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**CORE AREA AND WEST SHORE SEWAGE TREATMENT
TECHNICAL AND COMMUNITY ADVISORY COMMITTEE MEETING**
Notice of Meeting on **Tuesday, September 1, 2015 at 12 noon**
Room 107, 1st floor, 625 Fisgard Street, Victoria, BC

L. Helps (Chair)	R. Barnhart	M. Baxter	M. Coburn
T. Davies	G. Gillespie	D. Halldorson	E. Ishiguro
M. Mahovlich	D. Marshall	J. McIsaac	J. Miller
J. Paul	D. Purewall	L. Resnick	J. Rose
J. Rosenberg	T. Tiedje	D. White	C. Witter

AGENDA

1. Approval of Agenda
2. Adoption of Minutes of July 7, 2015
3. Chair's Remarks
4. Core Area Liquid Waste Management Committee Progress Update
5. Eastside Select Committee Update
 - a) Eastside Select – Reprioritization Primer
 - b) Site Prioritization and Distributed Option Set
6. Westside Select Committee Update
 - a) Westside SiteSpeak final Report
 - b) Westside Site Profile Package
 - c) Westside SiteSpeak Final Report Presentation
7. New Business
8. Adjournment

Next Meeting: October 6, 2015

LUNCH WILL BE PROVIDED.

To ensure a quorum, please advise Margaret Reilly at 250.360.3046 or mreilly@crd.bc.ca if you cannot attend.

DRAFT



Making a difference...together

Minutes of a Meeting of the Core Area and West Shore Sewage Treatment Technical and Community Advisory Committee (TCAC)
Held July 7, 2015, in the Board Room, 625 Fisgard St., Victoria, BC

Present: **Committee Members:** L. Helps (Chair), R. Barnhart, M. Coburn, T. Davies, D. Halldorson, E. Ishiguro, J. McIsaac, J. Miller, J. Paul, D. Purewall, J. Rosenberg, C. Witter
Staff: L. Hutcheson, General Manager, Parks & Environmental Services; D. Telford, Senior Manager, Environmental Engineering; K. Quayle, Communications Coordinator, Corporate Communications; M. Reilly (recorder)
Also Present: C. Houghton, Consultant; A. Gibbs, Consultant; A. Lee, Consultant
Absent: M. Baxter, G. Gillespie, M. Mahovlich, D. Marshall, L. Resnick, J. Rose, T. Tiedje, D. White

The meeting was called to order at 12:03 pm.

1. Approval of Agenda

MOVED by T. Davies, **SECONDED** by J. Paul,
That the agenda be approved with the addition of "General Thoughts on the Process"
under item 7 New Business.

CARRIED

2. Adoption of Minutes

MOVED by C. Witter, **SECONDED** by D. Halldorson,
That the minutes of the June 1, 2015 meeting be adopted.

CARRIED

3. Chairs Remarks

Chair Helps commented on lessons learned from the June 24 open house at the Delta Hotel. Future events will anticipate larger crowds.

J. Miller entered the meeting at 12:07 pm.

4. Eastside Select Committee Update

Amanda Gibbs, Public Assembly, provided an overview of the Eastside process. The following points were made:

- the first phase of concentrated public engagement is coming to an end

- the public consultation process has brought forward potential options for sewage treatment that are site focused, pragmatic, transparent, aware of cost and focused on optimizing response to climate change
- Ms Gibbs will be delivering a report on July 15 to the Eastside Select Committee which will quantify all of the public input to date and give key recommendations

Ehren Lee, Urban Systems, provided an update on the technical aspects of the Eastside process. Mr. Lee reviewed the six Eastside option sets that were presented to the public. He noted:

- option sets and design direction were developed based on responses gained through public consultation
- site suitability information continues to emerge
- sea level rise is a factor for consideration
- alternative outfalls (alternative to ocean outfalls) are being considered for reuse and disposal possibilities
- the Rock Bay site is present in 5 of the 6 options because it offers a potential integration of west and east and is strongly supported by the public
- the outer harbour site has an advantage in that it is larger than the Rock Bay site

5. Westside Select Committee Update

Christine Houghton, Westside Solutions, reported on the Westside's progress. Ms Houghton reviewed the Westside options set that were presented to the public. She noted:

- on June 18 the Westside sites were released to the public at the Songhees Wellness Centre
- technical progress to date includes: a request for technical information, flow analysis, identification of 20 potential sites and identification of 9 option scenarios
- kits are available for presenting information at community events
- an engagement tool call "Site Speak" has been set up on the internet to allow the public to provide comments on the process
- an interim report on the Site Speak findings will be presented at the next Westside Select Committee meeting
- feedback from public engagement is making a difference to the process – it is helping to shape the solution the Westside Select Committee has been tasked with finding
- costing will be done after the solution sets have been chosen and this information will then go back to the public for input
- every effort has been made to communicate with the public, including: open houses, rounds tables, presentations at community events, mail to residents and advertising in newspapers

6. Revised Meeting Schedule

MOVED by C. Witter, **SECONDED** by T. Davies,
That the revised meeting scheduled be accepted as circulated.

CARRIED

7. New Business

General Thoughts on the Process

TCAC members were invited to comment on the current sewage treatment process. The following observations were made:

- when the Sooke watershed was developed it required everyone to pull together and to think about the future benefits in order to create something of great value to the region; a similar spirit of unity and progressive thinking is needed for the sewage treatment project to be accomplished
- some are hearing anger and frustration over what they see as a repeat of past efforts, escalating costs and a failure to get this project underway
- the level of public consultation is encouraging
- given the difficulty and complexity of the sewage project as much information as possible needs to be given to the public
- it is helpful to have Amanda Gibbs and Christine Houghton speaking at public event as often as possible as the person-to-person contact is valuable in creating understanding
- this issue has been talked about for many years and this time action will be taken

8. Adjournment

MOVED by J. McIsaac, SECONDED by T. Davies,
That the meeting be adjourned at 1:05 pm.

CARRIED

Next Meeting: September 1, 2015.

CHAIR



Making a difference...together

**REPORT TO CORE AREA AND WEST SHORE SEWAGE TREATMENT
TECHNICAL AND COMMUNITY ADVISORY COMMITTEE
MEETING OF TUESDAY, SEPTEMBER 1, 2015**

SUBJECT **CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE PROGRESS UPDATE**

ISSUE

To update the Technical and Community Advisory Committee on progress and decision making of the Core Area Liquid Waste Management Committee (CALWMC), and the Eastside and Westside Wastewater Treatment and Resource Recovery Select Committees (Select Committees) for the past two months.

BACKGROUND

The Work Plan for the Core Area Wastewater Treatment project lays out three phases of work: Option Development, Planning and Implementation. The Westside and Eastside Select Committees, supported directly by regional and municipal staff and consultants, are currently working in the Option Development phase, which will continue until an amendment to the Core Area Liquid Waste Management Plan is endorsed by the CRD Board and submitted to the province by year end. The 3P Canada Proposed Timeline is attached as Appendix A.

In order to identify the preferred solution sets during the Option Development phase, the Eastside and Westside Select Committees have each been working on two tracks: technical assessment and public engagement. The combined efforts of these processes have resulted in the identification of potential sites and solution sets for wastewater treatment in the core area.

On July 29, the CALWMC approved a number of recommendations from the Eastside and Westside Select Committees.

Westside Select Committee Recommendations:

1. That the Westside Wastewater Treatment and Resource Recovery Select Committee recommend that the Core Area Liquid Waste Management Committee (CALWMC) and the Capital Regional District Board direct the Westside technical and public engagement teams to conduct a more comprehensive evaluation of SiteSpeak feedback and technical considerations, including a targeted engagement of new sites, and to report back to the CALWMC by mid-October 2015; and
2. That a meeting of Westside staff and the Technical Oversight Panel occur before any decisions narrowing Westside sites and options occur.

Eastside Select Committee Recommendations:

1. That the following Eastside solutions put forward for the next phase of costing and analysis be analyzed, costed and considered as they integrate with Westside flows and proposed Westside solution:
 - Options 1a - centralized system at Rock Bay including a mix of public and private sites, co-location of wastewater and residuals treatment - sub-regional for all of the Eastside flows and for Eastside flows currently directed to the Clover Point outfall;
 - Options 1b - centralized, at Rock Bay, including a mix of public and private sites, co-location of wastewater and residuals treatment - regional;
 - That all of the emerging sites from the Eastside reprioritization process, including: Rudd Park; Municipal Precinct; Saanich Core; Saanich Public Works; Marigold Pump Station; Victoria Public Works Yard; BC Hydro; Transport Canada; Central Park; Clover Point Pump Station; Ogden Point; Shelbourne; Gordon Head; Penrhyn Pump Station; Trent Pump Station; Royal Jubilee and Windsor Park, be forwarded to the Technical Oversight Panel for general evaluation, including all of the information necessary to do the evaluation;
 - That the Technical Oversight Panel also be asked to advise as to how we could best canvas the private sector broadly to see what solutions they have to best meet the goals of this project; and
 - That the work be done simultaneously and concluded by the end of October at the latest.
2. That phase two costing of Eastside options includes the following treatment and recovery methods:
 - a) secondary and tertiary disinfected;
 - b) anaerobic digestion and gasification; and
 - c) potential for resource recovery and revenue generation.
3. That a meeting of Eastside staff and the Technical Oversight Panel occur.

Further details and maps showing potential sites and conceptual plans are presented in subsequent items on this agenda.

While the costing and technical analysis is taking place for the Rock Bay option, the Eastside and Westside Select Committees are continuing to work with the technical support team to evaluate options for a distributed wastewater treatment system. This evaluation will be completed no later than the end of October 2015.

In order to ensure that the review process includes the necessary due diligence, is transparent, and committee members and the public have confidence in the findings, the following roles have been secured for the project:

1. Technical support to conduct the detailed analysis and engineering work

Urban Systems, partnered with Carollo Associates, has been awarded the contract to conduct the Feasibility and Costing Analysis for the CRD Core Area Liquid Waste Management Plan Wastewater Treatment System. The Scope of Work is attached as Appendix B.

2. Fairness and Transparency Advisor

Kim Cholette has been selected as the Fairness and Transparency Advisor who will ensure that the process of costing the options, working with the host jurisdiction(s) and preparing an amendment to the Liquid Waste Management Plan is fair, transparent, impartial and objective. Ms. Cholette is currently establishing an administrative process for the role and we anticipate that she will begin receiving submissions by September 1, 2015. The Fairness and Transparency Advisor Terms of Reference is attached as Appendix C.

3. Technical Oversight Panel

- Teresa Coady (Chair)
- Susheel Arora
- Robert Atkins
- Roger Bailey
- Bruce Jank
- Jeff Snyder

The TOP will provide independent oversight to the work of the engineering, business case, lifecycle costing and other project analysis and will report directly to the CALWMC. The TOP will also work with the Eastside and Westside Wastewater Treatment and Resource Recovery Select Committees to assist with the evaluation of the sites for distributed options for wastewater treatment. The Technical Oversight Panel Biographies document attached as Appendix D.

Further public consultation will occur once distributed options have been refined and the preliminary costing is complete. This will continue to inform the Eastside and Westside Select Committees and the CALWMC in their considerations and decision making on an amendment to the Liquid Waste Management Plan. This amendment is scheduled to be submitted to the Province of BC by year end. Concurrently, CRD staff will work closely with the host jurisdiction(s) to ensure that local authority/site zoning is achieved.

CONCLUSION

The CRD continues to make progress on an aggressive work plan to establish a new approach for wastewater treatment and resource recovery for core area participants. The work underway is focused on developing detailed costing information for a regional facility and evaluating distributed wastewater treatment options. The CRD Board remains committed to moving forward with wastewater treatment for our area.

RECOMMENDATION

That the Core Area and West Shore Sewage Treatment Technical and Community Advisory Committee receive this report for information.



Larisa Hutcheson, P.Eng.
General Manager
Parks & Environmental Services

Attachments: Appendix A – 3P Canada Proposed Timeline
Appendix B – Scope of Work – Urban Systems and Carollo Associates
Appendix C – Fairness and Transparency Advisor Terms of Reference
Appendix D – Technical Oversight Panel – Panelist Biographies

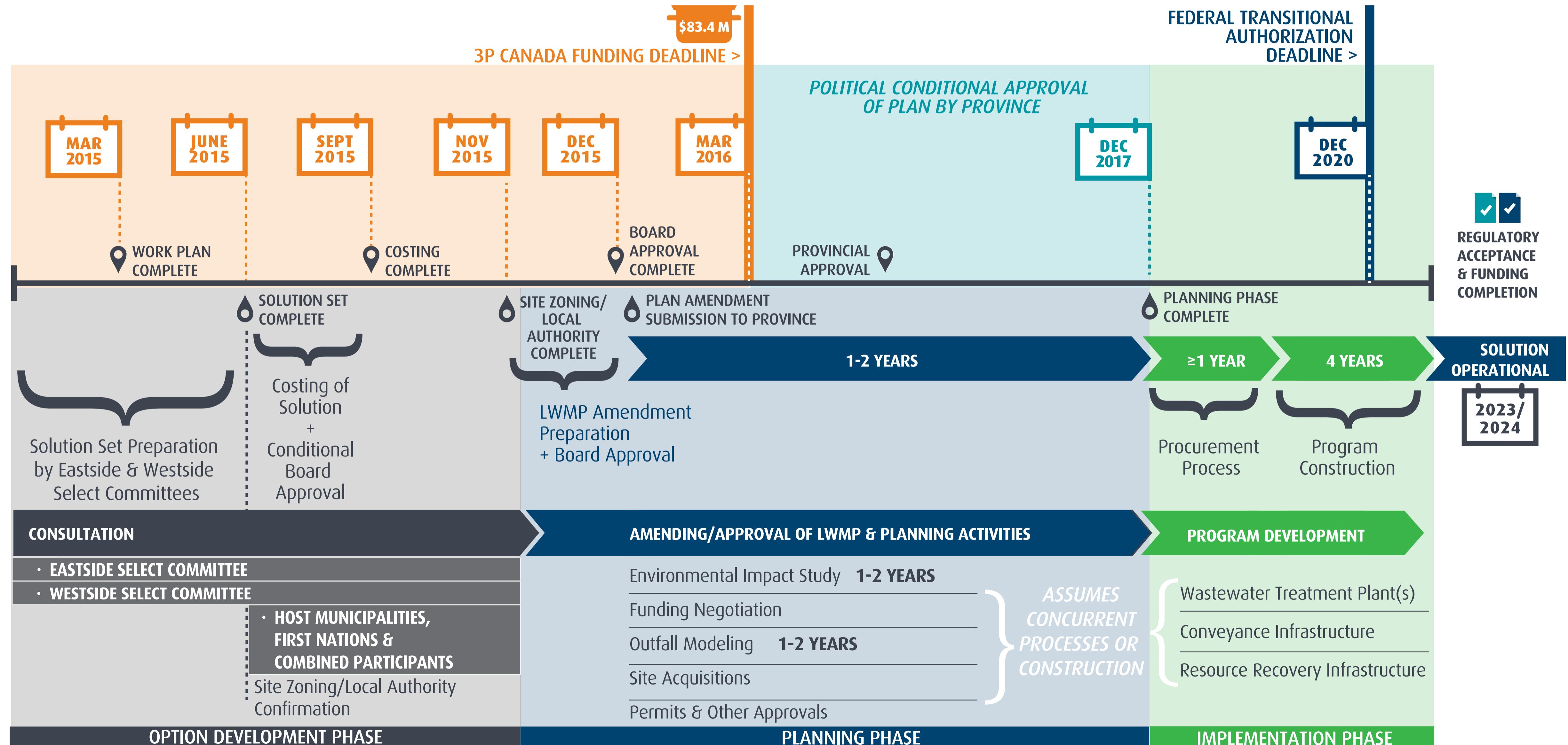
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Proposed Work Plan Overlay

3P CANADA FUNDING CONSIDERATIONS

OPTION DEVELOPMENT, PLANNING & IMPLEMENTATION PHASES

Appendix A



APPENDIX “A” – SCOPE OF SERVICES**Purpose**

The purpose of this Request for Proposal (RFP) is to retain the services of a qualified consultant (Consultant) to provide assistance to the Capital Regional District (CRD) in developing wastewater treatment system solution sets using agreed to sites resulting from the Westside and Eastside site selection and public consultation processes. Each solution set is to be subjected to a comprehensive feasibility and costing analysis using the following intertwined general baseline criteria:

- the project must meet or exceed provincial and federal requirements
- the project must serve all existing sewered areas upon commissioning
- design for a 15-year horizon with additional “just in time” expansion options
- optimize climate change mitigation, resource recovery and environmental sustainability
- minimize project capital and operating costs
- minimize life cycle cost

The goal of this analysis is to identify and present for consideration the solution sets that best satisfy each of the following basic objectives:

- most cost effective
- maximum resource recovery and environmental benefit that optimizes response to climate change through reduced greenhouse gas emissions. Resource recovery encompasses, but is not limited to, effluent heat, reclaimed water, struvite, biogas and beneficial use of biosolids
- balanced, cost effective and resource recovery/environmental benefit

Project Objectives and Guiding Principles

The following Guiding Principles have been established by the Core Area Liquid Waste Management Committee:

1. Undertake a fair and transparent process.
2. Collaborate and achieve incremental consensus building amongst all participants.
3. Achieve value for money for taxpayers and meet the CRD’s project budget.
4. Optimize existing infrastructure.
5. Fiscally equitable amongst facility users based on design capacity benefit.
6. Contribute to regional sustainability and respond to climate change.
7. Optimize resource recovery, supported by prudent business case analysis. Consider use of effluent heat, reclaimed water, struvite, biogas and beneficial use of biosolids.
8. Integrate proposed wastewater treatment and resource recovery facilities within the community.
9. Engage in a robust public consultation process at each phase of the planning process.

10. Ensure that the planning process and revisions to the current approved Liquid Waste Management Plan (LWMP) resulting from the planning process are conducted under the umbrella of the CRD to preserve federal and provincial funding to the extent possible.
11. Identify wastewater and residual solids treatment solutions for all seven municipalities and the two First Nations that meet or exceed applicable regulatory requirements.
12. Acknowledge that investments made by participants in community assets over and above the LWMP are outside the scope of the project.
13. Acknowledge the following guidelines, which are designed to preserve the autonomy of the municipalities and First Nations while maintaining the requirement to provide a holistic regional sewage treatment solution under the umbrella of the CRD:
 - (a) Each municipality will have authority over zoning for treatment plants within that municipality. Each municipality, not the CRD, will be responsible for either identifying a suitable site or sites within the municipality or for collaborating with another municipality that has agreed to host a site.
 - (b) Each municipality hosting a site assumes primary responsibility for determining the public process required to obtain approval for that site. These public processes will be led by the municipalities, in conjunction with CRD and relevant consultants.
 - (c) Costs will be allocated on the basis of actual costs to serve each participant. The cost of a plant serving only one municipality would be allocated entirely to that municipality and, similarly, the cost of a plant and conveyance systems serving a sub-set of municipalities will be allocated entirely among those participants. No municipality will be obliged to share the cost of plant or conveyance system in another municipality except by agreement between them, and the CRD, as approved by the Board.
 - (d) Individual municipalities or sub-systems will determine levels of treatment and resource recovery, provided they meet the standards required by regulators and funders. Benefits of resource recovery will be allocated in the same way as costs.
 - (e) Grant funding should be allocated to reduce costs of systems on the basis of the current cost sharing formula and will be the basis of how future debt servicing costs are allocated among municipalities.
 - (f) Independent technical consultant will continue to liaise and work with municipal staff groups.

Further refinement of these objectives and approaches have been taken by both the Westside and Eastside Select committees. The following is an excerpt from the Westside Select Committee project framework regarding the Project Purpose:

Evaluate options and recommend site(s) for potential liquid waste treatment and resource recovery facility for the Westside municipalities as a conceptual amendment to the CRD's LWMP that will:

- Optimize existing infrastructure, where practical
- Be developed in a collaborative manner
- Be environmentally sound
- Based on the best business case scenario that maximizes benefit to the best value for taxpayers
- Meet the unique needs of the Westside in a proactive and timely way
- The process will be efficient and cost effective
- Engage and consult with Westside residents and First Nations
- Meets deadlines and funding set by the federal and provincial governments

The following guiding principles have been established by the Eastside Select Committee:

- Optimizing response to climate change by optimizing resource recovery and minimizing life cycle cost.
- Identifying priority sites
- Ensuring public engagement is focused, meaningful and pragmatic
- Restoring public confidence in the process and outcomes
- Ensuring efficiency and maximizing available public funding
- Ensuring efficiency by including life cycle costs in the consideration of total costs.
- Seeking a clear mechanism for identification and selection of technical options
- Open to considering opportunities to integrate wastewater and residual solids with treatment of other waste streams in the region that may be presented to the Committee through the market sounding process approved by the CRD Board
- Support for rapid consultation beginning with striking advisory committee in March and public consultation complete by late June or July.

The above principals guide how the overall project will be undertaken. These terms of reference do not include direct consultation with the public; this will be conducted by the Select Committees.

Background

The participating municipalities (Victoria, Saanich, Oak Bay, Esquimalt, View Royal, Colwood and Langford) and the Esquimalt and Songhees Nations are in the process of identifying potential site options and wastewater treatment solution sets for either a sub-regional or regional treatment system as Phase 1 for preparing a potential amendment to the Core Area Liquid Waste Management Plan (LWMP). These potential siting options and solution sets will be identified by the Westside and Eastside Select Committees through direct facilitation with the participants, extensive public consultation, and a series of workshops with the participants.

While the participants in this service may not have similar ultimate objectives and may either individually or as sub-groups pursue options that have different business approaches, timelines, risk tolerance and/or environmental objectives, they will be delivered within the CRD's Core Area Liquid Waste Management Plan and within the CRD's existing service authority.

Phase 2 of this process will be a feasibility and costing analysis carried out by the Consultant of the preferred wastewater treatment system solution sets to determine the regulatory requirements and compare the costs against the existing overall funding envelope of \$788 million. The costing analysis should emphasize the budget starting with baseline costs and noting all add-ons costs with the premise of secondary treatment as the baseline.

It is anticipated that timelines for construction outlined in the approved Core Area Liquid Waste Management Plan will not be met under this process. The Consultant will develop revised timelines for the Plan and indicate the likelihood of meeting federal timelines under the Fisheries Act.

In completing Phase 2, the Consultant will identify capital, operating and maintenance costs for wastewater treatment, residual solids treatment, required upgrades or changes to conveyance infrastructure, disposal system(s), resource recovery systems and potential revenues from resource recovery for the preferred solution set(s).

Proponent Eligibility

The Consultant will have no past affiliation with the Seaterra Program, the Peer Review Team or any other core area wastewater treatment planning study commissioned by the CRD since the 2006 Ministry of Environment directive to implement secondary treatment was issued.

Scope of Work

PHASE 1 – Public Consultation and Identification of Potential Siting Solution Sets (by others)

This phase of the process will be completed by the Westside and Eastside Select Committees and be approved by the Core Area Liquid Waste Management Committee (CALWMC). Its purpose will be to identify potential siting options and system solution sets (up to four preferred) for sub-regional and regional wastewater treatment systems for further analysis in Phase 2 by the Consultant.

PHASE 2 - Feasibility and Costing Analysis (by the Consultant)

This phase of the process will be completed by the Consultant to develop a shortlist of system solution sets, based on the preferred options that emerge from the Select Committee processes.

1. Each solution set is to be subjected to a comprehensive feasibility and costing analysis using the following intertwined general baseline criteria:
 - project must meet or exceed provincial and federal requirements
 - project must serve entire sewered area upon commissioning
 - design for a 15-year horizon with additional “just in time” expansion options
 - optimize resource recovery opportunities, both current and future potential, based on municipal OCPs and Regional Growth Strategy
 - minimize project capital and operating costs
 - minimize life cycle cost
2. The goal of this analysis is to identify and present for consideration the solution sets that best satisfy each the following basic objectives:
 - most cost effective
 - maximum resource recovery and environmental benefit
 - balanced cost effectiveness and resource recovery/environmental benefit
3. Each solution set option must provide service to all 7 core area municipalities and First Nations under the LWMP when commissioned, whether by a single regional facility or by a network of sub-regional facilities.
4. Each solution set should be based on the best utilization of the existing infrastructure, as is practical and subject to condition and capacity. Infrastructure realignment and conveyance modifications shall be analyzed for each solution set including both capital and operating costs.
5. The viability/risk/expense of using new wastewater treatment technologies at each facility should be considered in the context of optimizing resource recovery such as effluent heat, reclaimed water, struvite, biogas, syngas and/or beneficial use of biosolids.

6. Solution set sites must be considered under the lens of community “values”, which include zoning, design attributes, impacts and mitigation requirements brought forward from the Phase 1 public consultation process.
7. Overall environmental impact of each solution set shall be considered, including a high-level construction/operation carbon balance for each option.
8. The level of wastewater treatment shall be sufficiently high to meet receiving environment requirements and resource recovery objectives (i.e., tertiary treatment for all reclaimed wastewater and not less than secondary with advanced oxidation for the non-recovered portion of the waste stream).
9. A minimum of 2 alternatives for the treatment of residual solids should be provided to:
 - (a) identify sites that can accommodate both wastewater and residual solids treatment; and
 - (b) treat all residual solids at the Hartland RRC facility, as outlined in the LWMP.
10. The costing analysis shall be based on both a 30- and 50-year life cycle, including capital, operating and maintenance costs. The capital cost estimates developed as part of this analysis shall use costing criteria consistent with previous CRD costing analysis work to date, to allow direct comparison with the established project budget. These factors include but are not limited to design and construction contingencies, indirect costs, administration costs, interim financing and inflation costs to mid-point of construction, project management costs, environmental impact study costs, site contamination costs, and the consistent use of discount rates for life cycle analysis of costs, revenues from certain resource recovery and carbon credits. The capital cost estimates developed will have an accuracy range of -15% to +25%.
11. Preliminary cost sharing implications at a municipal level shall be identified for each solution set based on capital design capacity benefit, as outlined in the Project Objectives and Guiding Principles 3 and 10c) above.
12. The development of a realistic high-level schedule for the design and construction of the wastewater conveyance, treatment and disposal facilities envisaged herein, including pipelines, pumping stations, storage, treatment plants and outfalls. The schedule will include the time required to obtain approvals for effluent disposal as necessary for the option(s) developed, including: new outfalls for marine and freshwater discharge, rapid infiltration basins for ground discharge and reclaimed water use.
13. Potential to integrate other waste streams from the region into the wastewater treatment project in the future.
14. Provide advice on what potential procurement options are available based on current funding agreements and advice on next steps.

A final report and interim status reports shall be presented to the Core Area Liquid Waste Management Committee.

In parallel with Phase 1 and prior to Phase 2, the solution sets will be presented to the Ministry of Environment (at staff level) for review and to receive feedback on potential LWMP amendment implications and regulatory requirements regarding reclaimed water use and effluent disposal to freshwater or ground. This feedback should highlight any system redundancy requirements and reporting requirements, such as engineering and environmental studies.

Other Considerations:

1. Design Criteria

The CRD has developed design criteria for year 2030 design flows, including: population projections; industrial, commercial and institutional equivalents; and inflow and infiltration. This information will be provided to the consultant as the basis for their analysis. Consultation with First Nations to confirm allocated design capacity is required with CRD staff support.

Upgrades and/or modifications to linear infrastructure to transport sewage to the wastewater treatment plants at the selected locations will be identified by the CRD and municipal staff. The consultant will be responsible for developing cost estimates for these upgrades and/or modifications and incorporating them into the overall cost estimates for the wastewater treatment plants.

Each wastewater treatment plant will be required to meet the minimum Municipal Wastewater Regulations to ensure treatment requirements are met:

- secondary treatment for flows up to 2xADWF (average dry weather flow)
- primary treatment for flows from 2xADWF to 4xADWF
- preliminary treatment for flows greater than 4xADWF

Wastewater treatment plants that do not discharge to the receiving environment via an outfall must demonstrate system redundancy and be approved by the Ministry of Environment (MOE) for:

- all flow conditions that exceed the maximum tertiary capacity of the treatment plant
- complete failure of the plant
- any condition that requires bypassing the tertiary level of treatment.

Plants that are designed for secondary treatment will require an outfall.

2. Available Documentation

Background Reports

The following past reports and documentation will be made available to the Consultant (note that this list is not intended to be exhaustive);

- The Path Forward – The Supporting Report to the Response of the MOE (June 2007)
- Resources from Waste – Integrated Management Phase 1 Study Report, Fidelis (February 2008)
- Resources from Waste Peer Reviews – Peer Review Responses (February 2008)
- Program Development Discussion Papers, Associated Engineering/CH2MHill/Kerr Wood Leidal (May 2008-May 2009)
- Peer Review Team Report (May 2009)
- CRD Core Area Inflow and Infiltration Program I&I Analyses Results: October 2006 to March 2008 – Final Report (July 2009)
- CRD Core Area Wastewater Treatment Program – Option 1A, 1B and 1C Report Stantec/Brown & Caldwell (September 2009)
- CRD Core Area Wastewater Treatment Program – Option 1A, Stantec/Brown & Caldwell (December 2009)
- CRD – CAWTP – Effluent Reuse and Heat Recovery for the University of Victoria & Surrounding Area, Stantec (January 2010)

- CRD – CAWTP – Feasibility Study for Heat Recovery for James Bay and Downtown Victoria, Stantec (January 2010)
- Biosolids Management Plan, Stantec/Brown & Caldwell (November 2009)
- Capital Regional District, Core Area Liquid Waste Management Plan, Amendment #7 (approved January 2010)
- Capital Regional District, Core Area Liquid Waste Management Plan, Amendment #8 (approved August 2010)
- Capital Regional District, Core Area Liquid Waste Management Plan, Amendment #9 (approved July 2014)
- Land suitability for a biosolids facility in the Core Area of the Capital Regional District, Westland Resources (September 2010)
- Core Area Wastewater Treatment Program Option1Aprime2 (June 2011)
- Capital Regional District Wastewater Plant – Discharge – Stage 1 Environmental Impact Study (March 2009)
- Technical Memo: CAWTP Indicative/Detailed Design/Wastewater Characterization and Design Loads, Stantec (January 2013)
- Stage II EIS Pre-Discharge Monitoring, Worley Parsons (February 2013)
- Environmental Impact Study of Core Area Wastewater Treatment Program Facilities Volume 1 of 3, Tera Consultants (updated March 2014)
- Environmental Impact Study of Core Area Wastewater Treatment Program Facilities Volume 2 of 3, Tera Consultants (updated May 2014)
- Project Description: Core Area Wastewater Treatment Program, Tera Consultants (updated March 2014)
- Land suitability and siting analyses, various, as presented to committee in closed session
- Core Area Inflow & Infiltration Program Annual Report 2012
- CALWMP Amendment #6 - Letter of approval from Minister Penner (December 2007)
- CALWMP Amendment #7 - Letter of approval from Minister Penner (February 2010)
- CALWMP Amendment #8 - Letter of approval from Minister Penner (August 2010)
- CALWMP Amendment #9 - Letter of approval from Minister Penner (July 2014)

Current Reports

The following current reports will be made available to the Consultant:

- Core Area Liquid Waste Management Plan – Sanitary Sewer Overflow Management Plan: 2014 Update
- Eastside and Westside Select Committee technical reports
- Request for Technical Information responses to Core Area Liquid Waste Management Committee (March 2015)
- Webcasts of Westside Innovation Days – <https://www.crd.bc.ca/westside-solutions/information-materials/innovation-days>

3. CRD Support

CRD staff will provide technical support including real estate services, operations and cost sharing considerations of existing and proposed conveyance infrastructure, geographical information and mapping and engineering. CRD staff will also provide administrative and logistics support, as required, for workshops and meetings amongst participants.

CRD staff will be responsible to renegotiate funding agreements and pursue alternative grant funding sources. The CRD will also be the primary contact with senior governments in regards to regulatory issues and amendments to the LWMP.

Budget

A budget breakdown for consulting time for different aspects of the work shall be provided as part of the fee proposal. The fee proposal shall be submitted in a separate envelope from the technical proposal.

The budget allowance for this feasibility and costing analysis is \$250,000.

Information Required

The following information is required as a proposal for this work:

1. the proponent's vision of the project, proposed approach and understanding of the CRD's objectives;
2. a clear statement of the roles and responsibilities of the various participants in the project;
3. a summary of the consulting team's experience with developing collaborative solutions through workshops and public engagement;
4. a summary of experience with:
 - municipal infrastructure design, construction and operation
 - wastewater and residual solids management
 - costing and financial analysis of similar projects including life cycle costs
 - evaluation and comparison of different emerging and proven technologies, including those that might allow for integration of other waste streams
 - optimization of sites, technology and resource recovery
 - assessment of net environmental gain from applicable technologies
 - understanding provincial and federal sewage regulations
 - alternative project procurement models
5. a discussion of unique aspects of the consulting team, or its approach to certain requirements of the terms of reference, which might enhance the outcome of the project and add value to the information required;
6. in tabular form, an estimate of each team member's time allocation to each aspect of the project, based on the requirements indicated and the consultant's vision for the project;
7. a project schedule indicating significant milestones and proposed meetings with the CRD and participants of the service;
8. a statement of commitment that personnel named in the proposal will be available for the duration of the project, except where prevented by circumstances beyond the control of the consultant;
9. the location of project personnel while working on this project; and
10. fee proposal (submitted in separate envelope) on a daily and upset monthly retainer.

Reporting

The Consultant will report to the General Manager, Parks & Environmental Services. In order to ensure transparency and achieve public confidence in the analysis, the CRD will retain a Technical Oversight Panel of up to five individuals with relevant technical expertise to provide oversight of this work. This Panel will report directly to the Core Area Liquid Waste Management Committee.

Meetings

Proponents shall allow for the following meetings, in addition to meetings with CRD and municipal staff:

- at least 10 council and committee meetings, and ongoing liaison with municipal staff
- presentation of draft report and recommendations to CRD and municipal staff
- presentation of draft report and recommendations to the Core Area Liquid Waste Management Committee
- a final meeting with all municipal participants and CRD and municipal staff to discuss the draft report prior to completion of the final report
- presentation of results to the Core Area Liquid Waste Management Committee and CRD Board for approval

Deliverables, Milestones and Schedule

The Consultant will present a PowerPoint report on the recommended solution set to the Core Area Liquid Waste Management Committee by September 30, 2015. The final report is to be completed for CRD Board approval on October 14, 2015.

**Fairness and Transparency Advisor
Terms of Reference**

Background

On March 11, 2015, the CRD Board approved a work plan for the Core Area Sewage Treatment project (the “Project”) that includes three phases of work: Options Development, Planning and Implementation. The approved Work Plan Overlay is attached as Appendix A.

The Westside and Eastside Select Committees are scheduled to bring forward solution sets for siting options to the Core Area Liquid Waste Management Committee (“CALWMC”) starting in July of 2015. Subsequently, detailed feasibility assessments and cost estimates for the solution sets will be conducted and brought forward for consideration and a decision will be made on siting for the Project. This phase of the work will involve developing an amendment to the provincially-approved Liquid Waste Management Plan and working with the host municipality(ies) to ensure that site zoning is achieved. These tasks are anticipated to conclude by the end of 2015.

Mandate

The Fairness and Transparency Advisor (FTA) will ensure the process of costing the options, working with the host jurisdiction(s) and preparing an amendment to the Liquid Waste Management Plan is fair, transparent, impartial and objective.

Principles

The FTA will be guided by the following principles:

Independence. The FTA will be appointed by the CRD Board and will carry out the responsibilities of the role independent of all Board and staff structures within the CRD. The FTA will report to the Board through the CALWMC, but will not be required to report or give evidence to the CRD Board or any committee about anything learned in the exercise of the FTA’s function.

Accessibility. The FTA will be accessible to residents of the Core Area municipalities and the CRD will publicize its operations and availability.

Impartiality. The FTA will act in consideration of and with respect for the legitimate interests and concerns of all affected parties.

Confidentiality. The FTA will ensure confidentiality of all personal information and will not release any personal information unless written permission has been received from the affected person or otherwise required by law.

Duties

The FTA’s principal duties are:

1. to receive complaints from residents and property owners of the Core Area municipalities related to aspects of the Project that fall within the FTA's mandate;
2. to investigate any such complaint;
3. to monitor the process and undertake investigations on the FTA's own initiative related to aspects of the Project that fall within the FTA's mandate;
4. to report to the Board through the CALWMC the results of an investigation;
5. to provide monthly status reports to the CALWMC;
6. to make recommendations to the Board through the CALWMC to help strengthen the fairness, transparency or objectiveness of the process followed relating to aspects of the Project that fall within the FTA's mandate.
7. at the conclusion of the term, to provide a written report to the Board through the CALWMC addressing the extent to which the CRD followed a fair, transparent and open process in executing the aspects of the Project that were within the FTA's mandate.

Term

The FTA's term will commence upon appointment and will expire on December 31, 2015.

Discretion

Subject to these Terms of Reference, the FTA has the sole discretion to:

1. decide whether to investigate a complaint;
2. determine what the scope of an investigation will be; and
3. set the procedures for an investigation.

Excluded Complainants

The FTA will not investigate complaints from CRD Directors, elected officials of municipalities or electoral areas within the boundaries of the CRD or from CRD employees, agents or independent contractors.

Access to Information

The FTA will have access to any CRD files, records, reports, documents and information needed in fulfilling the functions of the role. Requests by the FTA for information should be handled in a convenient and expeditious manner.

The FTA may seek information from contacts external to the CRD (such as participating municipalities) but will not have any right to access information outside of the CRD's custody and control.

The FTA is subject to the *Freedom of Information and Protection of Privacy Act*.

Reporting and Recommendations

The FTA may bring to the attention of the Board through the CALWMC any policies, rules or processes which appear unclear or unfair or inequitable and may suggest changes that the FTA determines are appropriate in the circumstances.

In addition to monthly reporting, the FTA will issue any supplementary report or investigative report or recommendations to the CALWMC.

The FTA will have the right to speak to a report or recommendations made to the CALWMC or the Board through the CALWMC.

Prohibited Functions

Although the FTA is authorized to function in the widest possible context and with a minimum of constraints, the FTA will not:

1. release any personal information regarding an individual complainant unless permission has been given by the complainant or as required by law;
2. exercise a judicial function or make binding decisions in any case;
3. act as the advocate of any party during the investigation of a complaint;
4. exercise authority beyond the legal authority of the CRD;
5. Have authority to impose remedies or sanctions, or to enforce or change any policy, rule or procedure.
6. become involved in matter where there may be an actual or perceived conflict of interest.

Budget and Staff

The budget for the operation of the FTA will be set by CRD staff in consultation with the FTA.

Arrangements for office accommodation and administrative support will be set by CRD staff in consultation with the FTA.

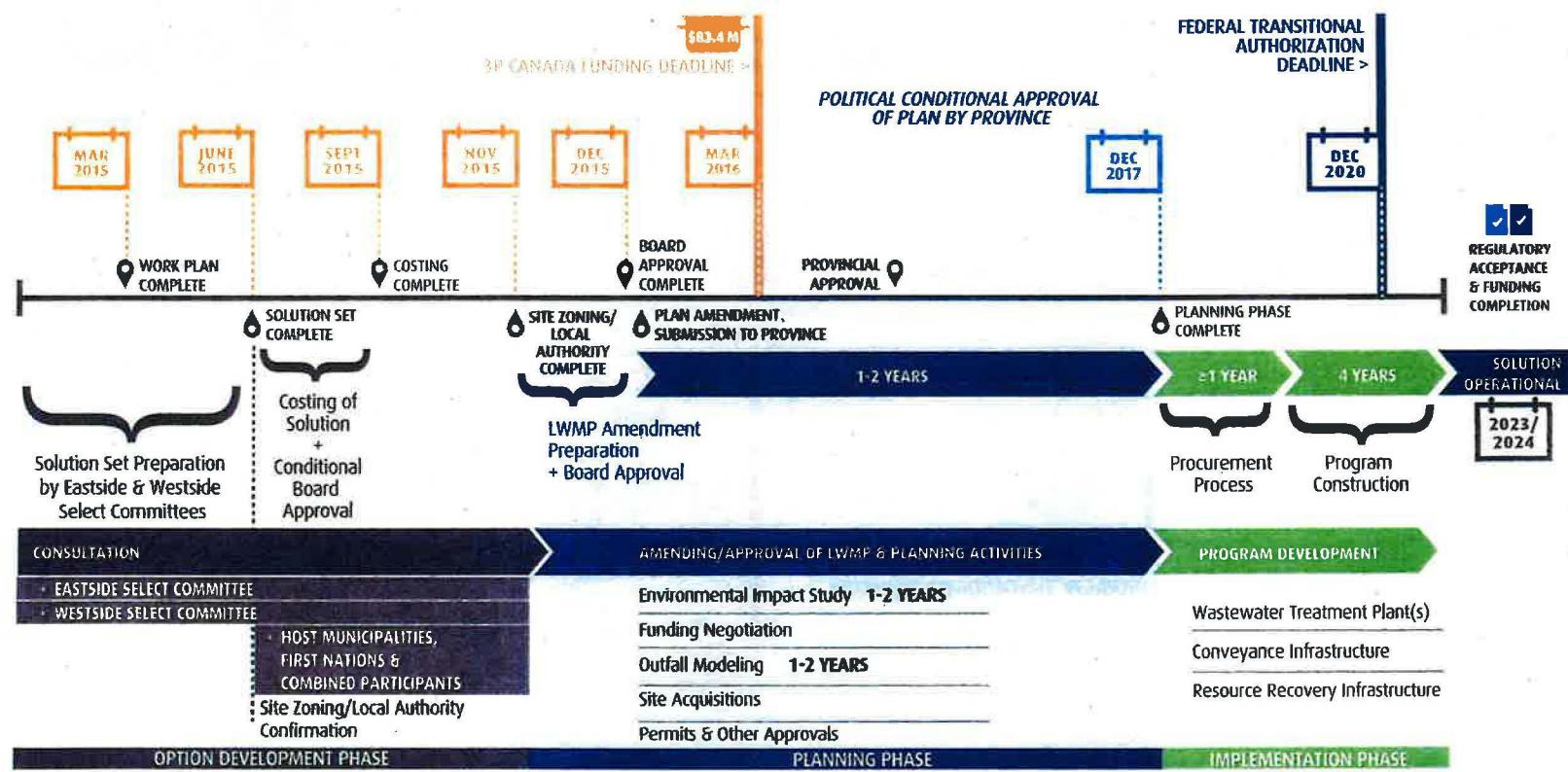
Review of Terms of Reference

These terms of reference will be reviewed by the FTA prior to the commencement of the term and the prospective FTA will have the opportunity to make recommendations on changes to the Board through the CALWMC.

Proposed Work Plan Overlay

3P CANADA FUNDING CONSIDERATIONS

OPTION DEVELOPMENT, PLANNING & IMPLEMENTATION PHASES



Teresa Coady

FRAIC, AIA, RI, LEED Fellow, ArchitectAIBC,

Career

Teresa Coady is a professional consultant and strategic business advisor. Ms. Coady was most recently the Chief Operating Officer, COO, of Kasian, a 300 person international design firm. In her roles at Kasian, Ms. Coady provided leadership to the staff and senior leadership team, and was responsible for the successful operation of the company, including profitability, vision, strategy, and high project performance. She provided overall BIM and Sustainability leadership, and helped to create a culture of creativity, excellence and success. She worked closely with multiple project teams involved in project management, and was involved in several high profile, successful projects, collectively worth over \$1B. Ms. Coady works closely with designers, engineers, contractors, owners, developers and user groups to effectively gain consensus, to achieve the successful completion of complex projects.

Prior to her role at Kasian, Ms. Coady was the president and founding partner of Bunting Coady, a 100 person Vancouver based design and planning firm. Ms. Coady built this firm with her partner from a start-up to one of Canada's most well recognized practices, and sold the firm to an international buyer, leaving the practice in 2012. During the twenty year period of growth and development, Ms. Coady provided exceptional leadership and engaged closely with the development industry stakeholders including public and private owners and developers, municipalities and communities, and others including first nations, provincial and federal government, health, education, traffic and environmental authorities. Ms. Coady was directly involved in the successful project management and leadership of over \$2B worth of construction and development during her time at Bunting Coady.

Ms. Coady began her career at Expo 86 and was the director of all the theatres shops and restaurants on site, managing a team of hundreds of professionals and construction workers through tight budget and schedule constraints. Ms. Coady was selected for this role by the Exposition Director upon the completion of her professional education, and was extremely successful in this position, earning a reputation for fairness and excellence.

Ms. Coady is a registered Architect in both Canada and the United States. Ms. Coady is a Fellow of the Royal Architectural Institute of Canada, a Fellow of the United States Green Building Council, and former Vice-President of the Architectural Institute of British Columbia.

Ms. Coady is internationally recognized for her innovative thinking and her leadership in sustainability and works closely with various agencies to continuously create new practices to benefit society. She is chair of the United Nations Environmental Program, Sustainable Built Climate Initiative Advisory Board (UNEP SBCI). Ms. Coady is responsible for pioneering, and first presenting, the Integrated Design Process (IDP) at the Globe 1998 Conference. The IDP successfully involves all stakeholders in all aspects of design and construction, revolutionized the industry by moving it from a competitive to a collaborative approach, and is now recognized as a LEED4 Pre-requisite. Ms. Coady worked to develop the City of Vancouver Action Plan and City Building Standards. Ms. Coady was the only Architect to serve on the British Columbia Provincial Government's Climate Action Team (CAT). Ms. Coady is also a former board member of Cascadia (US Green Building Council) and CaGBC (Canadian Green Building Council) and was appointed a LEED Fellow in 2012 by the USGBC. She has acted as an advisor to the British Columbia Energy Code and the National Energy Code. She currently sits on the Canadian team of the International Initiative for Sustainable Built Environment (iSBE).

In 1999, Ms. Coady was awarded the YWCA Woman of Distinction Award; an award that honors women whose outstanding achievements contributed to the well-being and future of the community. Ms. Coady was named winner of the RBC Canadian Woman Entrepreneur Awards (CWEA) in 2008. Ms. Coady is the only architect to ever receive this honor. She was also included in the 10th Annual Profit W100 list of Canada's Top Women Entrepreneurs. Ms. Coady has over 50 publications, numerous television and video appearances, and is actively involved as a mentor for emerging businesses and as a professional lecturer.

BIOGRAPHY

Susheel Arora, M.A.Sc., P.Eng.

Susheel Arora is the Director of Wastewater & Stormwater Services for Halifax Water. He has been involved with water and wastewater treatment for over 20 years. Susheel is responsible for the overall operations of wastewater collection, treatment, and biosolids management for the Halifax region. He was the key member of the team for Halifax Harbour Solutions project and is highly skilled in overall life cycle and cost benefit analysis of wastewater treatment projects. He is an active member of Engineers Nova Scotia and has two Masters Degrees; one in Environmental Engineering and the other in Applied Sciences. Susheel is also a graduate of the General Management Program from Harvard Business School.

Susheel is a member of various water and wastewater professional organizations such as Water Environment Federation (WEF), American Water Works Association (AWWA), and the International Water Association (IWA). He has actively participated in various committees at a national level including InfraGuide Best Practices for Wastewater Treatment Plant optimization.

Susheel strives for effective and sustainable management of wastewater and biosolids in an environmentally friendly manner.

Robert T. Atkins, FRICS., Chartered Quantity Surveyor (Retired) Canadian Citizen

Born and educated in Nottingham, England.

Attended Nottingham High School as a scholarship pupil and gained 6 "O" levels.

On leaving school at 16 I was engaged as a trainee quantity surveyor by Gleeds, Chartered Quantity Surveyors, Nottingham.

Attended Nottingham & District College of Technology (Now Trent University) – Day release and night courses in quantity surveying.

I was a student of the College of Estate Management – London – Correspondence courses and short residential course. Studying for RICS Professional qualification.

Qualifications:

- 1962 – Associate of the Royal Institution of Chartered Surveyors
- 1986 – Elected Fellow of the Royal Institution of Chartered Surveyors

Following qualification I held various positions at Gleeds in Nottingham culminating as Senior Surveyor responsible for Mechanical and Electrical Services and the introduction of New Management Techniques.

In 1975 I emigrated to Montreal, Canada to the position of General Manager, Construction Data Systems Ltd., (an affiliate of Hanscomb-Roy) responsible for compiling and editing "Yardsticks for Costing" – the Canadian Construction Price book published annually, and for introducing new techniques for project control.

Previous memberships in Canada – prior to retirement:

- Project Management Institute
- Association of American Cost Engineers
- Canadian Institute of Quantity Surveyors
- Economistes en Construction du Quebec

My whole career in England and Canada has been focussed on the planning, definition, administration and control of capital projects, large and small, in both the public and private sectors. I have held senior management positions in a range of organisations providing services to a very wide range of clients. In England I worked with major commercial clients and with Crown Corporations, Municipalities, Hospital Boards, Education Authorities and the like. In Canada I have provided services to Crown Corporations, Federal and Provincial Government Departments and major commercial companies, major financial institutions, large professional consultancies, property developers and to one of the world's largest engineering companies.

My responsibilities have included developing detailed capital budgets, cost planning through the design stages, preparing contract documents, analysing risk, reviewing and analysing bids, verifying interim payments, and formalising and implementing the control and reporting procedures necessary to ensure that no commitments were made outside the funding provision and that the work was completed as scheduled.

I have made presentations and given lectures to a wide variety of organisations and professional bodies predominantly in Canada on the subject of Capital Cost Management including to Architecture 422 and 423 at the University of British Columbia on the subjects of Cost Planning, Life Cycle Costing and Value Engineering and to Ryerson Polytechnic in Toronto on the subject of Cost Indexing. I have also made presentations on these and related subjects to government departments in Canada and the US.

In BC I was appointed Director of Capital Budget and Director of Management Services at EXPO86, the World Fair in Vancouver.

Currently I am retired from consulting engagements and available to provide support and expertise on challenging major capital projects.

Roger S. Bailey, General Manager
Central Contra Costa Sanitary District

Throughout his professional career, Roger S. Bailey has lead several major municipally owned operations across the US. He currently serves as the General Manager of the Central Contra Costa Sanitary District (CCSD). Located in the East San Francisco Bay Area, CCCSD provides wastewater services to an area covering 146 square miles, including thirteen local jurisdictions which have a combined population of over 470,000.

Previously, he served as the head of the City of San Diego Public Utilities Department, one of the largest and most complex water and wastewater utilities in the country. Under his leadership, the San Diego Public Utilities Department (SDPUD) provided the highest quality and most cost effective utility services to over 1.5 million water customers, and over 2.2 million wastewater customers. In recognition of his many contributions to SDPUD, the City Council declared July 30th, 2013, “Roger S Bailey Day” in the City of San Diego.

Prior to joining the City of San Diego, he served as Interim Deputy City Manager and Utilities Director for the City of Glendale, Arizona. He also served as Utilities Director for the City of Royal Palm Beach, Florida; Assistant Utilities Director for the City of Valdosta, Georgia; and Senior Engineer with the City of Tallahassee Water Utilities Department. Under his leadership, San Diego and Glendale’s Utilities Department has won platinum awards for Utility Excellence from the Association of Metropolitan Water Agencies.

Mr. Bailey is a registered professional engineer in Arizona and Florida. His professional affiliations include the American Society of Civil Engineers, American Public Works Association, American Water Works Association, and Water Environmental Federation. His education includes M.S. and B.S. degrees in Civil Engineering from Florida A&M University. He also holds a B. S. degree in Physics and Mathematics from the University Of Winnipeg, Canada.

DR. BRUCE JANK'S EXPERIENCE RELATED TO UTILITY SERVICING FOR ENVIRONMENTALLY SUSTAINABLE COMMUNITIES

- Ph.D., Civil Engineering, University of Waterloo, 1971.
- Divisional Manager, Biological Processes, and Director of Environment Canada's Wastewater Technology Centre, Burlington Ontario over a 25 year period.
- Responsible for design, construction and 6 year operations contract for the Town of Banff's Wastewater Treatment Plant.
- As Technical Director, Unisphere Waste Conversion Inc., over a 5-year period developed the detailed design for a 100 ton per day tire pyrolysis plant which was to be located at the Port of Belledune, New Brunswick.
- Technical Advisor for the design, construction and performance evaluation of Wastewater Treatment Plants for the following communities:
 1. The Columbia Icefield information centre and hotel (seasonal operation);
 2. The Municipality of Jasper, AB;
 3. Town of Squamish, BC;
 4. The Britannia Copper Mine, Britannia, BC;
 5. The Town of Okotoks, AB;
 6. The Town of Taber, AB; and
 7. The Town of Strathmore, AB.
- Technical Advisor for the design, construction and performance evaluation of a Regional Water Treatment Plant constructed in the Town of Vulcan, AB.
- Provided conceptual and detailed designs for Utility Servicing for approximately ten off-the-grid residential development projects in Alberta and Ontario. Projects typically included the following components:
 1. aggressive potable water conservation;
 2. greywater, rainwater and stormwater harvesting;
 3. advanced wastewater treatment with water reuse or aquifer recharge;
 4. solid and liquid food waste aerobic or anaerobic composting;
 5. geoexchange systems for heating and cooling; and
 6. solar, wind or gas turbine systems for electricity generation.
- Hobby – Development and implementation of Integrated Resource Management strategies

Bruce Jank, Ph.D., P.Eng.(AB & ON)
CEO, Canadian Clean Water Technologies Inc.

Jeffrey Scott Snyder

BIO

Jeff has over 25 years of experience in Water and Waste Water Management. His diverse skills set include everything from environmental compliance, regional sales and development efforts, contract negotiations to system repair and maintenance. Jeff has worked with a number of waste disposal and utility companies which include Parkson Corporation, Synagro Technologies, American Water Services, AquaSource Utility and Culligan Operating Services.

Jeff was instrumental in the development of a Fluidized Bed Gasification System that processed Biosolids from Wastewater Treatment Plants as the sole feedstock to the gasifier. Jeff was responsible for the installation of the fluidized bed gasifier that was installed in Sanford FL. Jeff also led the commissioning and operation of the gasifier. The Sanford operation also included sludge dewatering and drying as components of the gasification operations that Jeff was responsible for.

In December 2013 Jeff was directly responsible for securing a Determination for USEPA that a Gasifier Operating on sewage sludge was not an incinerator.

MEMORANDUM

Date: July 27, 2015
 To: Eastside Select Committee
 cc: Larisa Hutcheson
 From: Urban Systems – Ehren Lee
 File: 1692.0034.01
 Subject: Primer: Site Reprioritization and Option Set Development

Introduction

At the July 15, 2015 Eastside Select Committee on Wastewater Treatment and Resource Recovery, Urban Systems was requested to return to the Committee on July 28, 2015 with an updated Eastside Option Set based on a reprioritized list of sites. This primer introduces the approach to reprioritization as well as provides an overview of findings.

Approach

An effective decision making process for regional wastewater includes direct links to public and technical priorities. While largely a technical exercise, the reprioritization of sites is based on a matrix-approach incorporating engineering aspects of the Project Commitments, public priorities and wastewater performance. The intent is to apply a deeper layer of technical analysis to evaluate the potential for any site to host a facility and to identify a short list of sites, with evidentiary advantages, per site node.

The matrix-approach includes six (6) criteria:

- *Current and Future Water Reuse* e.g. rating potential from opportunities for stream augmentation, irrigation and growth centers
- *Current and Future Heat-Solids Recovery* e.g. rating potential through site size, growth centers, proximity to boiler demands (acknowledging syngas flexibility)
- *Proximity to Infrastructure* e.g. rating potential by distance to CRD trunks and reuse-outfall infrastructure
- *Land use* e.g. rating potential through ownership, growth centers, industrial, commercial and civic buildings and uses
- *Environmental* e.g. rating potential through managing risk from sea level rise, seismic, archaeology, ecology

Site potential varies across the Eastside with certain site nodes demonstrating relatively higher potential than others but generally, each site node emerges with one or more possible sites for a distributed model. Engineering analysis focuses on the functional opportunities near each site in a systematic way including incoming flows, site size, need for pumping, outfalls and consideration to integrating flows across for the whole Core Area.

Summary of Findings

The matrix-approach to technically evaluate sites was effective in identifying locations of evidentiary advantage for wastewater treatment and resource recovery centers. On a site node basis, the results include:

- *Core Saanich*: five (5) prioritized sites with notable advantages including environmental, water reuse and land use (including one private site), as well as a range of possibilities to integrate

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Westside flows - Municipal Precinct, Saanich Public Works, Marigold Pumpstation, Rudd Park and Core Saanich Private.

- Validate with public input: Saanich Public Works is 'green', three are 'yellow' and Marigold Pumpstation is yet to be evaluated.
- East Saanich: two (2) prioritized sites with varying technical advantages (includes private sites) - **Shelbourne and Gordon Head.**
 - Validate with public input: Shelbourne is 'yellow' and Gordon Head is 'green'.
- Oak Bay: two (2) prioritized, adjacent sites with proximity to water reuse as well as proximity to infrastructure - **Trent-Jubilee Hospital.**
 - Validate with public input: both of these sites are yet to be evaluated.
- Rock Bay: three (3) prioritized sites with similar recovery opportunities but varying environmental advantages; possibilities to integrate Westside flows - **Victoria Public Works, BC Hydro-Transport Canada, Central Park.**
 - Validate with public input: two sites are 'green' and Central Park is 'yellow'.
- Victoria Outer Harbour: two (2) prioritized sites with varying functional opportunities; possibilities to integrate Westside flows - **Ogden Point and Clover Point.**
 - Validate with public input: Clover point is 'green' and Ogden Point is 'yellow'.

Option Set Development

Fourteen sites out of 30+ locations provide elevated technical advantages and became the basis for a revised Eastside Option set. Technical fundamentals include tertiary-focused treatment, distributed solids recovery (multiple sites), neighborhood-scale facilities, maximizing reuse and maintaining sites in key areas for possible integration with the Westside flows.

The proposed Option Set utilizes the site reprioritization, incorporates the technical fundamentals and includes five to seven treatment facilities covering each of the five site nodes. Facility sizes range to suit sub-regional flows, infrastructure and site size as follows: Rock Bay (60% of flows), Saanich Core (20%), East Saanich (10%), Trent-Jubilee (<5%), and Ogden (~5%). Multiple facilities on the identified sites may be considered in Saanich Core or East Saanich as future study or direction warrants.



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Phase 2 analysis may continue to evaluate the list of sites and Option Sets and optimize the configuration for cost, recovery and amenity possibilities.

The contents of this primer as well as the appended presentation will be brought forward to the Eastside Select Committee on July 28, 2015.

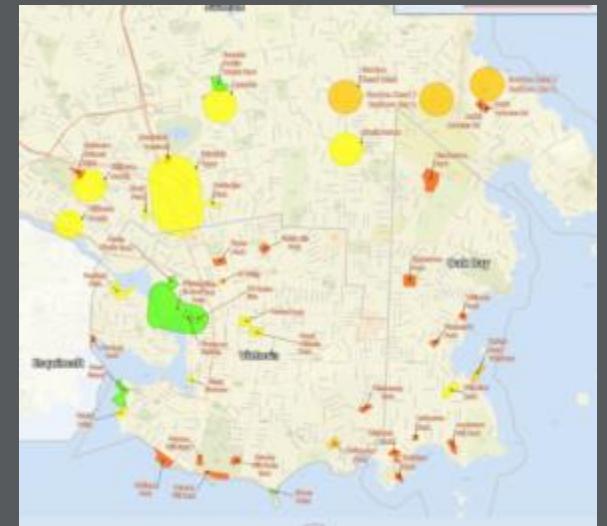
URBAN SYSTEMS LTD.

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Site Prioritization and Distributed Option Set

Eastside Select Committee

July 28, 2015



Overview and Background

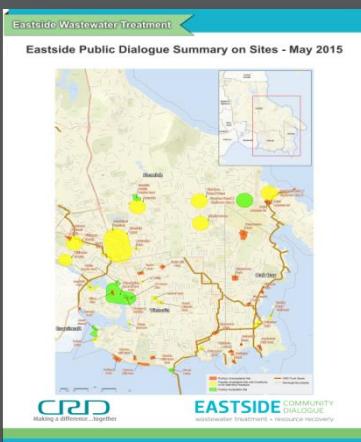
- April-July process to narrow sites and options
 - *Link public input with sites and option sets*
 - *Respect authorities and parallel processes*
- Reprioritize list of sites
 - *Next layer of technical feasibility*

Sites Process

Technical Mapping
to Support Local
Councils



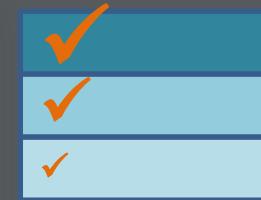
Full List of
Eastside Sites



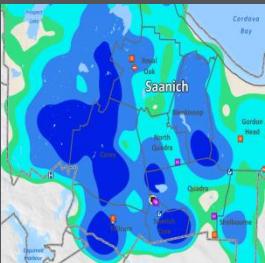
Ongoing
Engagement to
Assess Acceptability



Further
Technical
Prioritization



Phase 2
Feasibility
Analysis



Reprioritize

- Advance feasibility to sort for most preferred
 - *Include CRD pumpstations + Council supported sites*
- Use agreed-upon technical + public criteria
 - *Detailed feasibility in Phase 2*
- Distributed Option Set based on most preferred sites

Option Set Development

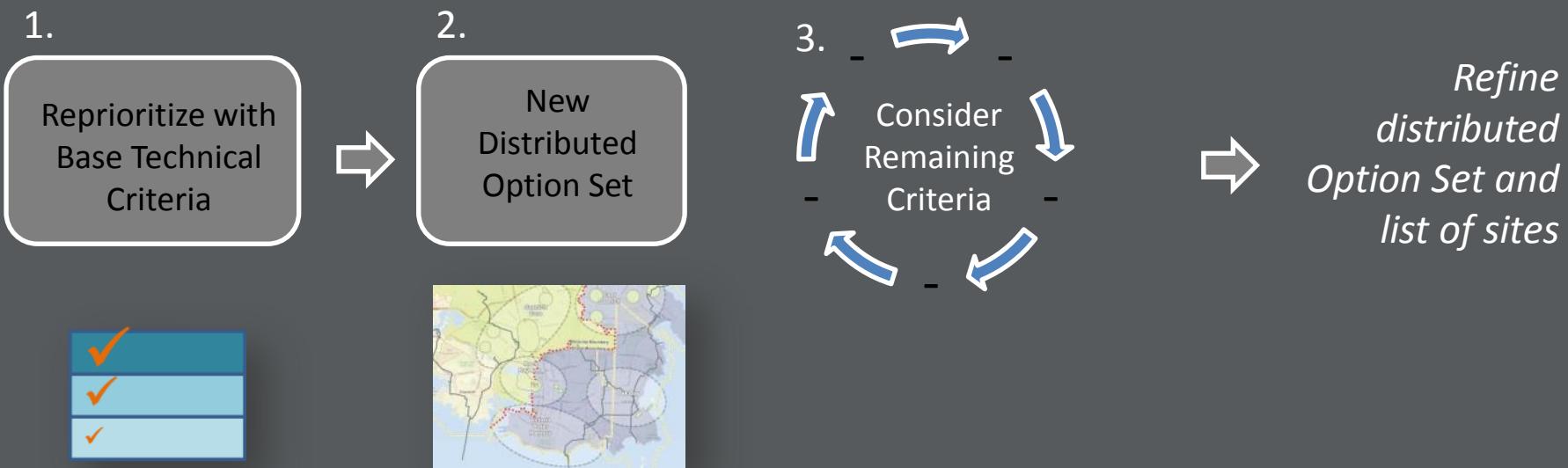
- Functional approach to treatment recovery in plausible locations
 - *Review area around preferred sites for technical possibilities;*
- Look for Option Sets that minimize new infrastructure and deliver on resource recovery
 - *Iterate*

Option Set Development con't

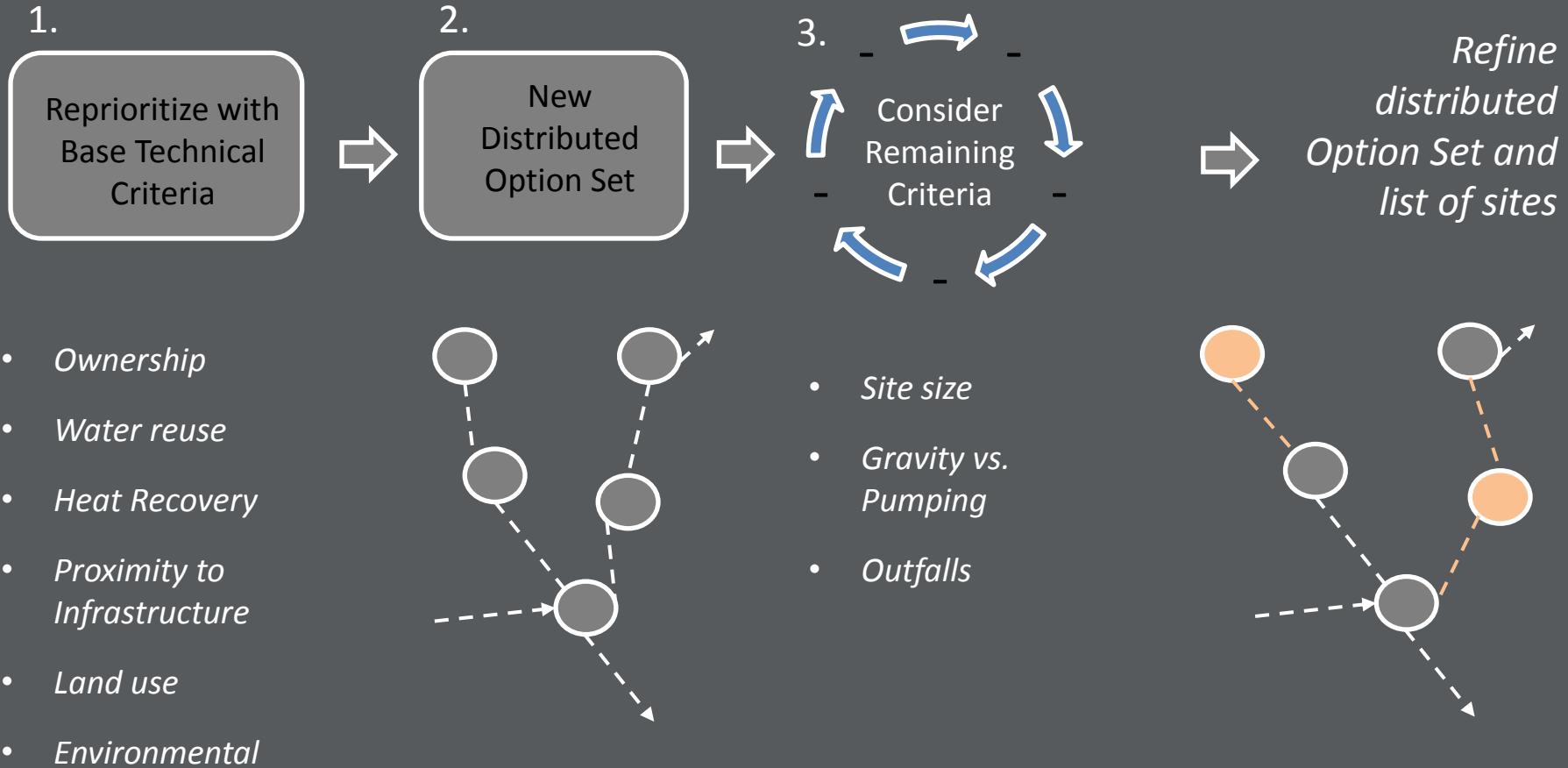
- Incorporate range of flows
 - *Wet-weather, tertiary, Westside, reuse*
 - *Scale facilities to suit neighborhood and available flows*
- Maximize recovery in a distributed model
 - *Site size, water reuse, distributed residual solids*

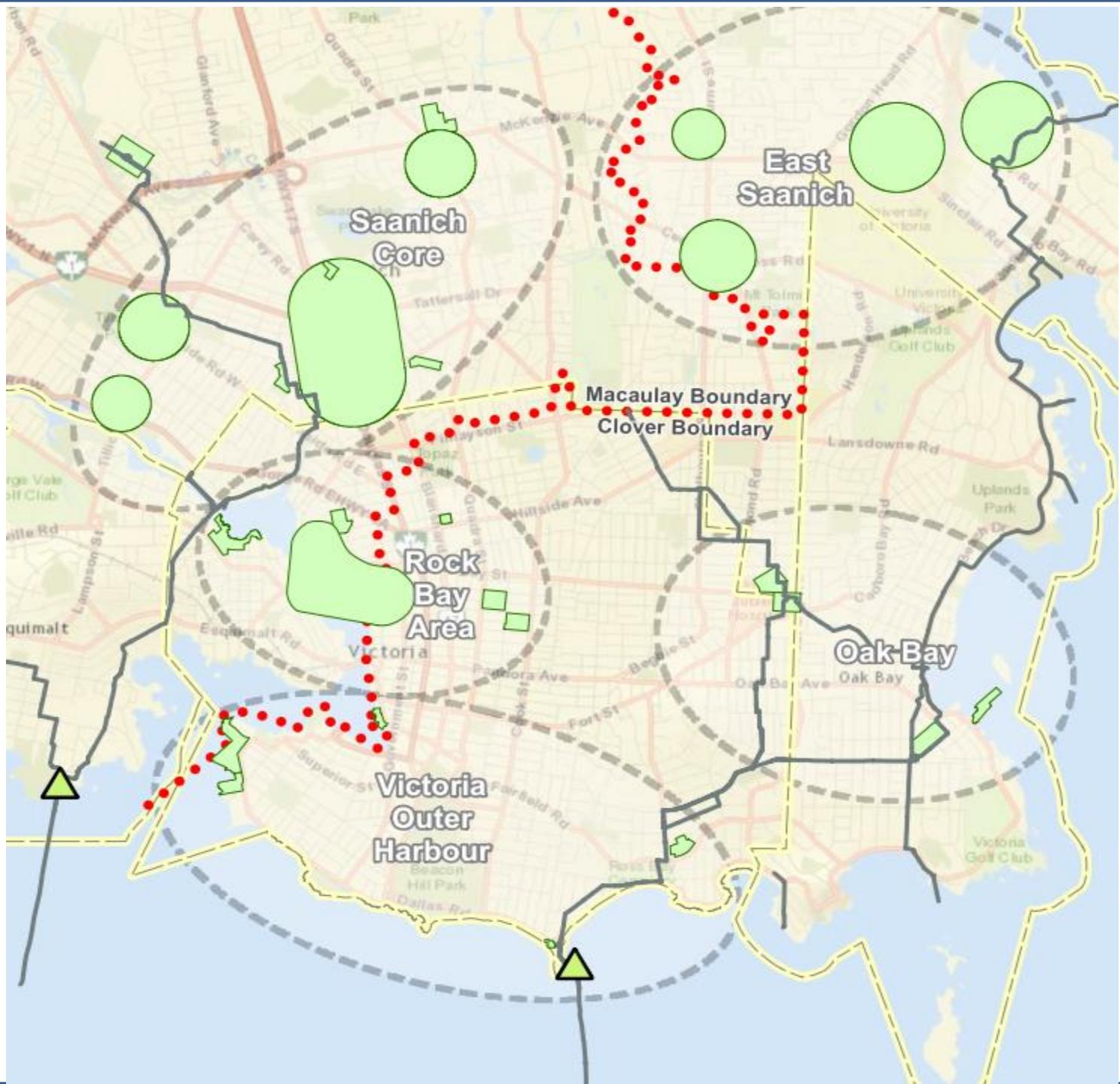
Reprioritize Approach

- ✓ Project Commitments
- ✓ Technical Criteria: *three-step process*
- ✓ Eastside Dialogues



Reprioritize Approach



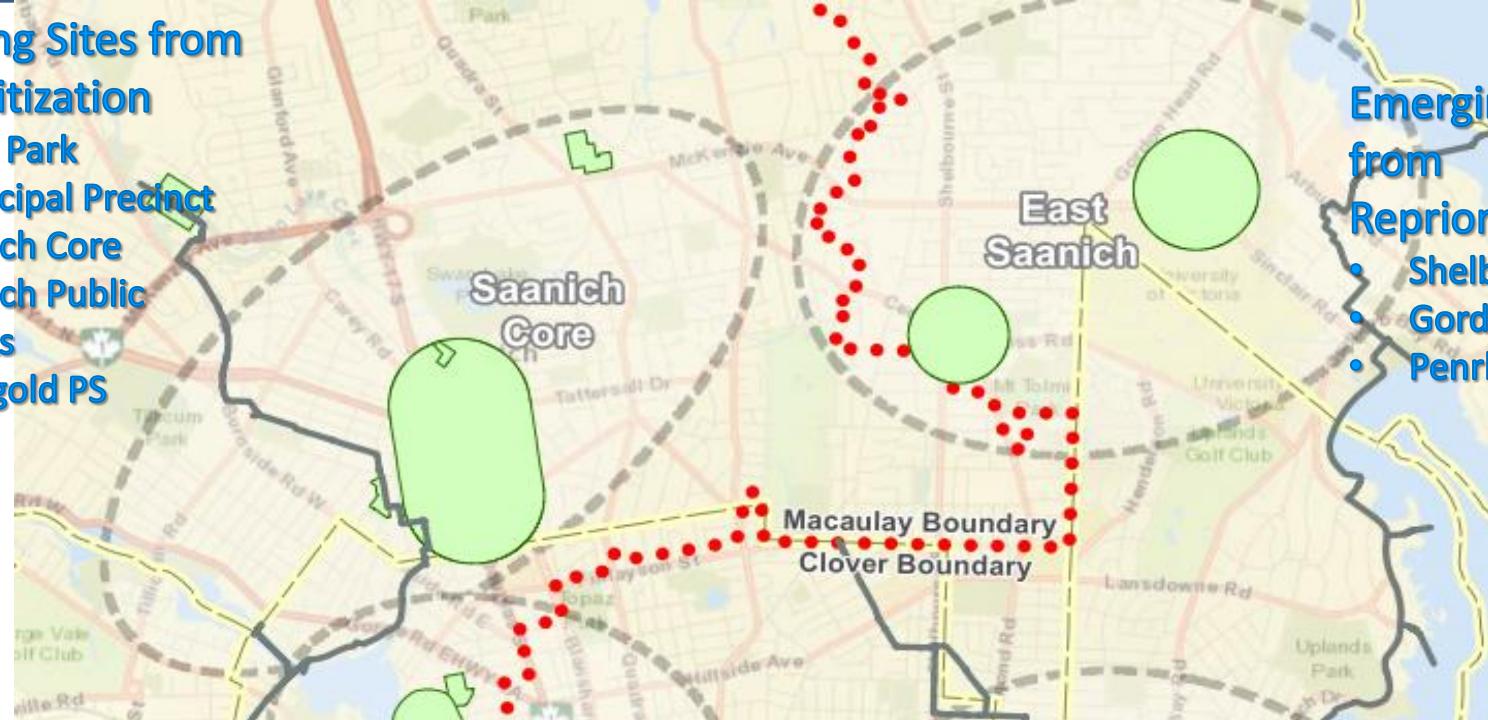


**Emerging Sites
from
Reprioritization**



Emerging Sites from Reprioritization

- Rudd Park
- Municipal Precinct
- Saanich Core
- Saanich Public Works
- Marigold PS



Emerging Sites from Reprioritization

- Victoria PW Yard
- BC Hydro-Transport Canada
- Central Park



Emerging Sites from Reprioritization

- Clover PS
- Ogden Point

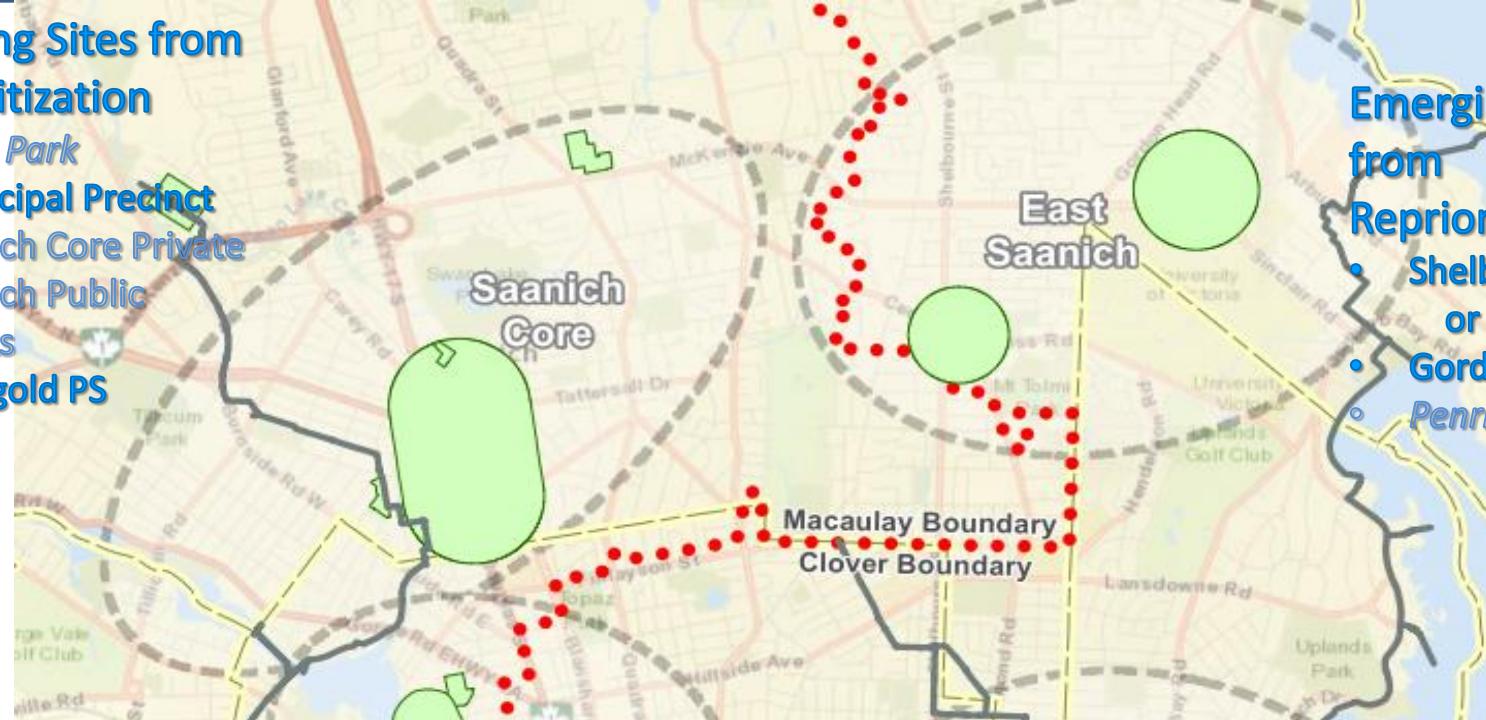


Emerging Sites from Reprioritization

- Trent PS
- Royal Jubilee

Emerging Sites from Reprioritization

- Rudd Park
- Municipal Precinct
- Saanich Core Private
- Saanich Public Works
- Marigold PS



Emerging Sites from Reprioritization

- Victoria PW Yard or BC Hydro-Transport Canada
- Central Park



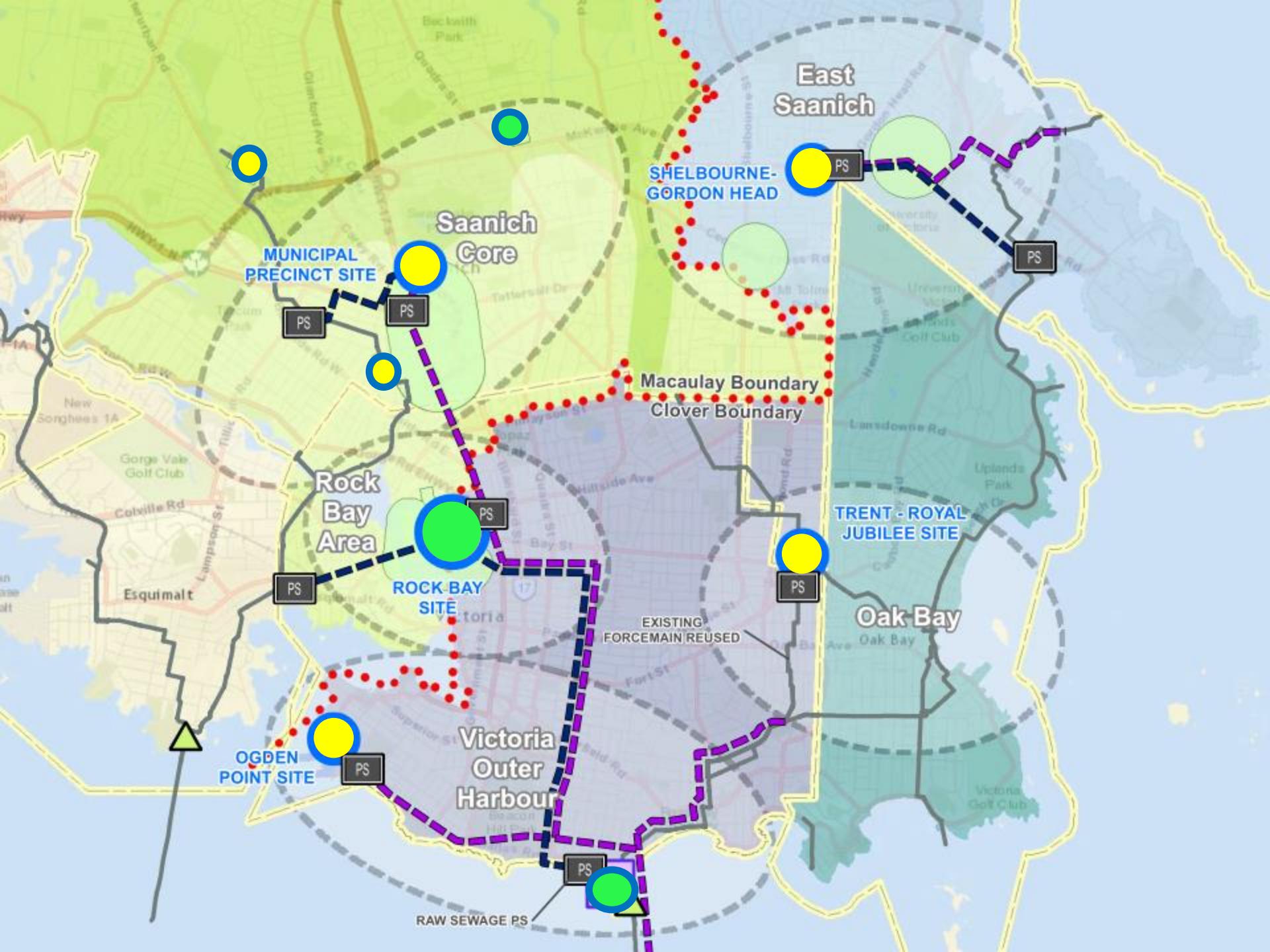
Emerging Sites from Reprioritization

- Clover & Ogden Pt

- Shelburne or Gordon Head
- Penrhyn PS

Emerging Sites from Reprioritization

- Trent -Jubilee

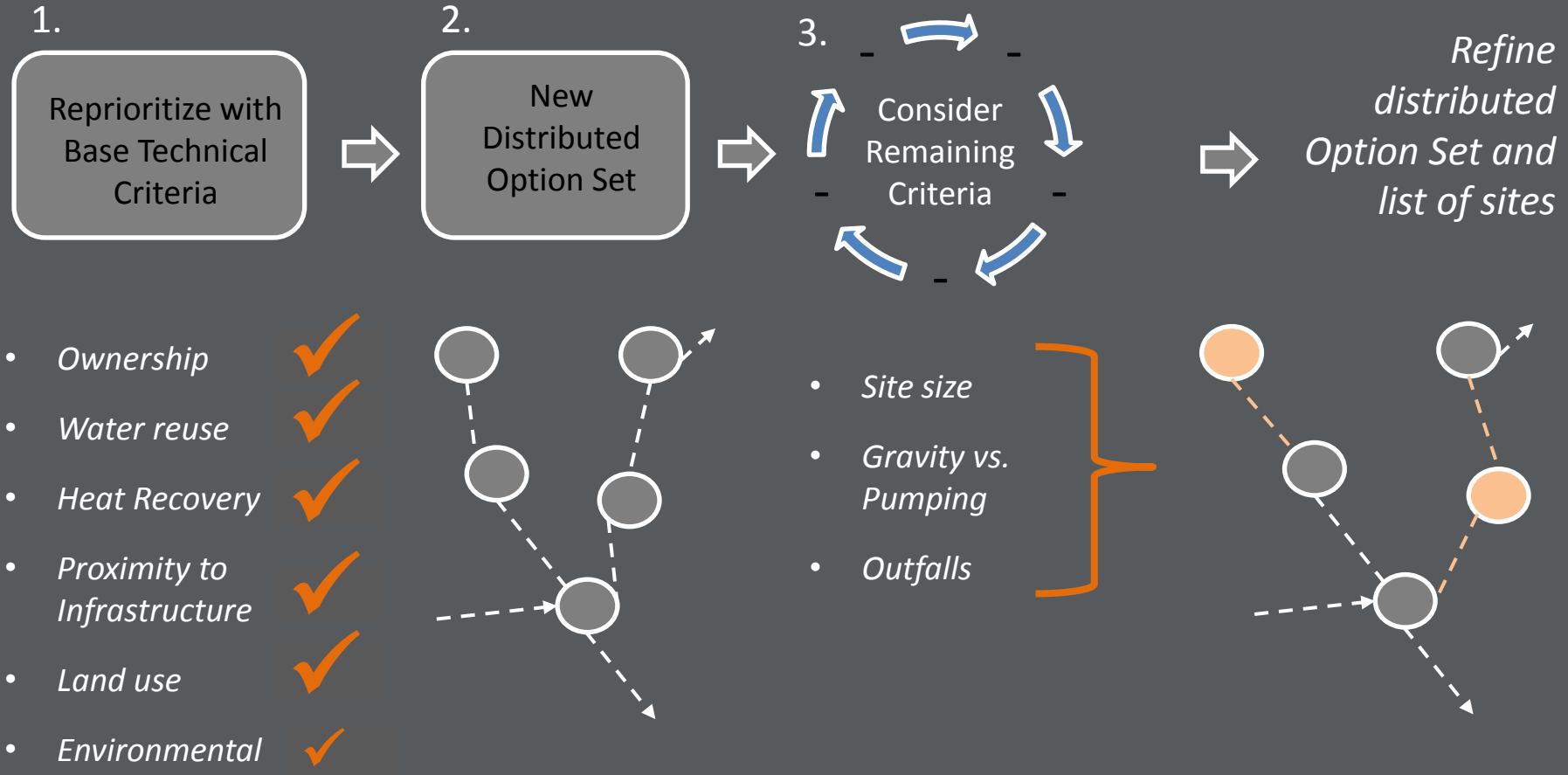


New Distributed Option Set

- 5 Plants for all Eastside flows
- Phase 2 consideration to more than 1 facility in Saanich Core site node
- Tertiary treatment focus w/ added process for reclamation
- Land uses include institutional, industrial, commercial
- Solids processing central or distributed (further study)
- Ability to accommodate all Core Area flows as needed
- Reprioritized to 14 sites

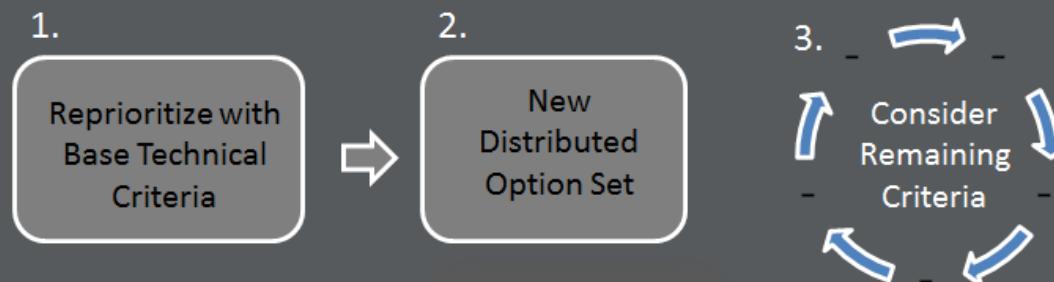


Reprioritize Approach



Overview

- Sites came from Councils & shaped through Eastside Dialogues
- Reprioritize informed by:
 - *Project Commitments*
 - *Values and Priorities*
 - *Engineering Standards and technical feasibility*
- Distributed Option Set sets up Phase 2
 - *Sub-regional wastewater system design*
 - *Breadth and depth of comparisons*
 - *Public acceptability*



Further Discussion and Questions

WESTSIDE SOLUTIONS SiteSpeak REPORT

Introduction:

SiteSpeak was the online platform utilized to engage residents allowing them to provide input into possible sites and technologies. This report presents quantitative data as well as some of the overall themes of respondents.

Some important things to note about SiteSpeak:

- only one survey completion was allowed through each computer address,
- respondents were allowed to skip questions if they did not wish to respond,
- provision was made to allow respondents to return to their survey after the Royal Colwood Golf Course site was added to amend their previous answers if needed,
- At the end of the survey respondents could see the statistical results to date (graphs).

A review of the methodology used was conducted and is attached to this report.

Data Summary:

The following is a brief summary of some of the statistical data collected in SiteSpeak. Graphs on all responses are contained in the body of the report. Percentages here have been rounded to the nearest whole number.

SiteSpeak duration	<ul style="list-style-type: none"> • Launched June 24 • Closed July 22 • Additional site (Royal Colwood Golf Course) added July 16
Participation	<ul style="list-style-type: none"> • 619 respondents • ~85% Westside residents
Average length of time to complete	<ul style="list-style-type: none"> • 1 hour 25 minutes
SiteSpeak promotion	<ul style="list-style-type: none"> • Options Launch Delta Hotel • Media release • Community Newspaper ads • Times Colonist online ad • Used Victoria online ad • CRD Face book ad • Westside Solutions website • Municipal websites • Postal drop across the westside ~27,000 households • Social media • Twitter • Facebook • Community events <ul style="list-style-type: none"> ◦ Vic West Fest ◦ Canada Day

	<ul style="list-style-type: none"> Fort Rodd Hill o Goldstream Market o Esquimalt Market o Neighbourhood Nights – View Royal
Priority sites within nodes	<ul style="list-style-type: none"> • Esquimalt Nation - Site 15, • View Royal - Site 16, • Langford - Site 2a/2b, • Colwood - Site 14, and • Colwood - Site 4.
Number of sites preferred	<ul style="list-style-type: none"> • 4 sites ~20% • 2 sites ~25% • 1 site ~26% • Other/unsure ~29%
Level of Treatment	<ul style="list-style-type: none"> • meet regulatory requirements ~12% • exceed regulatory requirements with cost recovery ~21% • exceed regulatory requirements to protect environment ~15% • all are important ~44% • unsure ~8%
Technology preferences	<ul style="list-style-type: none"> • Advanced waste water treatment ~42% • Aerobic digestion ~24% • Anaerobic digestion ~25% • Gasification ~33% • Dewatering and transporting ~10% • Unsure/other ~48%
Willingness to pay more	<ul style="list-style-type: none"> • 0 cents per day ~28% • 25 cents per day ~36% • 50 cents per day ~21% • 75 cents per day ~3% • 1 dollar per day ~11%

Commentary Summary:

The majority of comments on SiteSpeak have been constructive. Even those expressing concerns over specific sites or issues have been valuable in contributing to the conversation.

The commentary themes on specific sites and nodes have not changed from what was observed in the Interim Report tabled on July 15, 2015. Some common themes, concerns and priorities include:

- needing to see resource recovery benefits
- concerns over proximity to residential
- proximity to infrastructure
- ownership of potential site
- protection of recreation and environmental values
- future development potential

Again, common themes and conditions expressed throughout the responses, regardless of site location remained similar including:

- ensuring odour control/elimination from any facility
- minimizing traffic
- minimizing noise
- complementing any environment where a facility is built
- ensuring public safety – including taking into account sea level rises
- developing and maintaining trust through on going public involvement

There is also continues to be a need for further detailed information including;

- cost and benefit analysis
- all costs (life cycle and ancillary infrastructure)
- cost comparisons between each option
- potential environmental impacts
- realistic resource recovery benefits and liabilities
- keeping the process open and transparent to the public to ensure sound economic and environmental outcomes

All comments and data received through SiteSpeak or via email pertaining to the questions posed in SiteSpeak will be available through the website at:

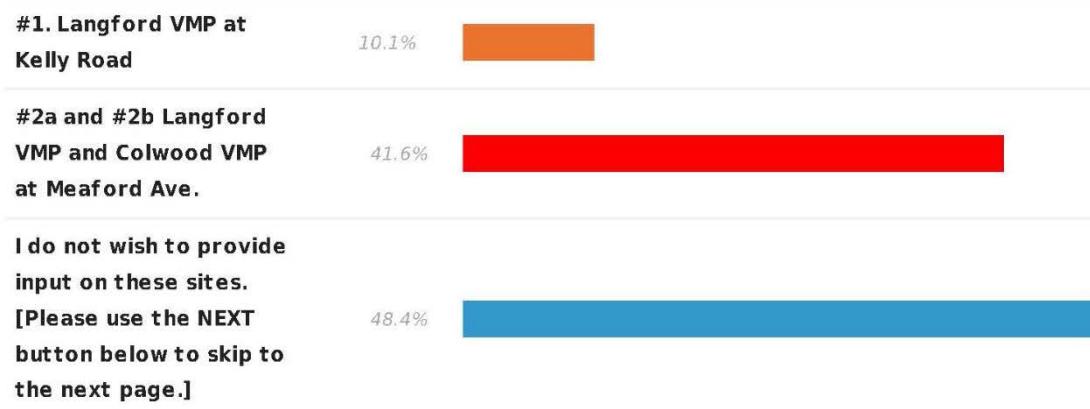
<https://www.crd.bc.ca/westside-solutions>

Sites:

LANGFORD SITE NODE:

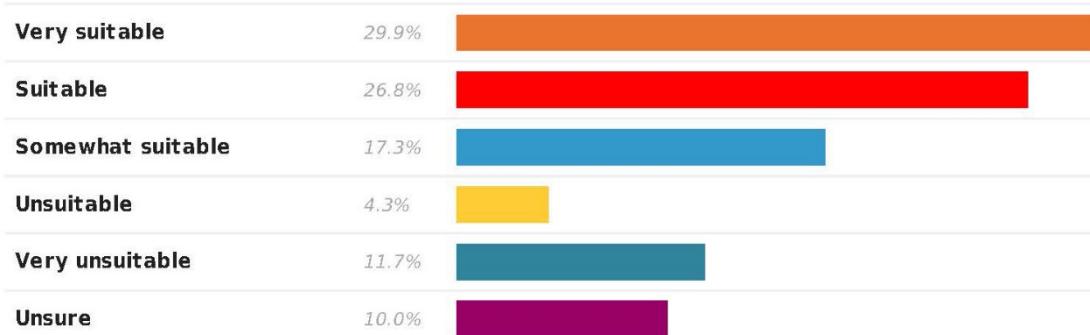
Preferred site:

The majority of respondents chose THE Langford/Colwood VMP at Meadford (Site #2a/2b)



How suitable do you consider this site in terms of how the land is currently used, how wastewater resource facility would fit with the surrounding area and future plans for the community?

Response



Benefits:

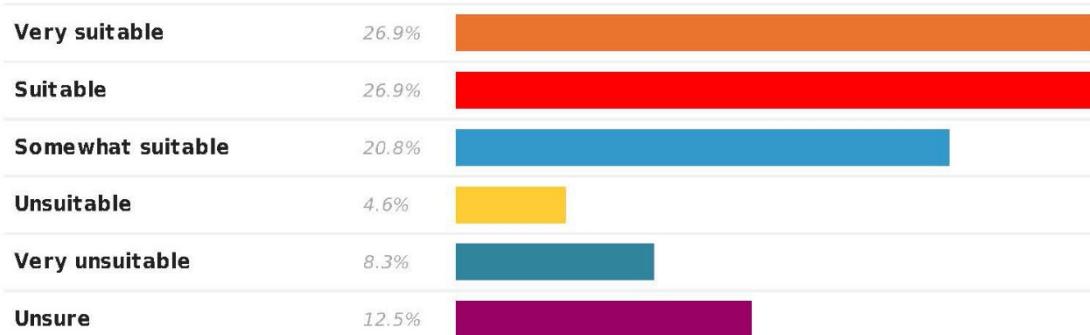
- site not adjacent to residential
- close to infrastructure
- high water reclamation opportunities

Concerns:

- privately owned therefore could increase costs
- conflicts with current zoning
- increased traffic could be a problem

How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?

Response



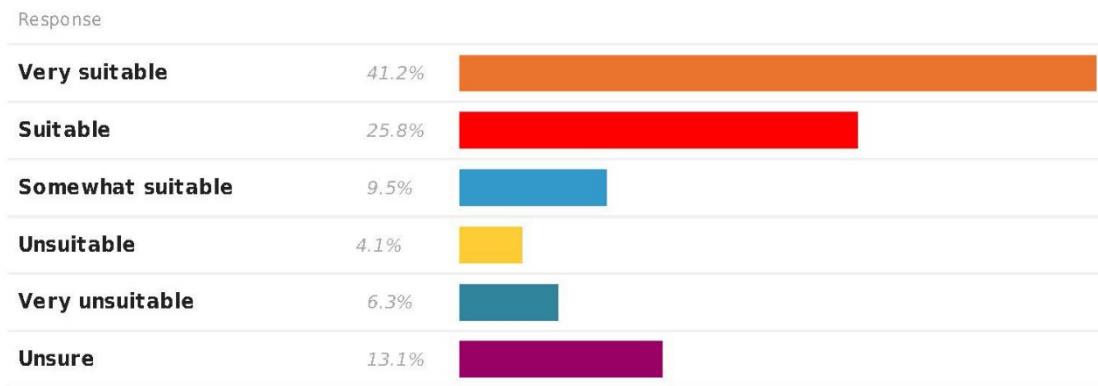
Benefits:

- high water re-use opportunities
- potential new opportunities for heat recovery including both private and public buildings

Concerns:

- heat recovery would take more work as there are few at this time
- health concerns over water re-use

How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



Benefits:

- well situated to existing trunk lines and truck routes
- very accessible

Concerns:

- possible increased traffic issues – particularly as it is close to a school

What conditions would need to be met in order for you to consider this site suitable?

- must fit in with the community – to the point of being “invisible”
- no odour or noise pollution
- cannot comment without more information on design, cost or potential reclamation opportunities

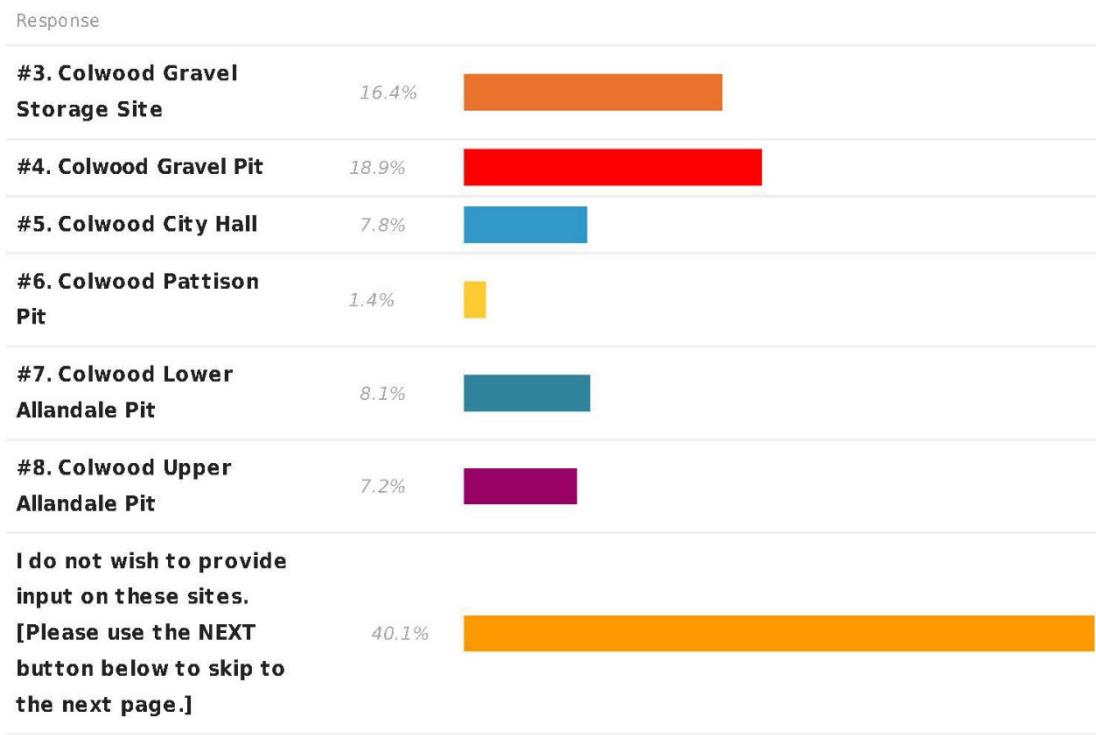
TECHNICAL COMMENTS

- Site 2a:2b is large enough to accommodate liquids and residuals treatment at sub-regional scale
- Public input suggests any facility should tie into existing and future uses and be partly hidden
- A facility at 2a:2b is better suited a distributed-type plant with residuals processing located at an alternate site (to accommodate the input of being partly hidden)
- Site acquisition or assembly requires further study

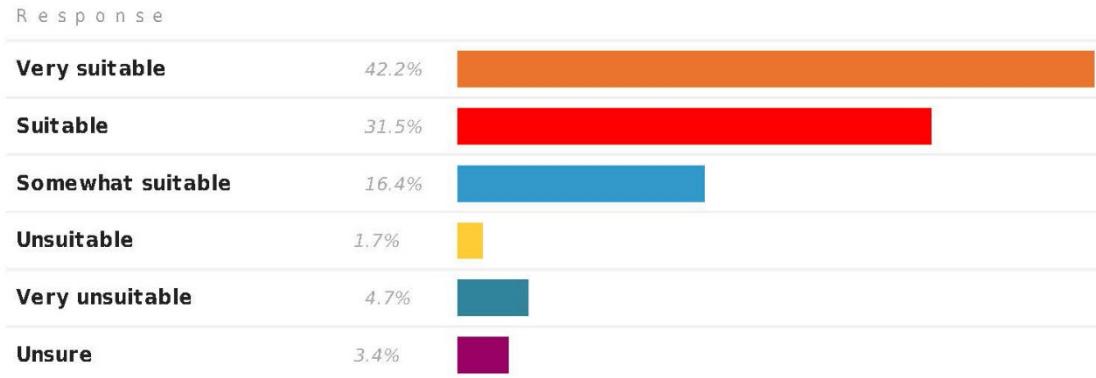
COLWOOD SOUTH – CENTRAL NODE:

Preferred site:

The majority of respondents chose the Colwood Gravel Pit (Site #4).



How suitable do you consider this site in terms of how the land is currently used, how wastewater resource facility would fit with the surrounding area and future plans for the community?



Benefits:

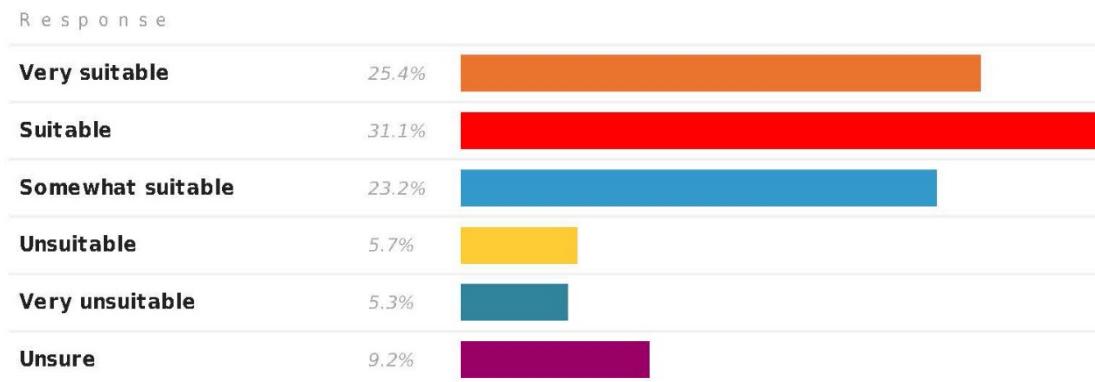
- growth in area could see more resource recovery
- currently undeveloped and available

- expansion possibilities

Concerns:

- could deter future investment and development opportunities
- currently limited resource recovery options

How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



Benefits:

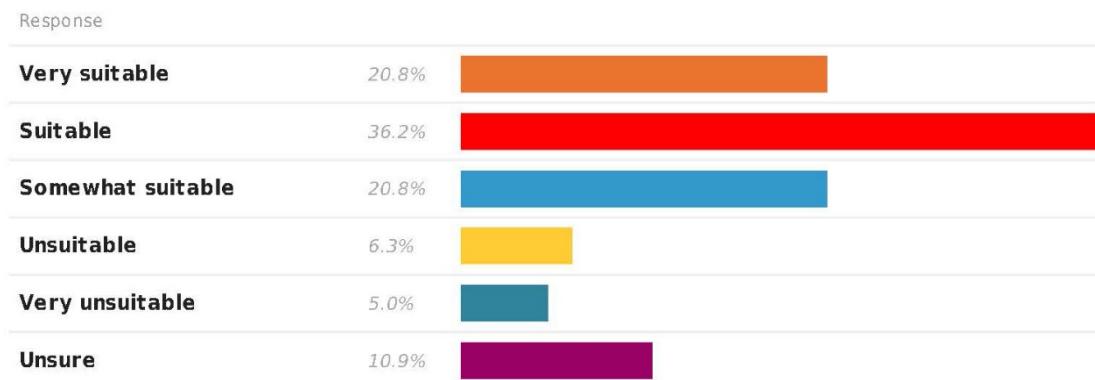
- opportunities for utilizing reclaimed water and energy into future developments

Concerns:

- heat and water reclamation not a priority
- too far from existing facilities

How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?

3. How suitable to you consider this site in terms of how close it is to existing sewer trunk and truck routes?



Benefits:

- roads with close proximity
- room for expansion

Concerns:

- too far from existing outfalls
- current access goes through residential neighbourhood

What conditions would need to be met in order for you to consider this site suitable?

- no conditions – this is bad for investment
- would require additional consultation with residents in the area
- must be invisible

TECHNICAL COMMENTS

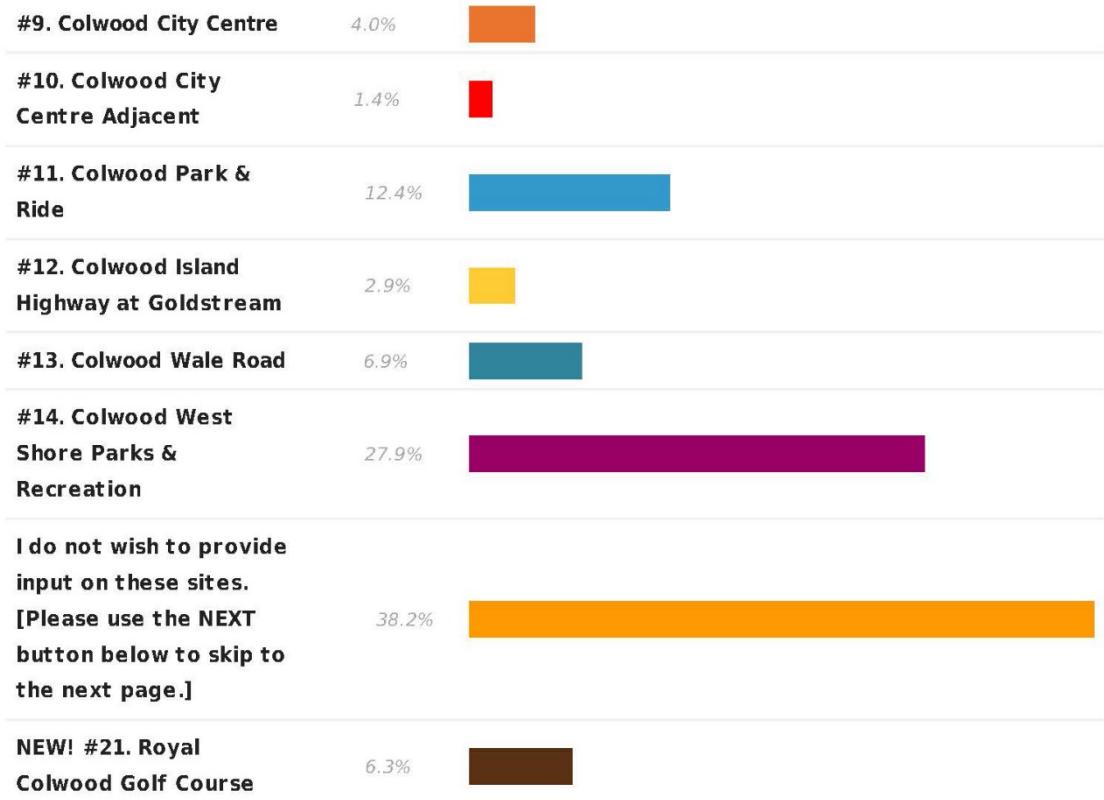
- Servicing Site 4 requires greater infrastructure needs (e.g. length of pipe and new outfall) and a lesser opportunity for resource recovery than sites in other Option Sets
 - Site 4 demonstrates some potential for a satellite facility phased in over time with growth at Royal Bay (e.g. to eliminate cost of rerouting flows across the sub-region)
 - Site acquisition requires further study
 - Note: Similar technical considerations apply to Site 3 (both received public support)
-

COLWOOD NORTH NODE:

Preferred site:

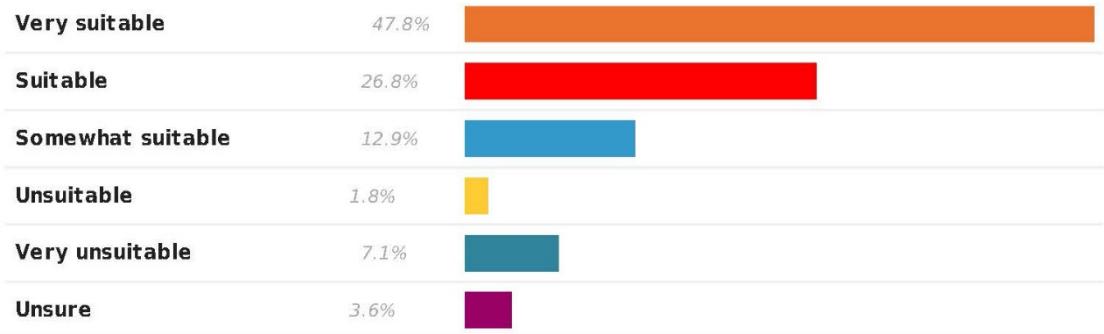
The majority of respondents chose the Colwood West Shore Parks & Recreation (Site #14).

Response



How suitable do you consider this site in terms of how the land is currently used, how wastewater resource facility would fit with the surrounding area and future plans for the community?

Response



Benefits:

- high potential for resource recovery
- reasonable distance from residential
- publically owned

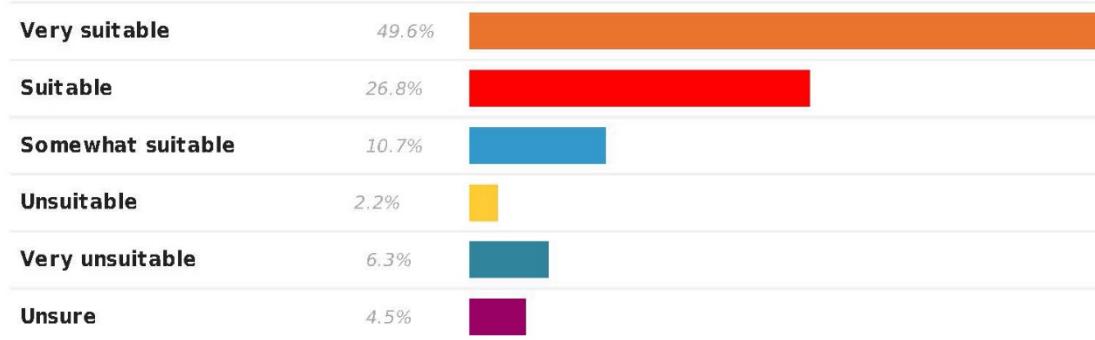
Concerns:

- needs to at least comprise to maintain the park

How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?

2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?

Response



Benefits:

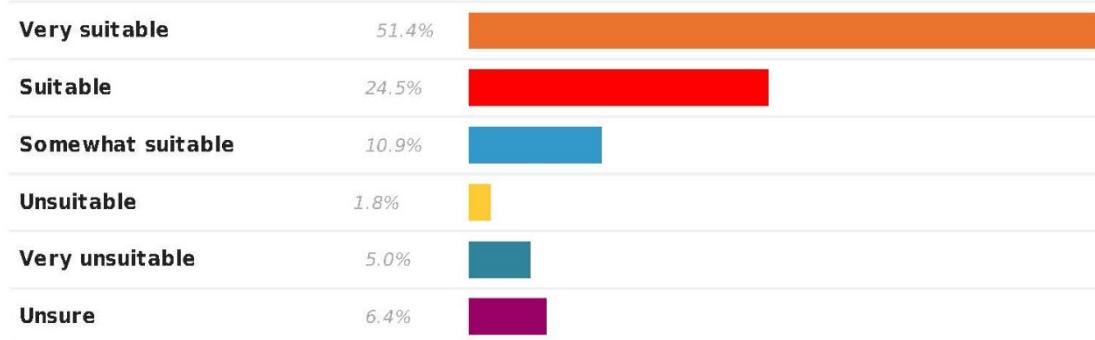
- possible benefits for the recreation centre and surrounding park
- adjacent to other services

Concerns:

- none at this time

How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?

Response



Benefits:

- extremely close
- good proximity to highway

Concerns:

- none at this time

What conditions would need to be met in order for you to consider this site suitable?

- appropriate amenities
- that enhance park values and recreational use
- maintain park and ride

TECHNICAL COMMENTS

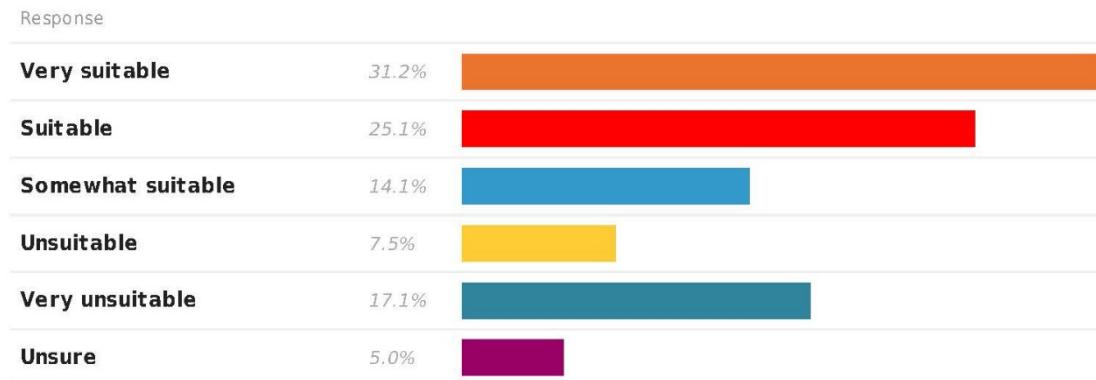
- Site 14 is sufficiently large enough to accommodate a sub-regional facility including liquids and residuals processing
- Site 14 is better suited to a distributed model to prevent directing large flows from the View Royal, Esquimalt and First Nations back up the sewer-shed (e.g. need for significant pipes and pump stations)
- Further study needed on governance for use of the Site 14 (inter-municipal lands) as wastewater facility and identifying the preferred location for any facility (e.g. identifying where there is surplus lands)

VIEW ROYAL NODE:

Preferred site:

There is only one site in this node View Royal Burnside & Watkiss (Site #16).

How suitable do you consider this site in terms of how the land is currently used, how wastewater resource facility would fit with the surrounding area and future plans for the community?



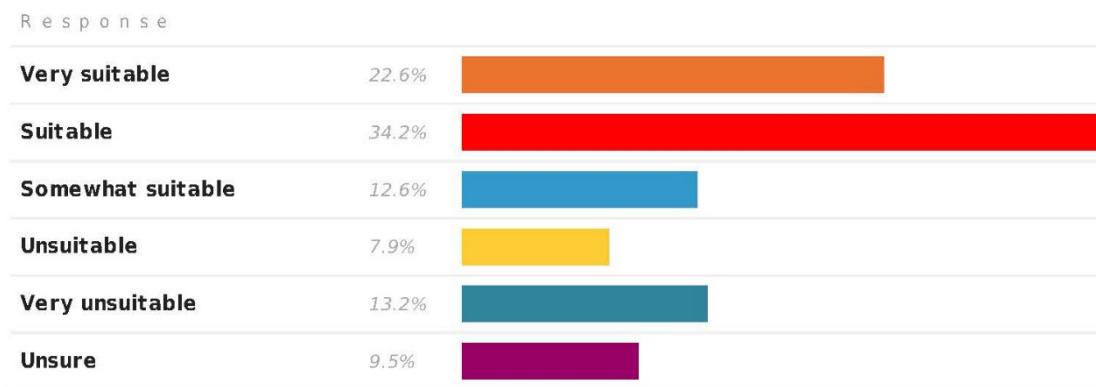
Benefits:

- publically owned and currently vacant
- not too close to residential
- good proximity to transportation and resource recovery opportunities

Concerns:

- parkland/recreation opportunities need to be reserved
- too close to hospital/school/residences
- possible archeological issues

How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



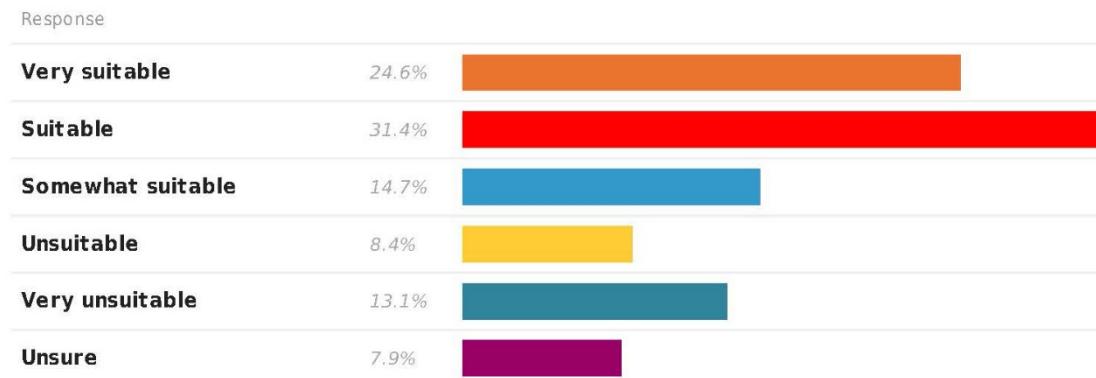
Benefits:

- good recovery opportunities with proximately to hospital and golf course

Concerns:

- size may limit possibilities
- not enough detail to fully comment

How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



Benefits:

- near some truck routes

Concerns:

- not near a main highway
- not at the end of the pipe and may require more infrastructure like pump stations

What conditions would need to be met in order for you to consider this site suitable?

- integration into community and current uses including odour and noise control
- for the province to agree to either gift the land or negotiate a fair price
- separate access away from school

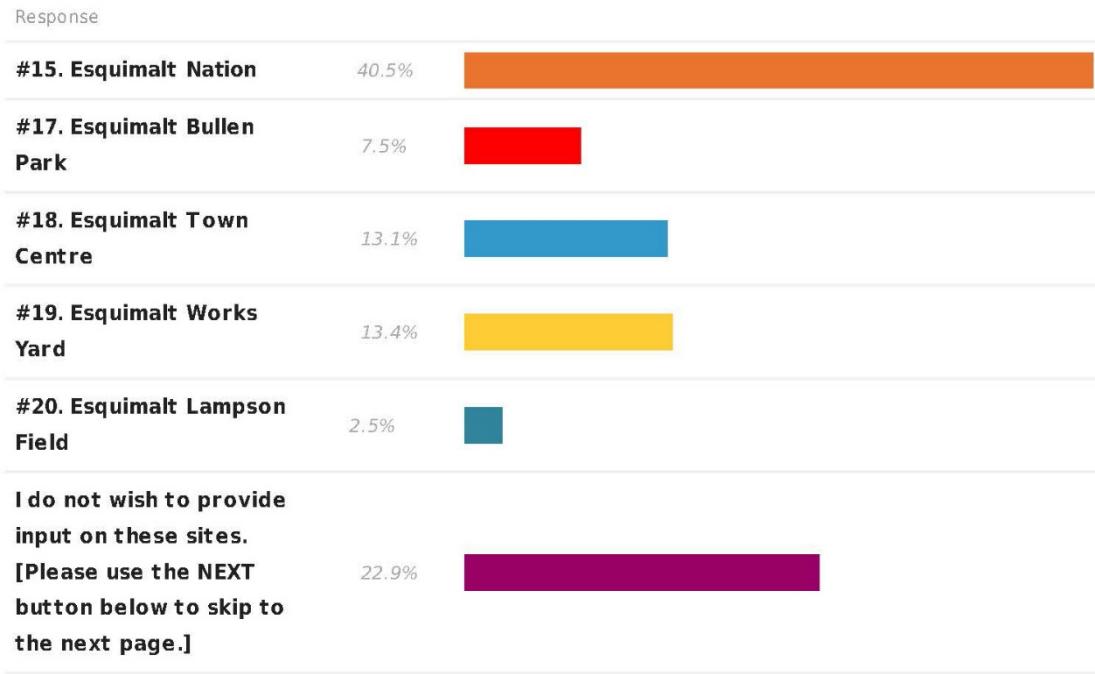
TECHNICAL COMMENTS

- BC Hydro right-of-way should be studied to incorporate any setback/limitations for new works (e.g. may limit site area significantly)
 - Servicing Site 14 in any distributed or dual model requires relatively high amounts of new infrastructure
-

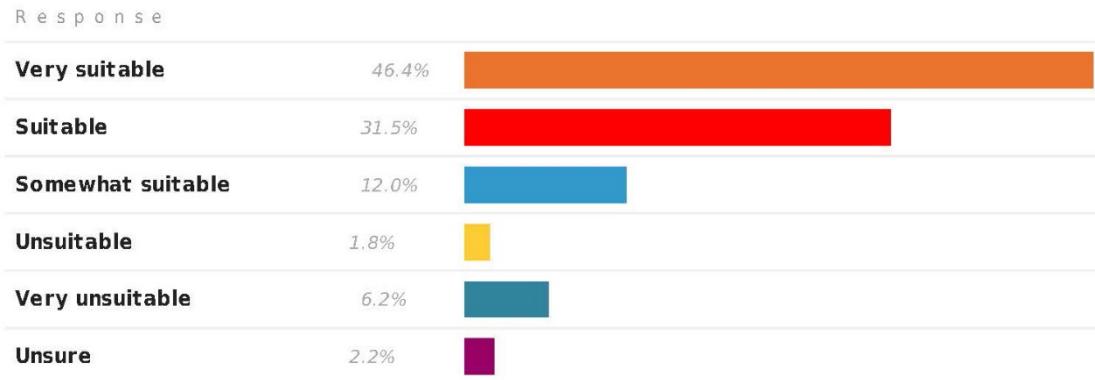
ESQUIMALT NODE:

Preferred site:

The majority of respondents chose the Esquimalt Nation (Site #15)



How suitable do you consider this site in terms of how the land is currently used, how wastewater resource facility would fit with the surrounding area and future plans for the community?



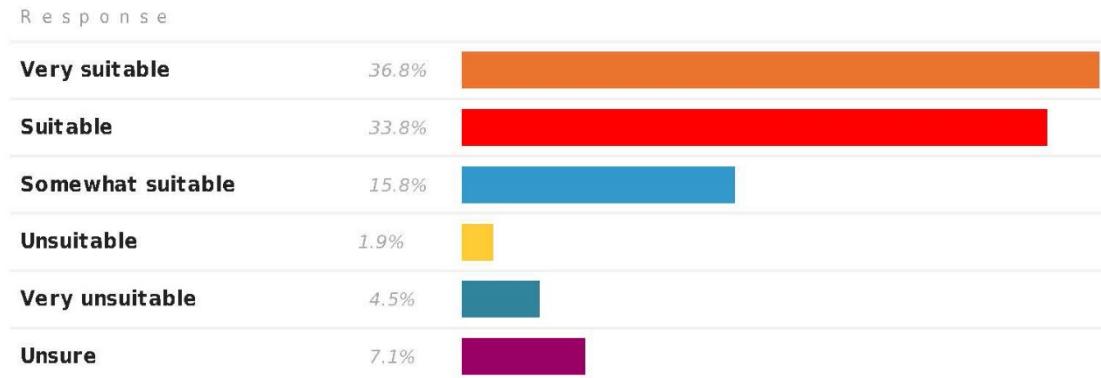
Benefits:

- site currently vacant
- has possibility to allow for expansion

Concerns:

- parkland and recreation opportunities need to be maintained
- must have secure access

How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



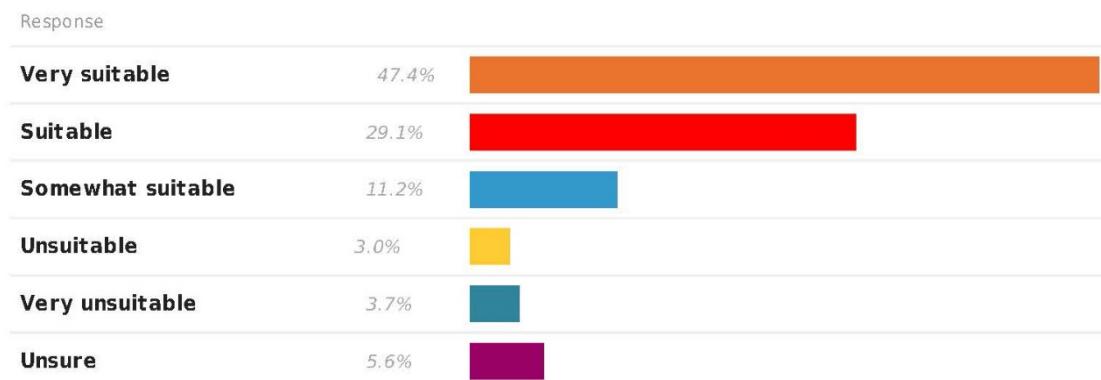
Benefits:

- potential for water reuse such as with the golf course
- future development possibilities for resource utilizations

Concerns:

- better opportunities elsewhere
- not a priority

How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



Benefits:

- close to both sewer mains and truck routes

Concerns:

- could contribute to traffic congestion

What conditions would need to be met in order for you to consider this site suitable?

- agreements in place with Esquimalt Nation

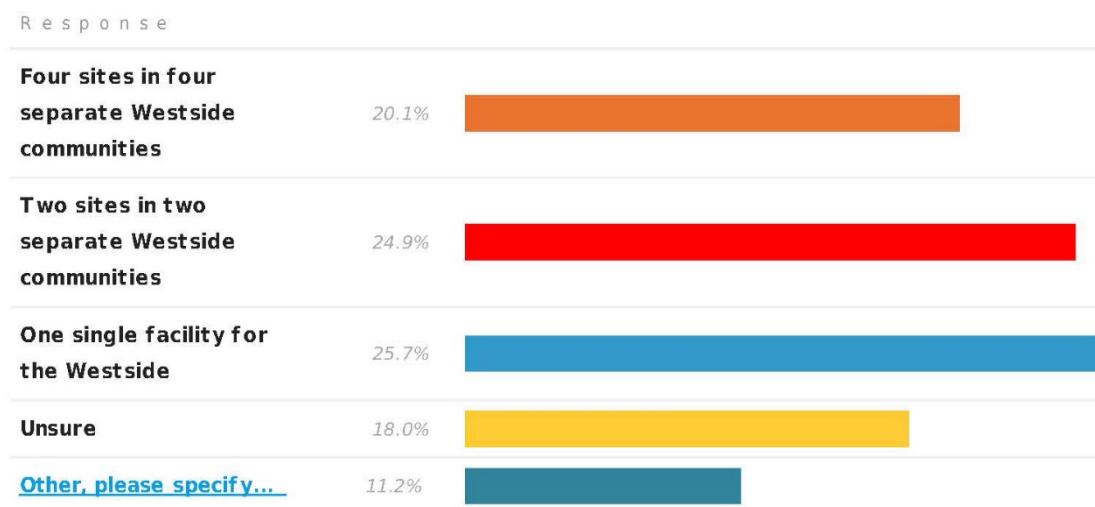
- proper odour, noise and traffic management

TECHNCIAL COMMENTS

- Site 15 is suitable for all Option Set configurations: 1 plant, 2 plant and 4 plant
- Possibilities to utilize other sites in Esquimalt site node for heat recovery or water reclamation
- Site 15 has high public support for both liquid and residuals treatment

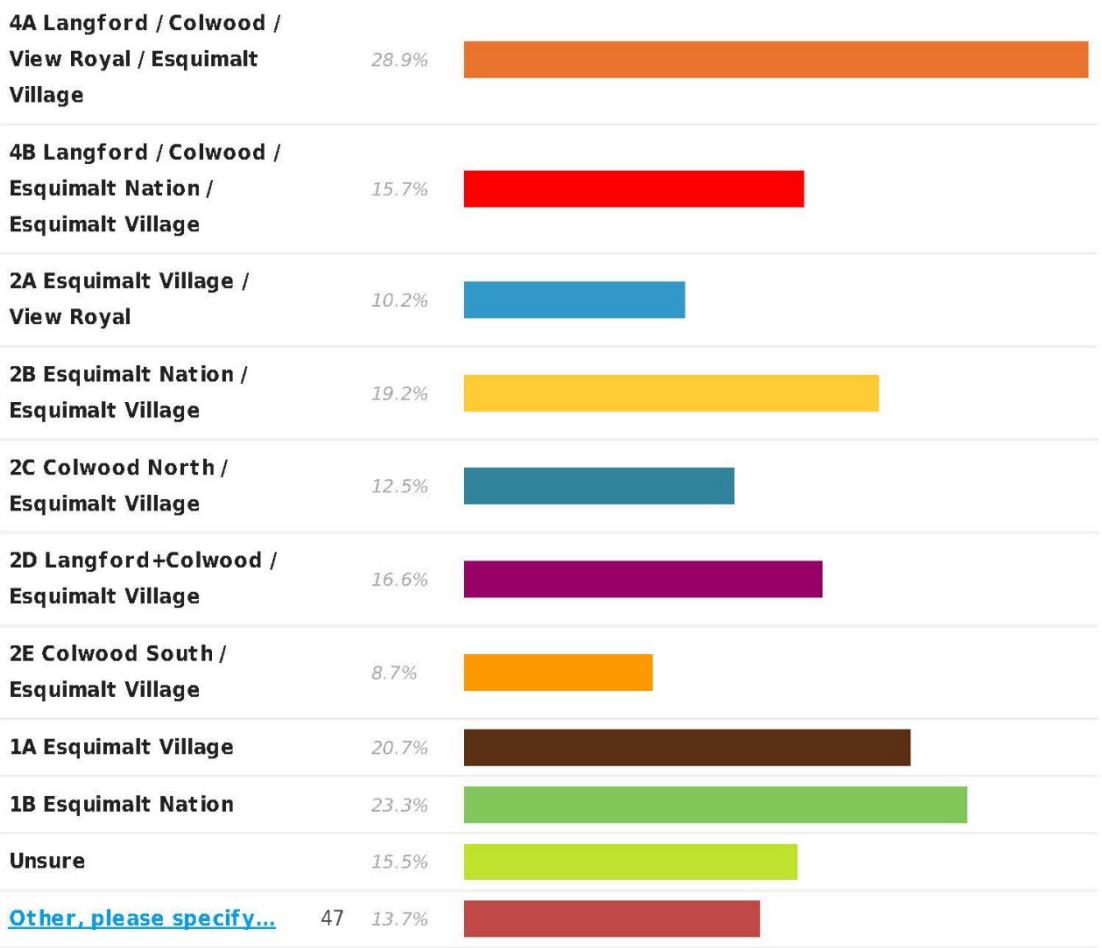
Number of sites:

What number of westside wastewater resource sites makes the most sense to you?



Of the sample option Sets presented, which option (s) do you feel should move forward for further technical analysis?

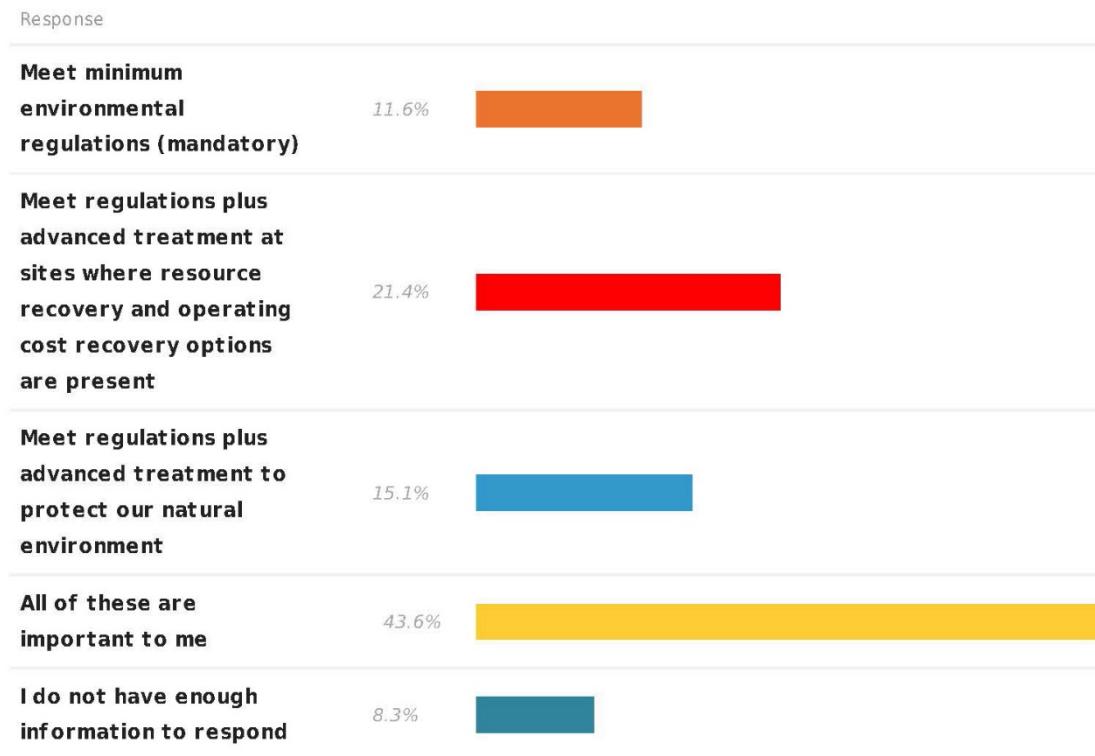
Response



Level of treatment:

Removal of Harmful Substances

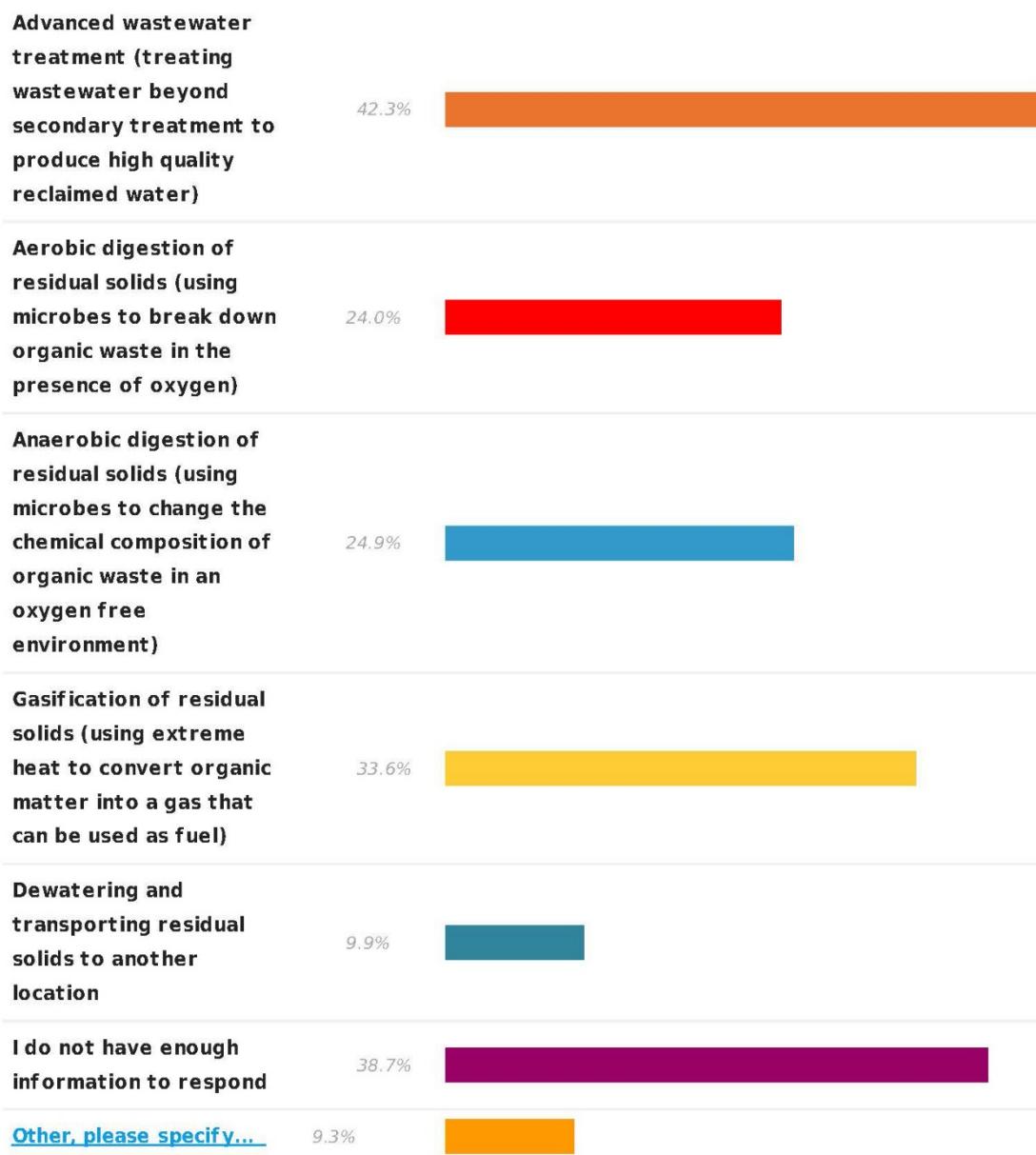
*To what degree do you think a wastewater resource facility should deal with harmful substances?
(Please select one.)*



Focusing in on Technology

What technology would you support in your community? (Please select all that apply.)

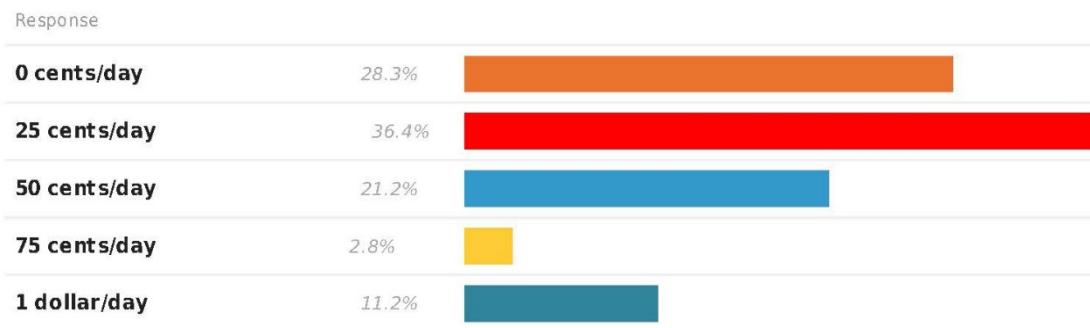
Response



Costs:

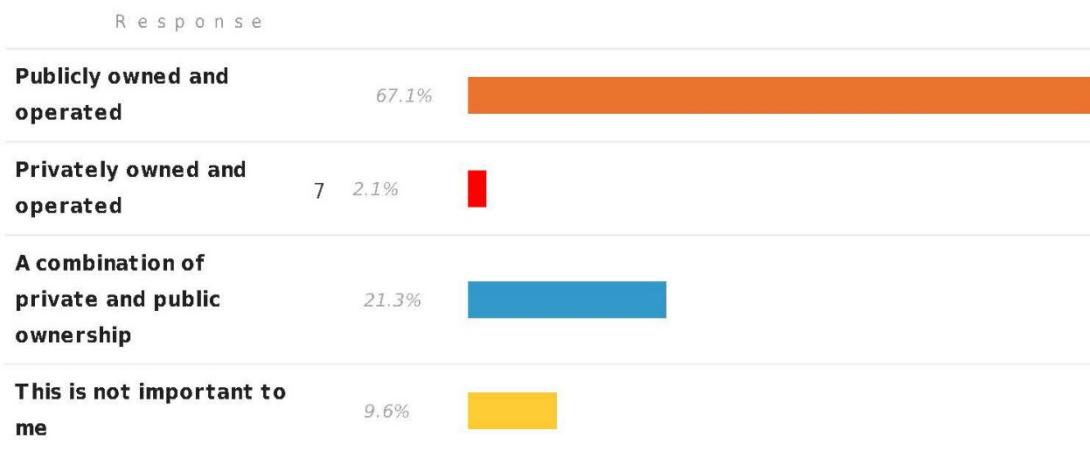
Breaking down the costs

Regulations require the region to treat wastewater to at least secondary treatment levels. If there were additional costs attached to a higher level of treatment, what would be a reasonable amount for each household to pay per day? (Please select one.)



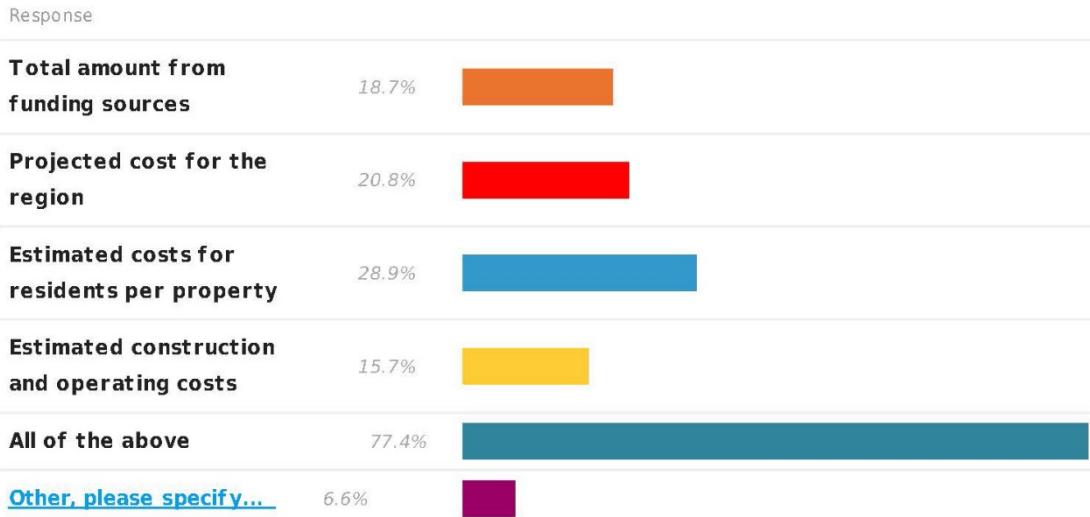
Defining Ownership and Governance

What is your view of the ideal ownership and governance of the site? (Please select one.)



Reporting on Financial Aspects

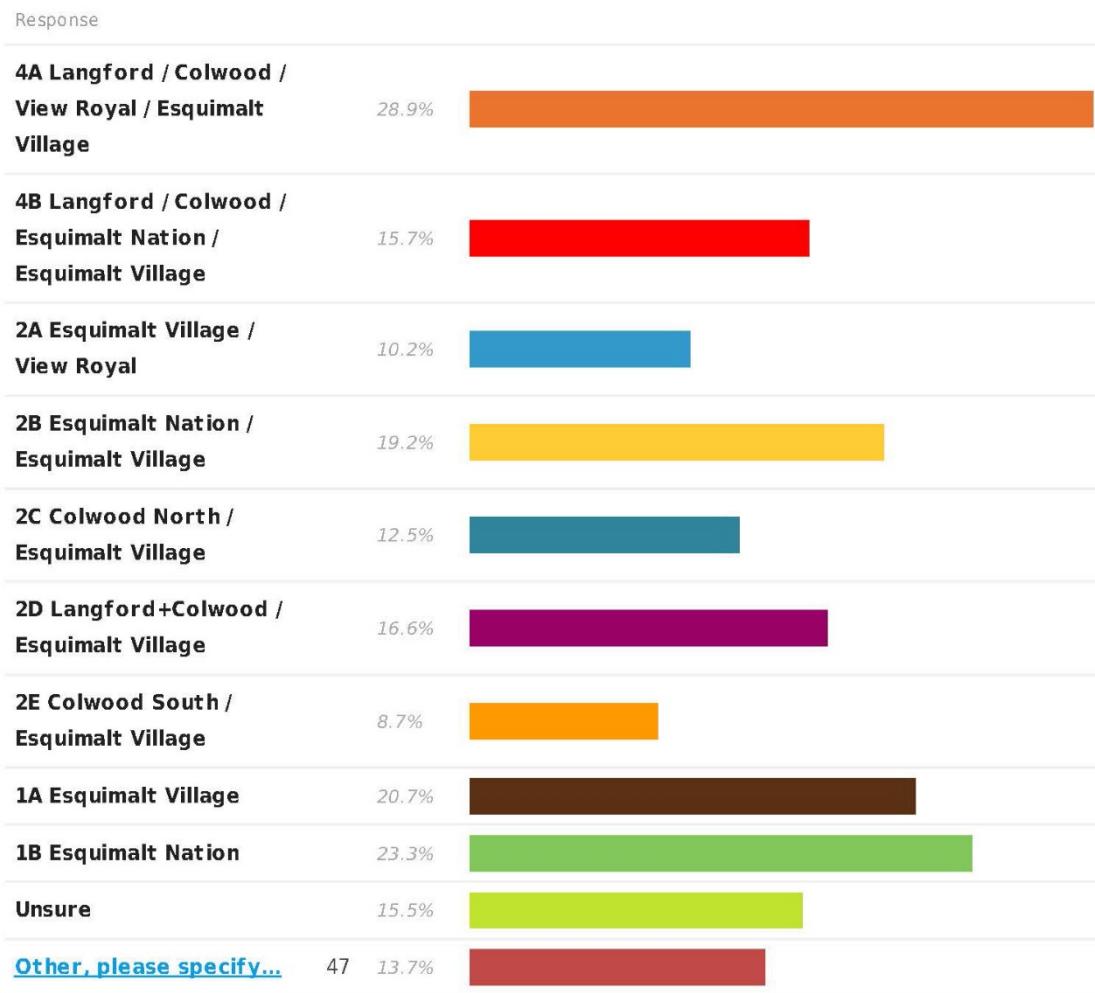
What information will you need in order to provide input into cost options over the course of the project? (Please select all that apply.)



If your chosen wastewater resource solution would cost significantly more than another option, would that affect your choice?



Responses by Community:



Conclusion:

While SiteSpeak has provided valuable information to help guide decision makers in moving forward in siting, designing, constructing and operating a wastewater treatment – resource recovery facility or facilities it is evident that there is both a need and desire for further public input into the process.

Further engagement activities must first provide clear updated information about options and should consist of a variety of methods and platforms to give the widest number of residents the opportunity to participate including:

- polling with targeted population samples
- continued input via the website
- community outreach activities

Even though this particular round of consultation occurred primarily over the summer it is clear that there is a very real demand by a considerable number of citizens to spend time and effort contributing

constructively to the process. It is important that the trust that is being established is maintained throughout the remainder of the project.

WESTSIDE SOLUTIONS

Technically Feasible Wastewater Treatment Site Profiles

Introduction

As part of the Westside Select Committee mandate to develop options for wastewater treatment and resource recovery, the Westside Solutions team has been working on two tracks, technical assessment and public engagement. The combined efforts of these processes have resulted in the identification of potential sites for wastewater treatment as well as flow scenarios for wastewater currently being discharged at McCaulay Point.

For the twenty sites that have been identified, it is possible for each site – or combination of sites – to accommodate secondary or tertiary treatment and handling of solids. The twenty sites are generally located in 6 Site Nodes throughout the Westside, as seen on the overview map. For this analysis, the same measures were used by each jurisdiction to give residents an indication of site attributes. This includes:

- proximity to the trunk and truck routes,
- current recovery potential for water reuse for, e.g. irrigation
- current recovery potential for heat use for, e.g. access to boilers
- seismic concerns as indicated by the Province of British Columbia's data mapping

Other factors included ownership, current use, zoning and Official Community Plans. (It is important to note that current use and opportunities were analysed for this report – future potential uses and opportunities will be factored in upon further analysis and public input.)

Westside Solution options for wastewater treatment and resource recovery could be any combination of 1 - 4 sites. Analysis of wastewater flows, future resource recovery options, and community and costing considerations will help to further define solution sets.

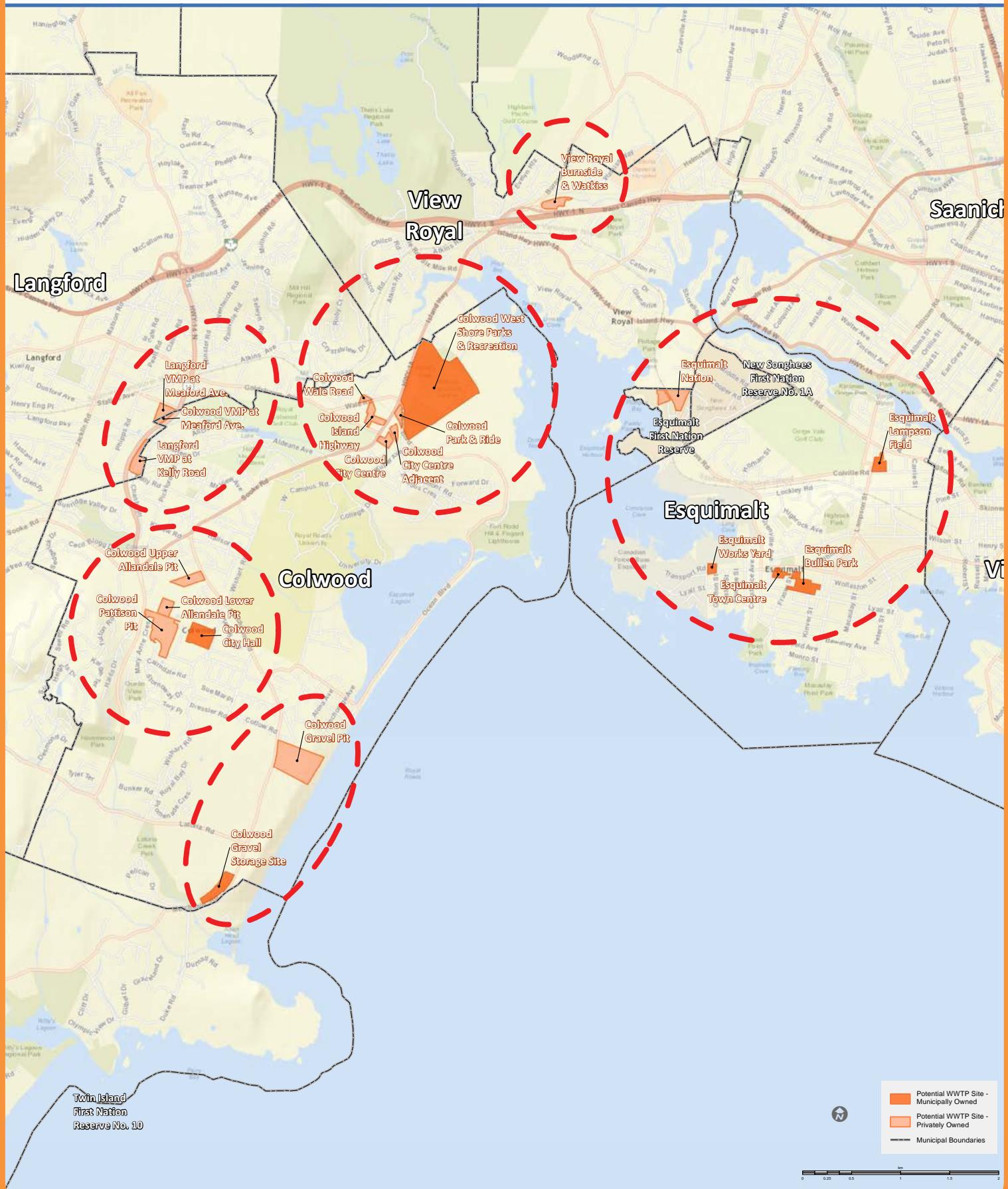
Residents are invited to provide input on sites through an online platform that will be presented on June 24. This feedback will be a critical factor in any decision on which sites and scenarios will proceed to undergo a more detailed analysis.

We appreciate you taking the time to consider all the potential sites and scenarios. We look forward to receiving your thoughts and ideas as we move forward together to find an economically and environmentally responsible solution for treating our wastewater.

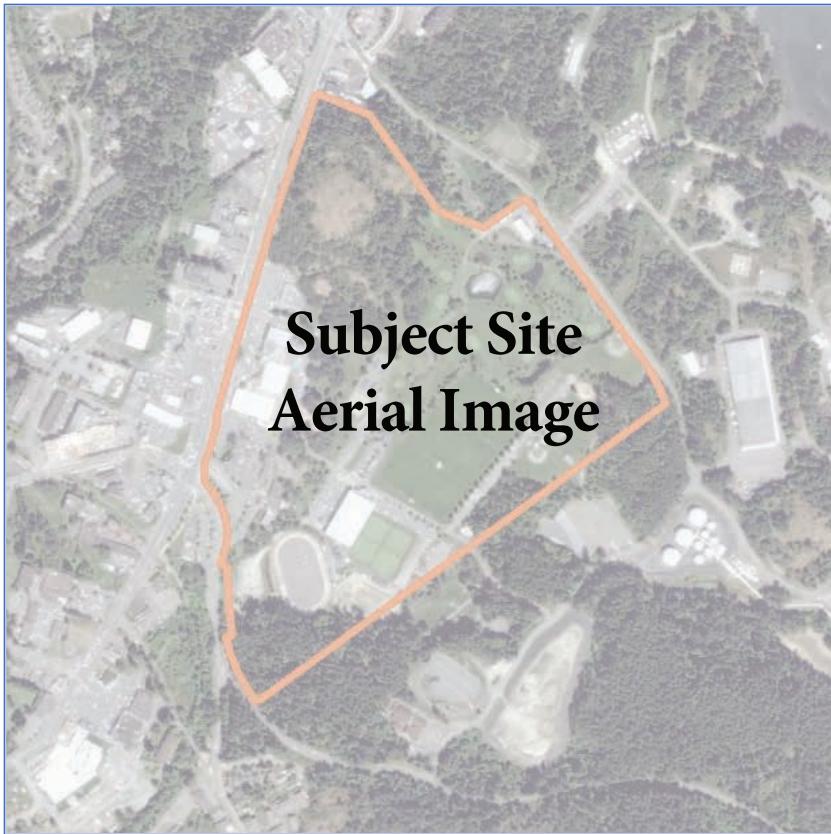
Westside Solutions



Westside Site Profiles



Information Sources Reference Sheet



Address: Street name, municipality

Ownership: private / public

Size of site: GIS generated (hectares)

Elevation of site: GIS generated (metres above sea level)

Current use: Present use of site

Existing zoning: From municipal zoning bylaw

OCP designation: From municipal Official Community Plan

OCP factors:

Based on each municipality's Official Community Plan.

Distance to truck route:

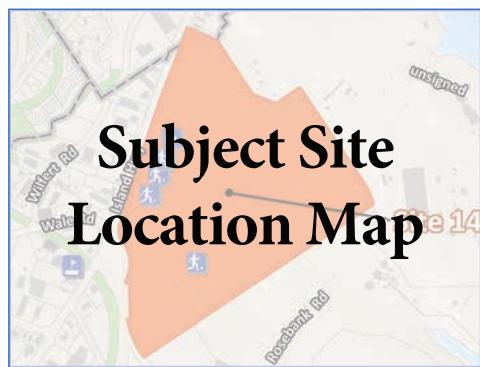


Based on proximity to Truck Route or municipal arterial as measured from the centre of site.

Distance to CRD trunk main:



Based on proximity to CRD sanitary trunk main.



Current water reuse recovery potential:

Based on proximity to potential water reuse users (eg. parks or golf course)

Current heat recovery potential:

Based on CRD discussion paper entitled 'Identification and evaluation of resource opportunities' (CH2M Hill, Associated Engineering, and Kerr Wood Leidel, 2008)

Seismic Concerns:

Data from BC Earthquake Hazard Mapping of Greater Victoria.

Other Considerations:

As noted

Access & Infrastructure

Summary of proximal distances to sanitary trunk mains, truck routes, and arterial roads.

Land & Amenities

Summary of land use considerations that affect siting, including current and future use, proximity to redevelopment and civic facility development and land ownership

Resource Recovery

Summary of heat recovery and water reuse potential

#1. Langford VMP at Kelly Road



Address: Veterans Memorial Parkway,
Langford

Ownership: Private

Size of site: 3.09 hectares

Elevation of site: 62.5 metres

Current use: Vacant

Existing zoning: Residential

OCP designation: Mixed Use
Employment Centre

OCP factors:

- Major civic uses and key landmarks
- Langford City Centre

Distance to truck route or arterial road:



11 metres

Distance to CRD trunk main:



195 metres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

Seismic Concerns:

Low Moderate High

Other Considerations:

- Within regional growth centre
- Colwood Creek within property site

Access & Infrastructure



Land & Amenities

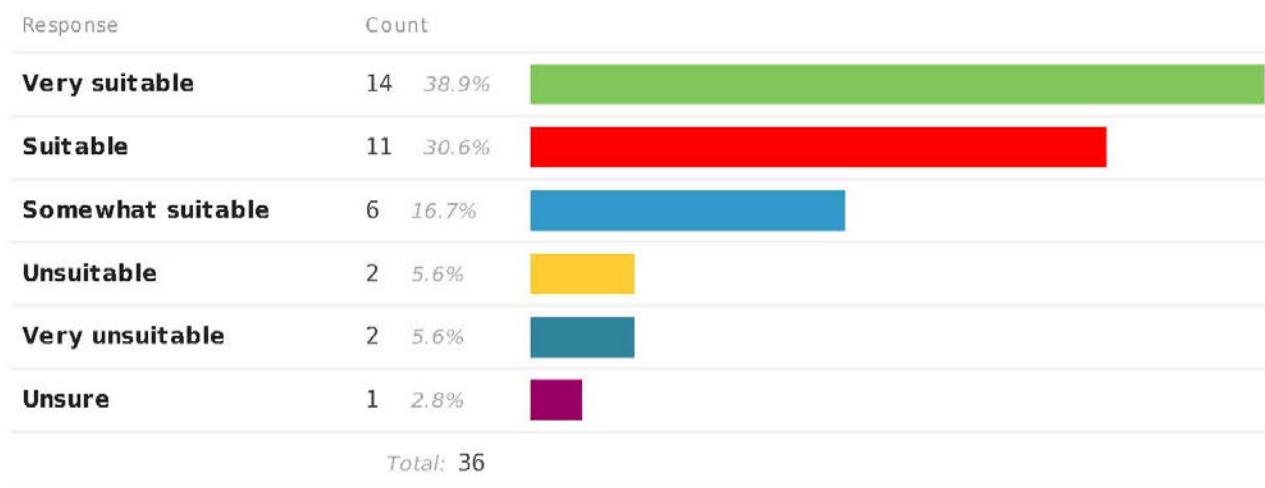


Resource Recovery

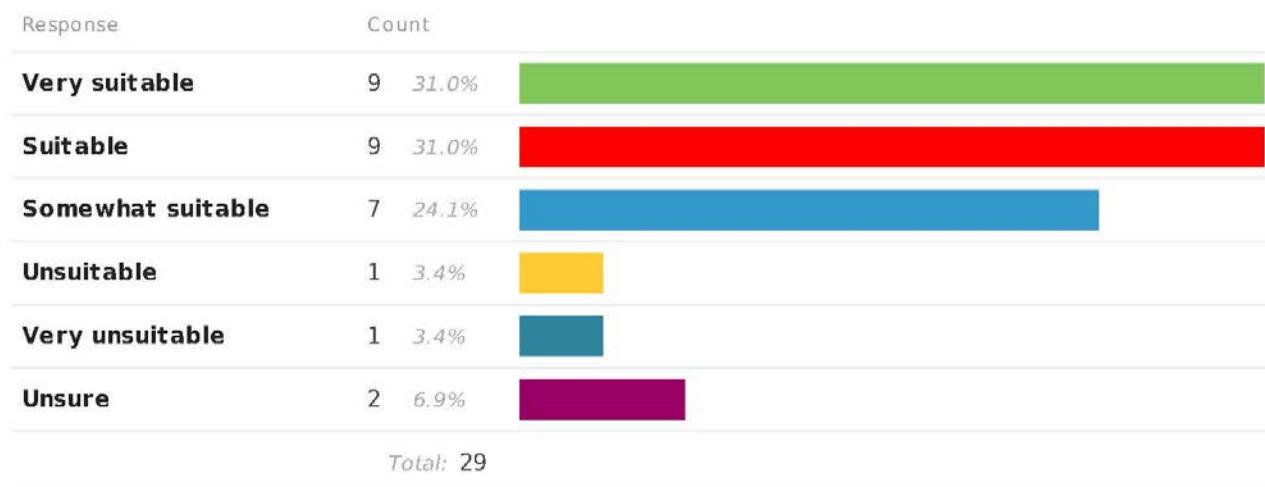


Langford VMP at Kelly Road

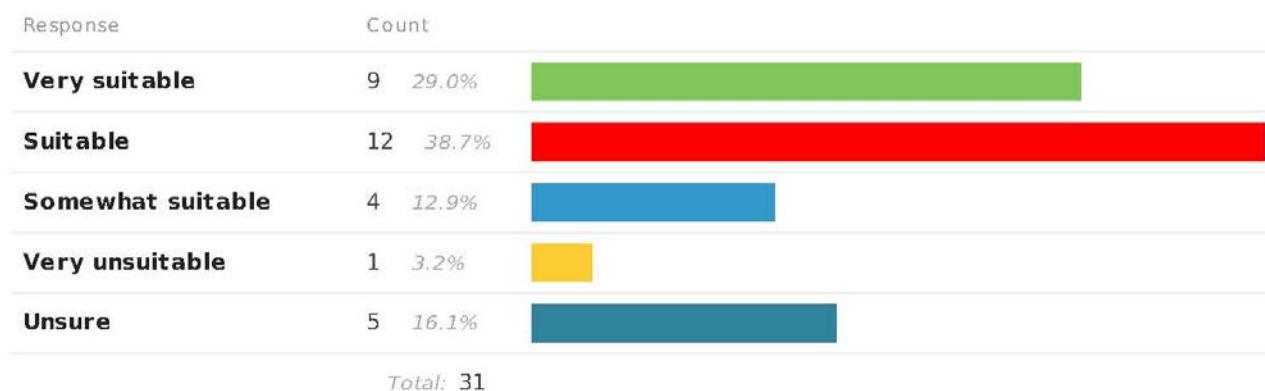
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#2a. Langford VMP at Meaford Ave.



Address: Meaford Ave, Langford

Ownership: Private

Size of site: 2.52 hectares

Elevation of site: 66 metres

Current use: Vacant

Existing zoning: Rural Residential

OCP designation: City Centre

OCP factors:

- Langford City Centre
- Encourage energy efficiency and green building technologies

Distance to truck route or arterial road:



22 metres

Distance to CRD main:



45 metres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

Seismic Concerns:

Low Moderate High

Other Considerations:

- Within regional growth centre
- Border with City of Colwood
- Siting feasibility in conjunction with site Colwood - 2b (optional)

Access & Infrastructure



Land & Amenities

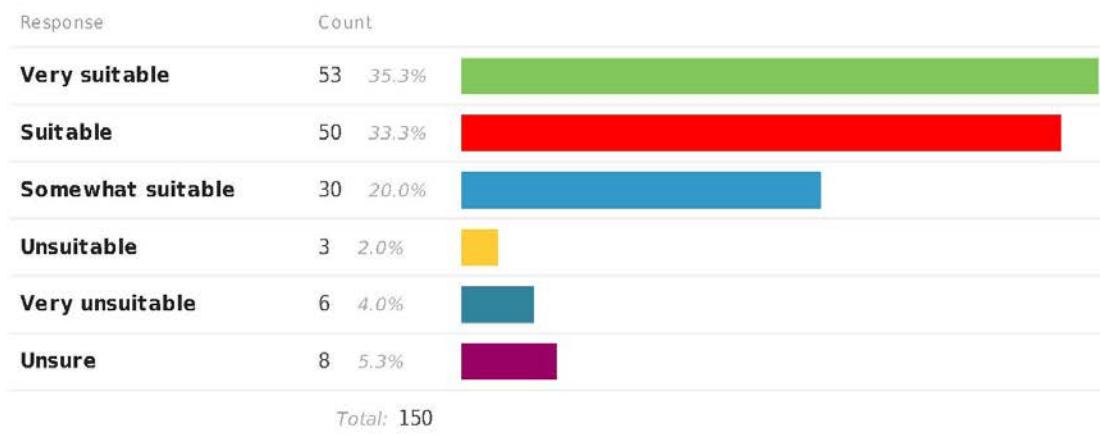


Resource Recovery

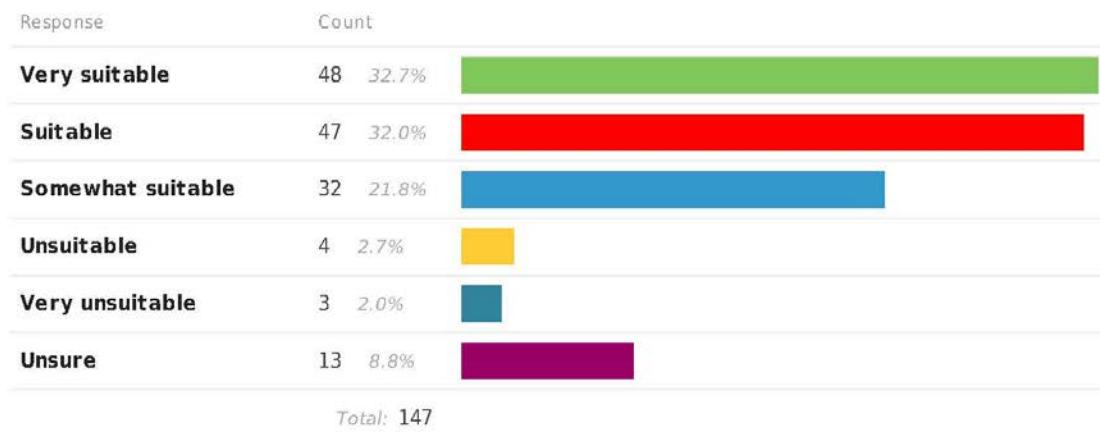


Langford/Colwood 2a/2b

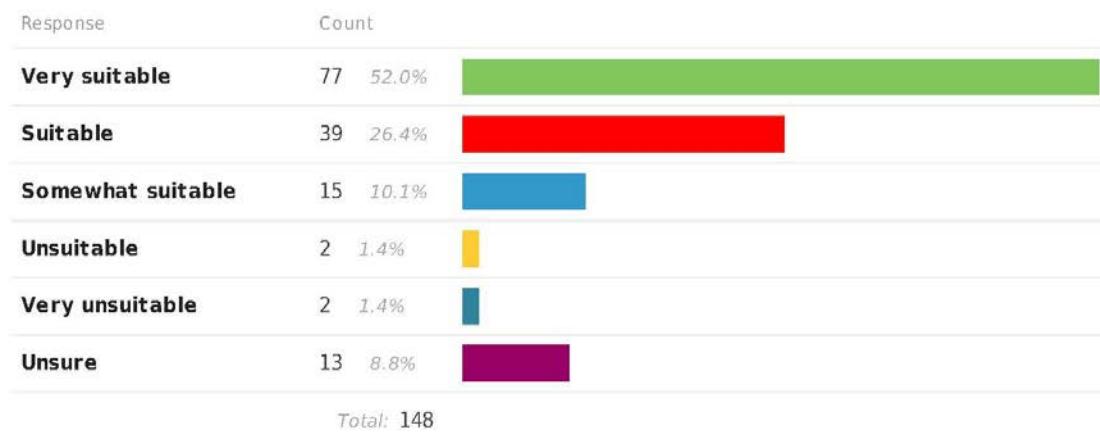
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#2b. Colwood VMP at Meaford Ave.

(must be combined with another site)



Address: Meaford Ave, Colwood

Ownership: Private

Size of site: 0.67 hectares

Elevation of site: 64 metres

Current use: Vacant

Existing zoning: Commercial

OCP designation: City Centre

OCP factors:

Distance to truck route or arterial road:



20 metres

Distance to CRD trunk main:



5 metres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

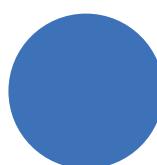
Seismic Concerns:

Low Moderate High

Other Considerations:

- Within regional growth centre
- Border with Langford
- Siting feasibility in conjunction with site Langford - 2a

Access & Infrastructure



Land & Amenities

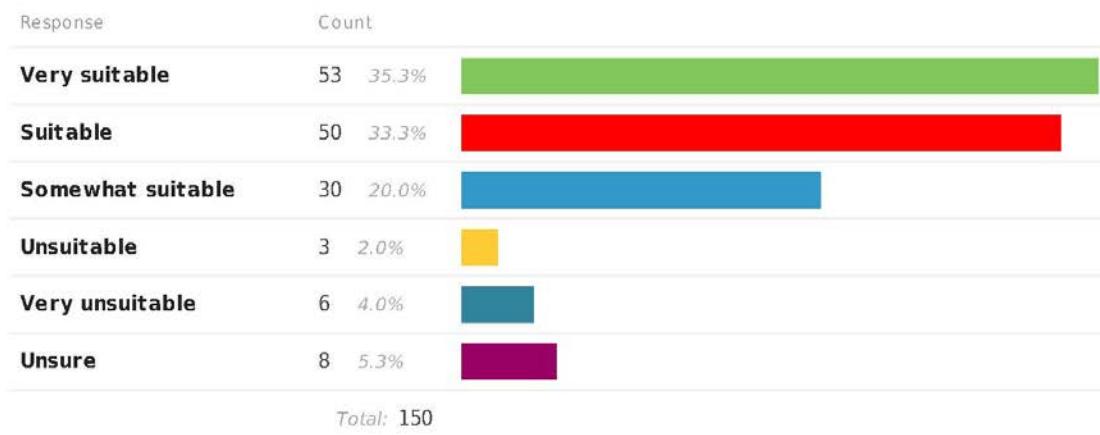


Resource Recovery

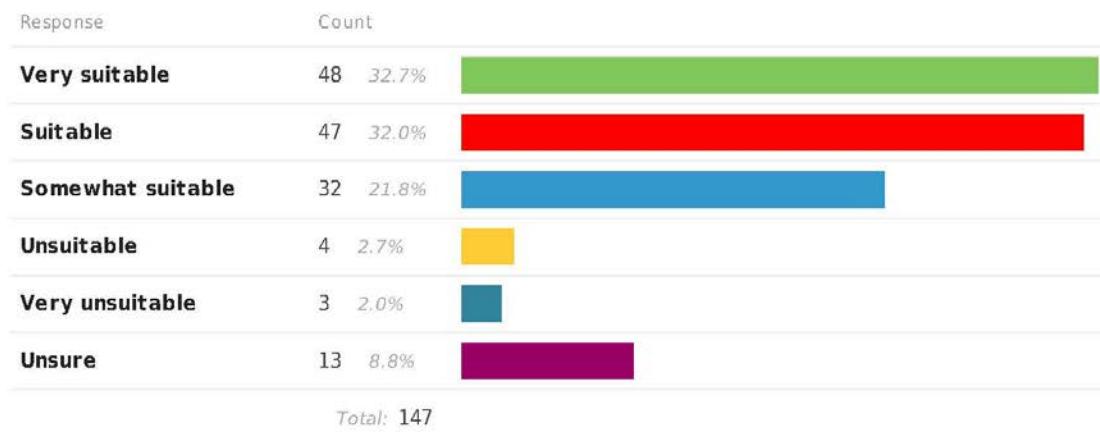


Langford/Colwood 2a/2b

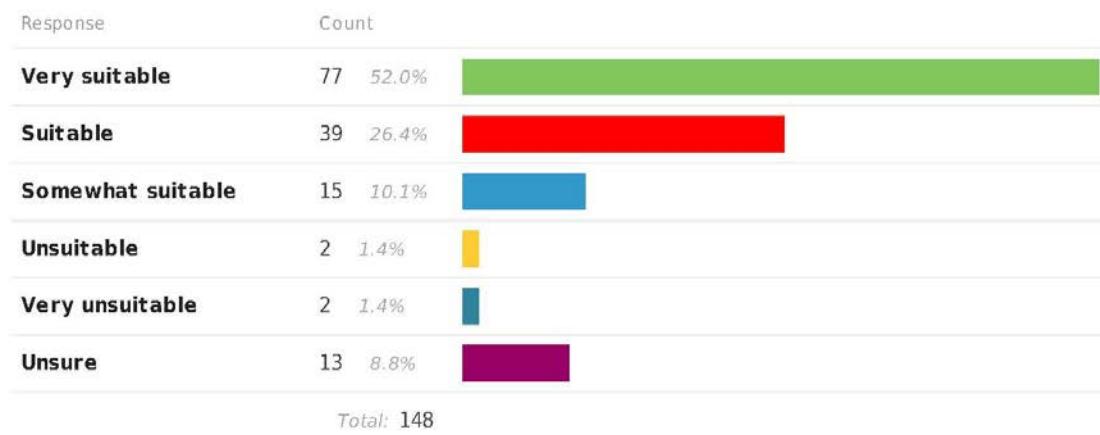
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#3. Colwood Gravel Storage Site



Address: Metchosin Rd., Colwood

Ownership: Municipal

Size of site: 3.52 hectares

Elevation of site: 42 metres

Current use: Vacant

Existing zoning: Rural Residential

OCP designation: Neighbourhood

OCP factors:

- Encourage energy efficiency and green building technologies
- Sensitive Ecosystems and Hazardous Conditions Development Permit Area

Distance to truck route or arterial road:



12 metres

Distance to CRD trunk main:



4.3 kilometres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

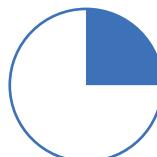
Seismic Concerns:

Low Moderate High

Other Considerations:

- Adjacent to Royal Bay Development

Access & Infrastructure



Land & Amenities

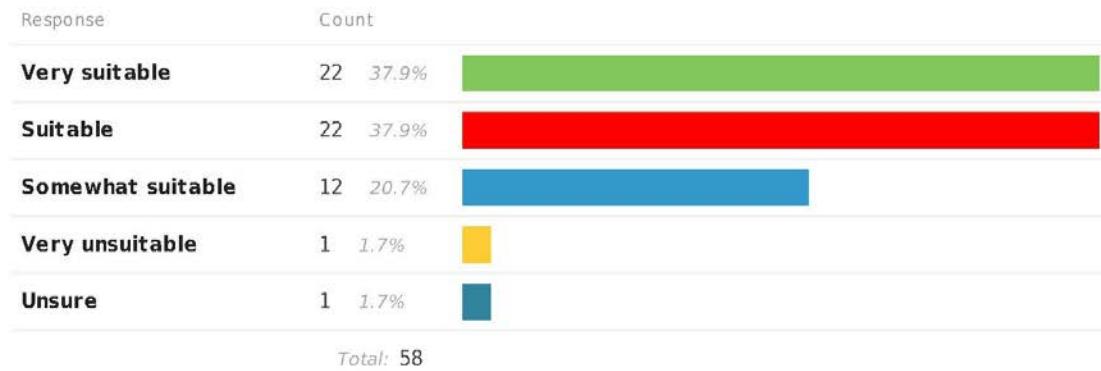


Resource Recovery

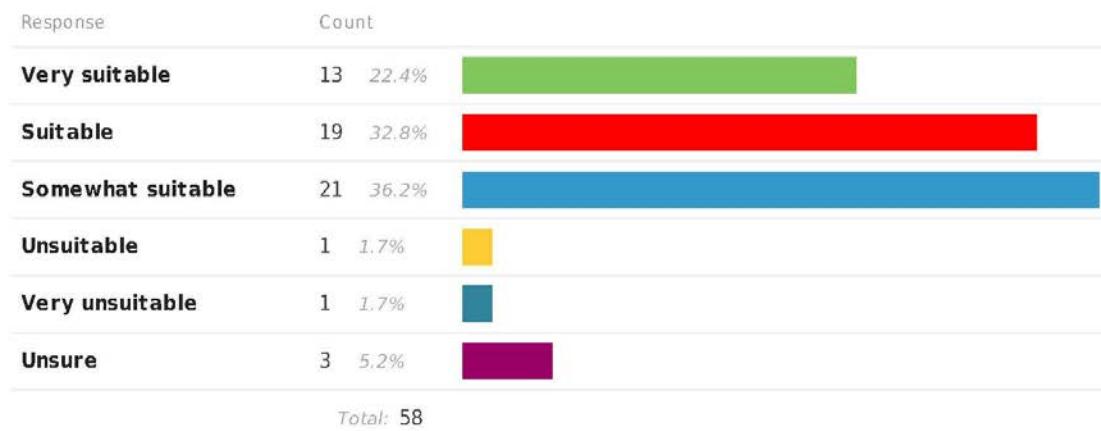


Colwood Gravel Storage Site

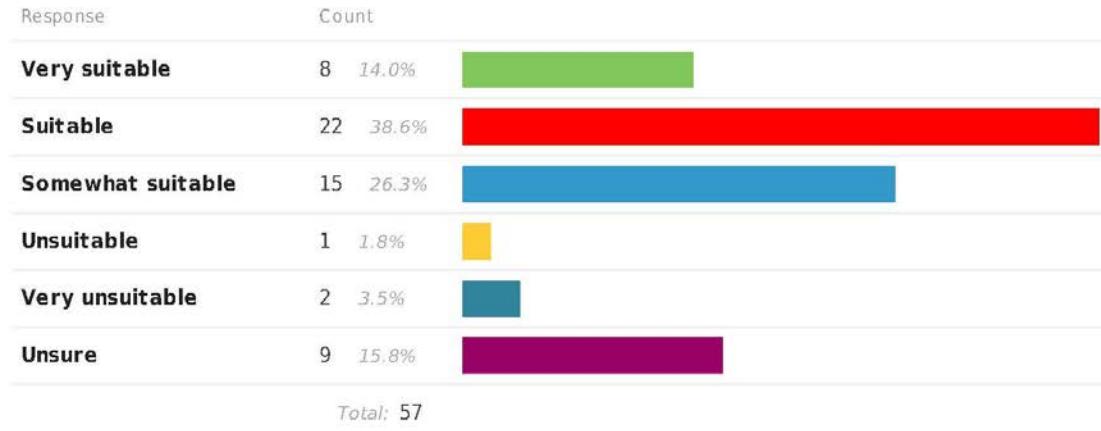
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#4. Colwood Gravel Pit



Address: Metchosin Rd., Colwood

Ownership: Private

Size of site: 12.96 hectares

Elevation of site: 36.5 metres

Current use: Vacant

Existing zoning: Comprehensive Development / Rural Residential

OCP designation: Neighbourhood

OCP factors:

- Encourage energy efficiency and green building technologies
- Sensitive Ecosystems and Hazardous Conditions Development Permit Area

Distance to truck route or arterial road:



10 metres

Distance to CRD trunk main:



2.9 kilometres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

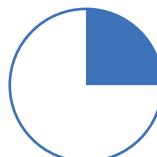
Low Moderate High

Seismic Concerns:

Low Moderate High

Other Considerations:

Access & Infrastructure



Land & Amenities

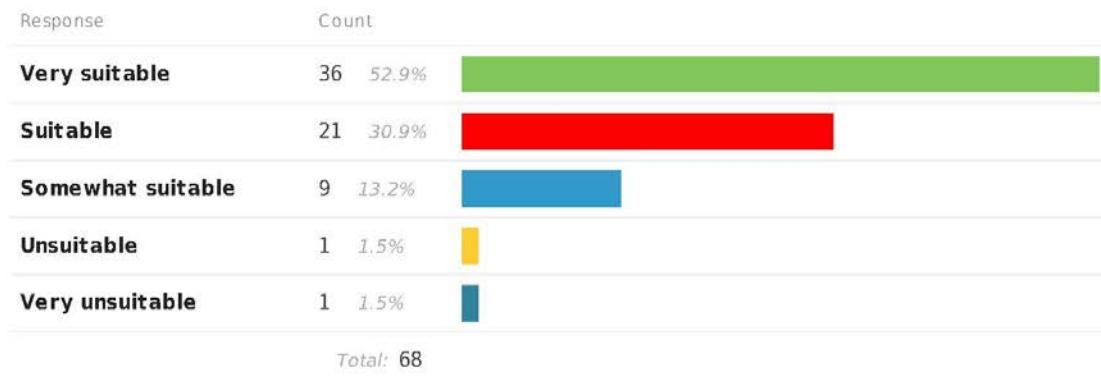


Resource Recovery

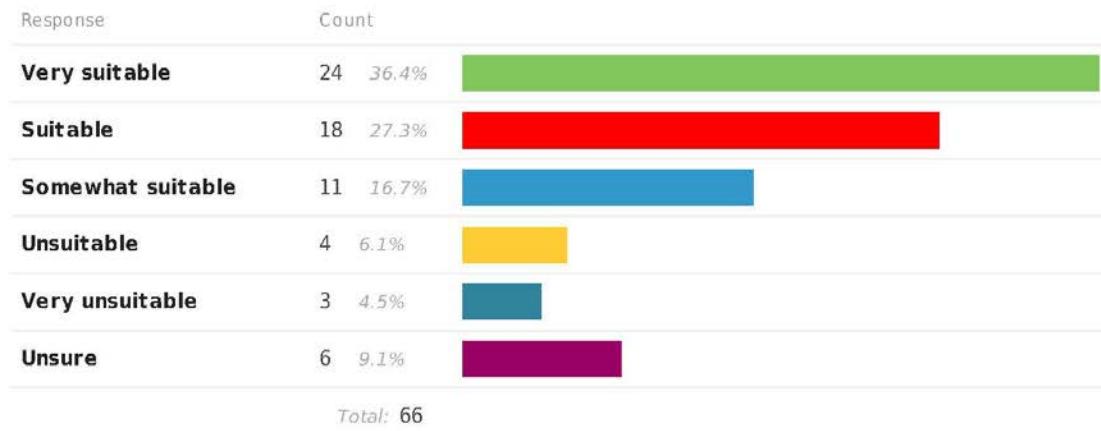


Colwood Gravel Pit

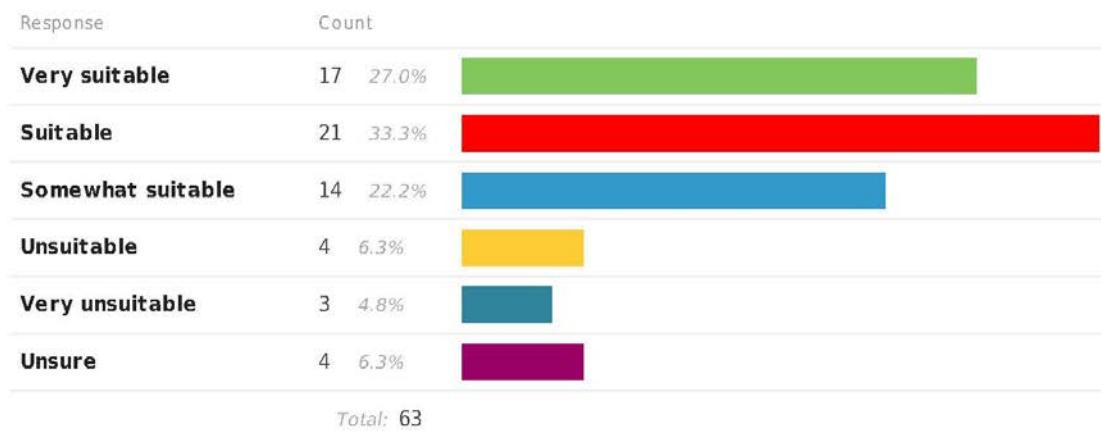
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#5. Colwood City Hall



Address: Wishart Rd, Colwood

Ownership: Municipal

Size of site: 5.1 hectares

Elevation of site: 72 metres

Current use: Colwood City Hall

Existing zoning: Institutional

OCP designation: Mixed Use Employment Centre

OCP factors:

- Encourage energy efficiency and green building technologies

Distance to truck route or arterial road:



7 metres

Distance to CRD trunk main:



2.0 kilometres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

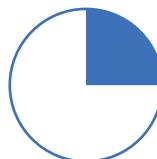
Seismic Concerns:

Low Moderate High

Other Considerations:

- Relocation of Colwood City Hall
- Colwood Growth Centre

Access & Infrastructure



Land & Amenities

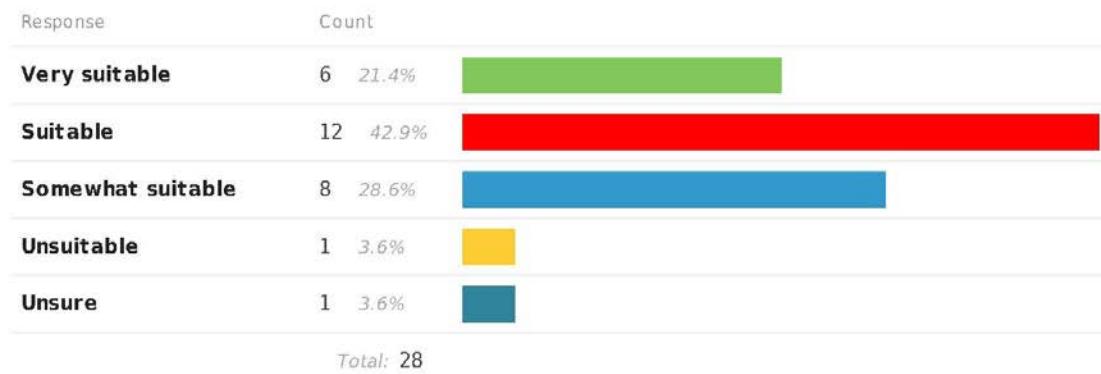


Resource Recovery

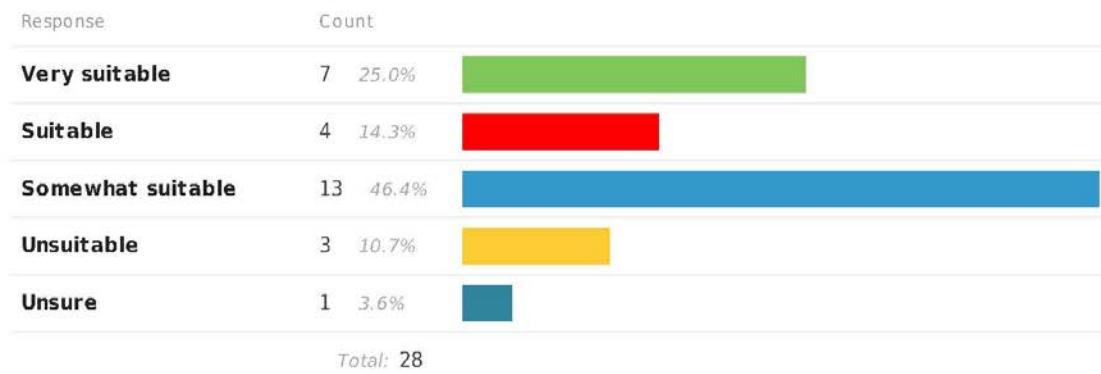


Colwood City Hall

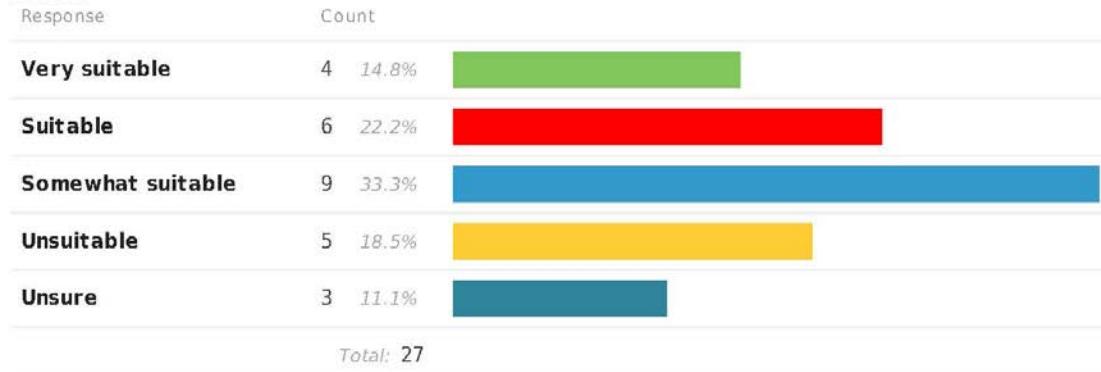
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



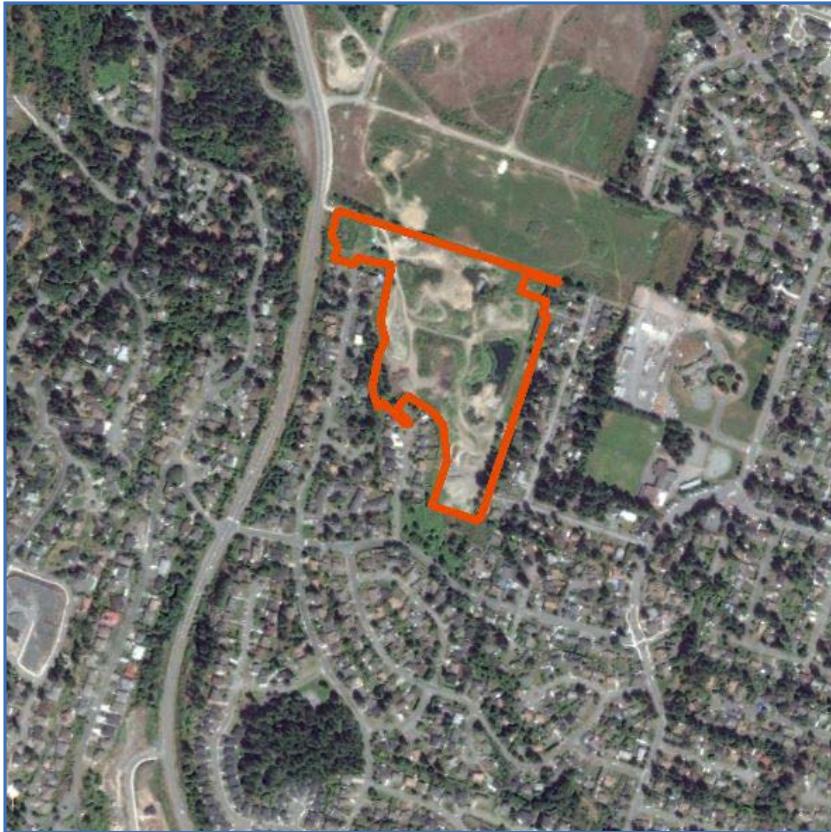
2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#6. Colwood Pattison Pit



Address: Susan Marie Pl., Colwood

Ownership: Private

Size of site: 8.29 hectares

Elevation of site: 73.5 metres

Current use: Vacant

Existing zoning: Residential

OCP designation: Neighbourhood

OCP factors:

- Encourage energy efficiency and green building technologies
- Sensitive Ecosystems and Hazardous Conditions Development Permit Area

Distance to truck route or arterial road:

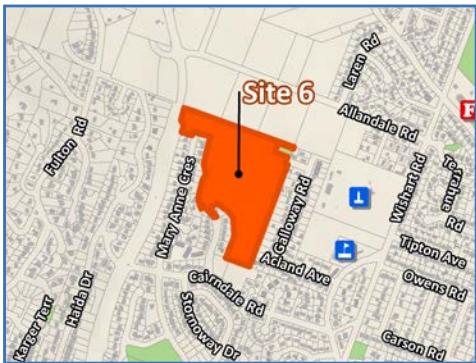


274 metres

Distance to CRD trunk main:



1.9 kilometres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

Seismic Concerns:

Low Moderate High

Other Considerations:

- Colwood Growth Centre

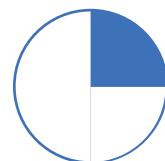
Access & Infrastructure



Land & Amenities

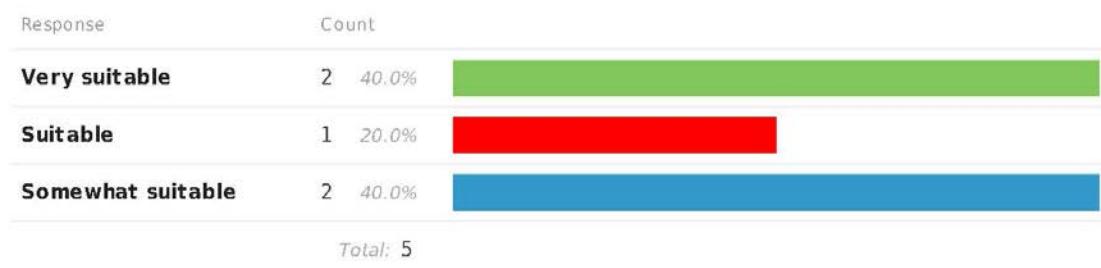


Resource Recovery

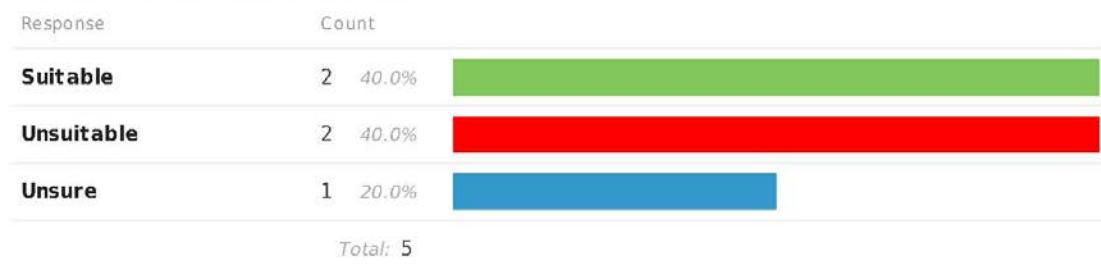


Colwood Pattison Pit

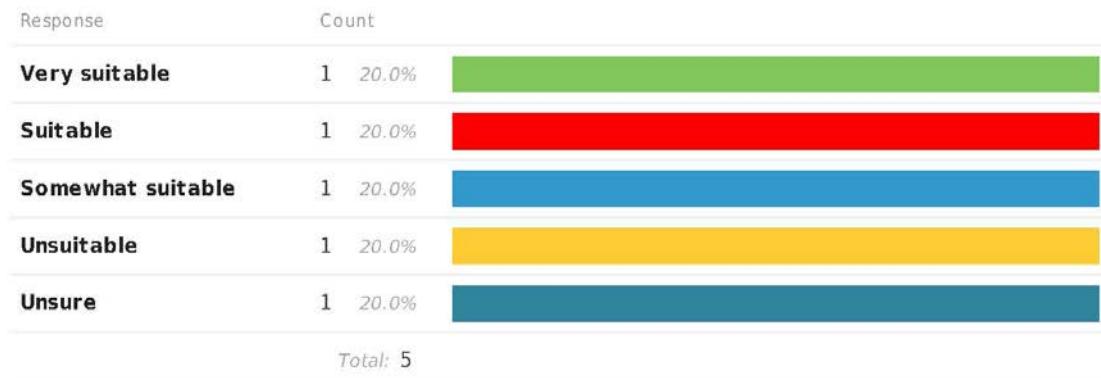
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#7. Colwood Lower Allandale Pit



Address: Allandale Rd., Colwood

Ownership: Private

Size of site: 2.06 hectares

Elevation of site: 71 metres

Current use: Vacant

Existing zoning: Industrial

OCP designation: Mixed Use Employment Centre

OCP factors:

- Encourage energy efficiency and green building technologies

Distance to truck route or arterial road:



220 metres

Distance to CRD trunk main:



1.7 kilometres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

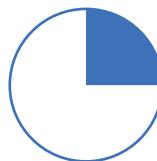
Seismic Concerns:

Low Moderate High

Other Considerations:

- Colwood Growth Centre

Access & Infrastructure



Land & Amenities

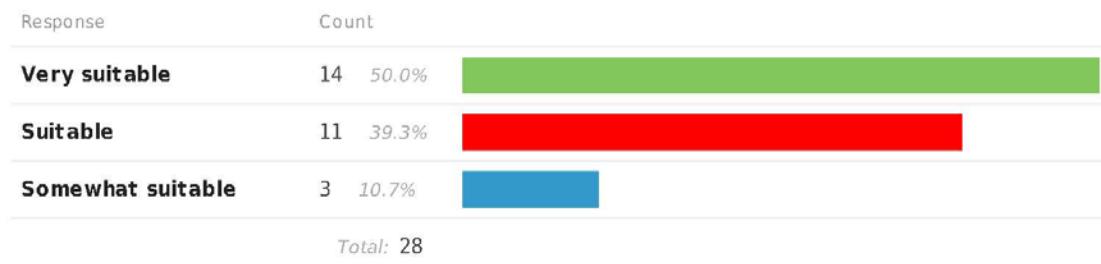


Resource Recovery

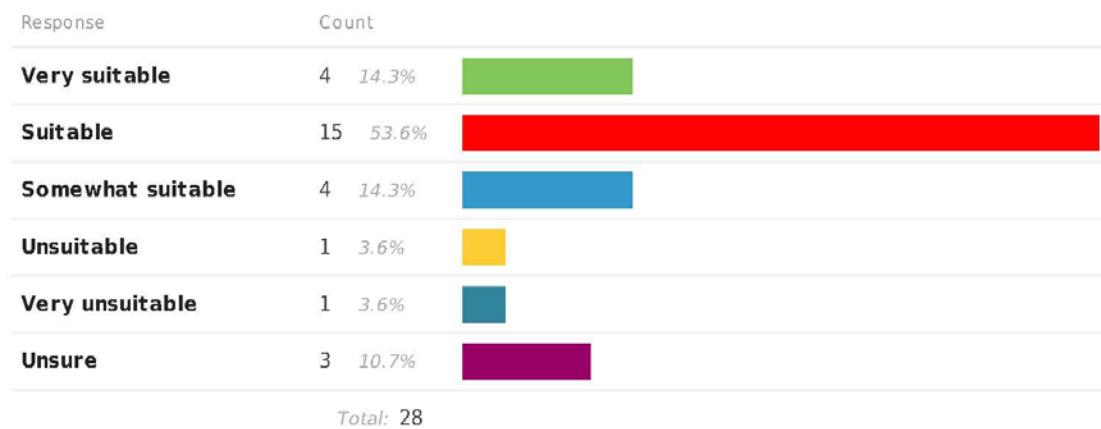


Colwood Lower Allandale

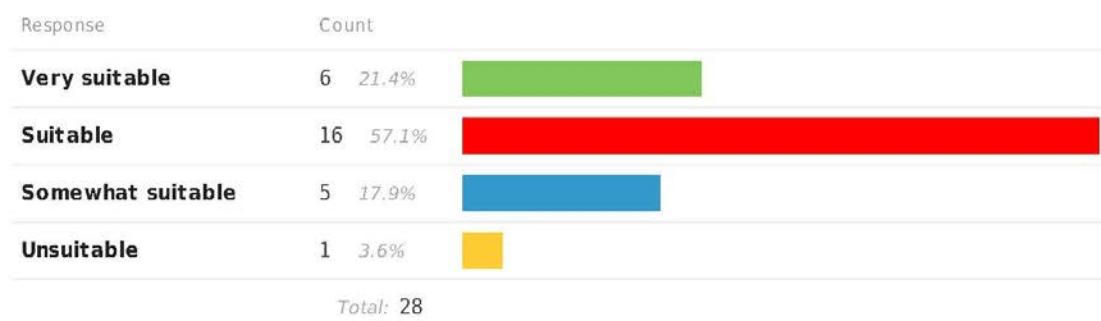
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#8. Colwood Upper Allandale Pit



Address: Metchosin Rd., Colwood

Ownership: Private

Size of site: 2.77 hectares

Elevation of site: 68 metres

Current use: Vacant

Existing zoning: Residential

OCP designation: Mixed Use
Employment Centre

OCP factors:

- Encourage energy efficiency and green building technologies

Distance to truck route or arterial road:



8 metres

Distance to CRD trunk main:



1.5 kilometres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

Seismic Concerns:

Low Moderate High

Other Considerations:

- Colwood Growth Centre

Access & Infrastructure



Land & Amenities

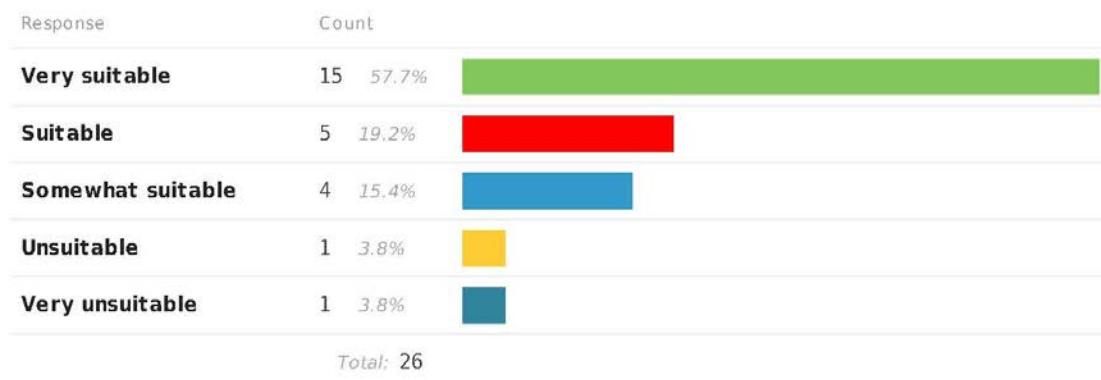


Resource Recovery

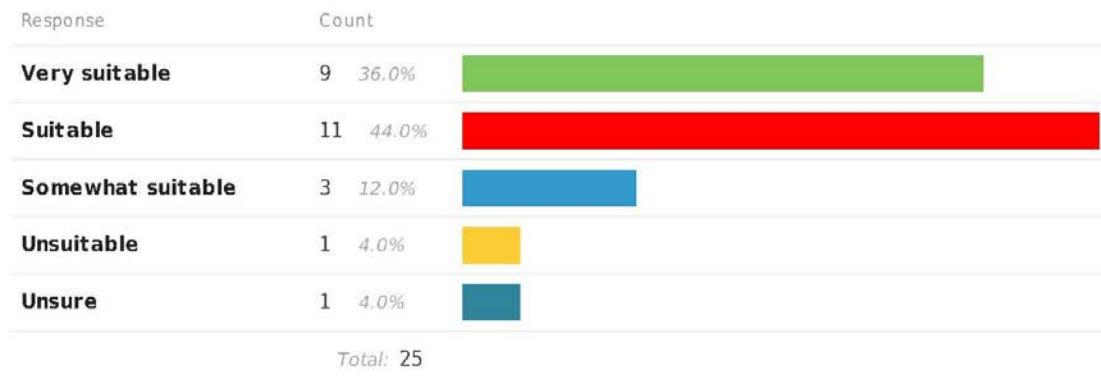


Colwood Upper Allandale

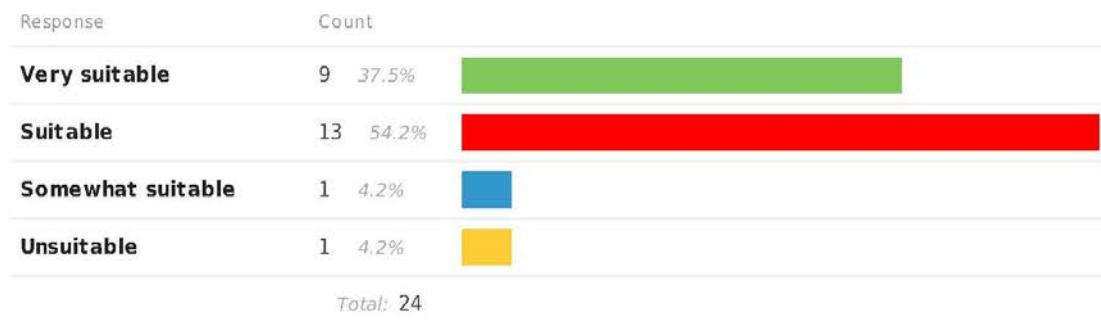
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#9. Colwood City Centre

(must be combined with another site)



Address: Sooke Rd., Colwood

Ownership: Private

Size of site: 1.36 hectares

Elevation of site: 63 metres

Current use: Foundation for development site

Existing zoning: Comprehensive Development

OCP designation: City Centre

OCP factors:

- Encourage energy efficiency and green building technologies
- Colwood City Centre

Distance to truck route or arterial road:



7 metres

Distance to CRD trunk main:



55 metres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

Seismic Concerns:

Low Moderate High

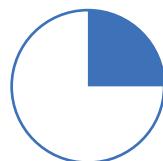
Other Considerations:

- Within regional growth centre
- Siting feasibility in conjunction with site Colwood - 10 and Colwood - 11

Access & Infrastructure



Land & Amenities

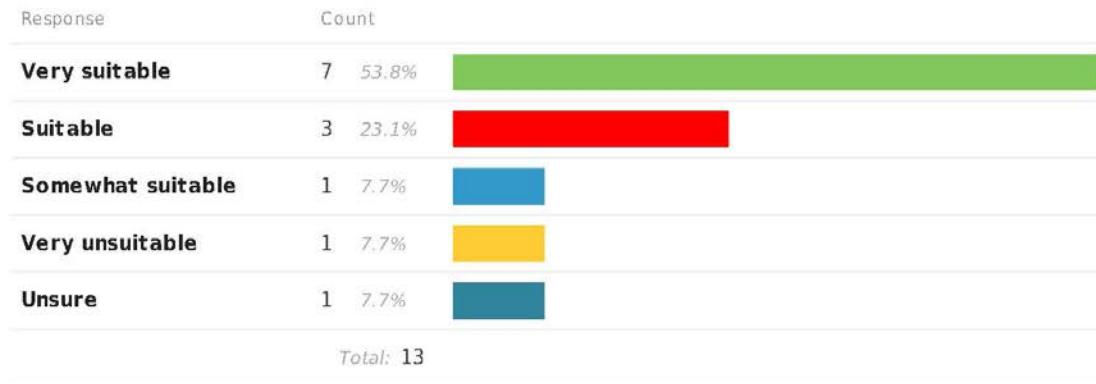


Resource Recovery

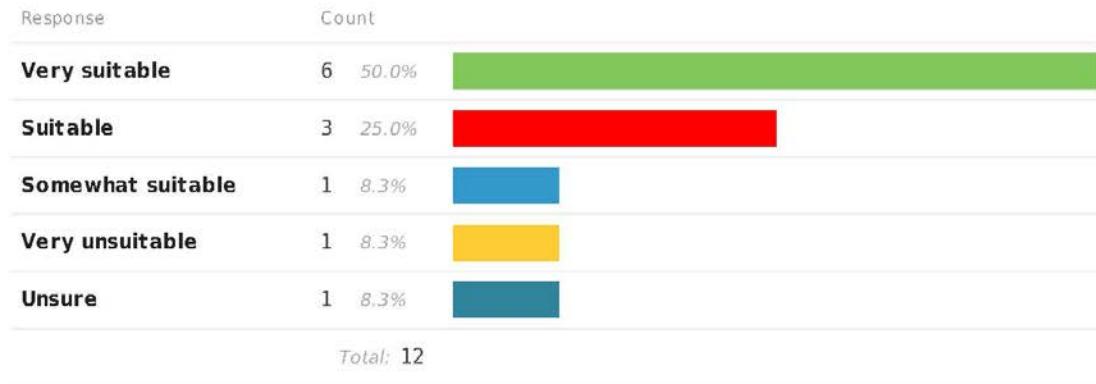


Colwood City Centre

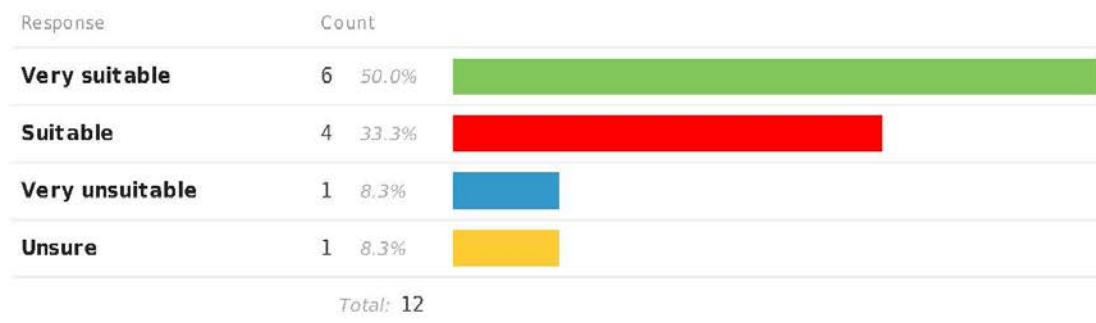
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#10. Colwood VMP City Centre Adjacent

(must be combined with another site)



Address: Belmont Rd., Colwood

Ownership: Private

Size of site: 0.88 hectares

Elevation of site: 55 metres

Current use: Vacant

Existing zoning: Comprehensive Development

OCP designation: City Centre

OCP factors:

- Encourage energy efficiency and green building technologies
- Colwood City Centre

Distance to truck route or arterial road:



54 metres

Distance to CRD trunk main:



11 metres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

Seismic Concerns:

Low Moderate High

Other Considerations:

- Within regional growth centre
- Siting feasibility in conjunction with site Colwood - 9 and Colwood - 11

Access & Infrastructure



Land & Amenities



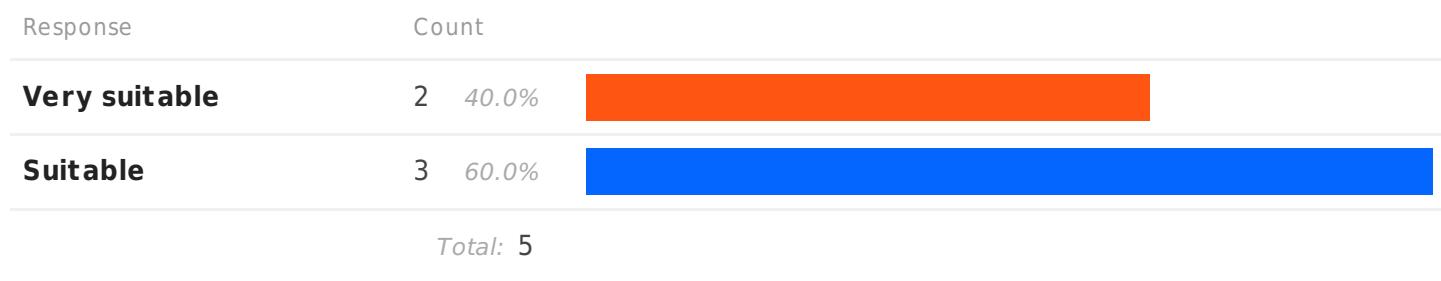
Resource Recovery



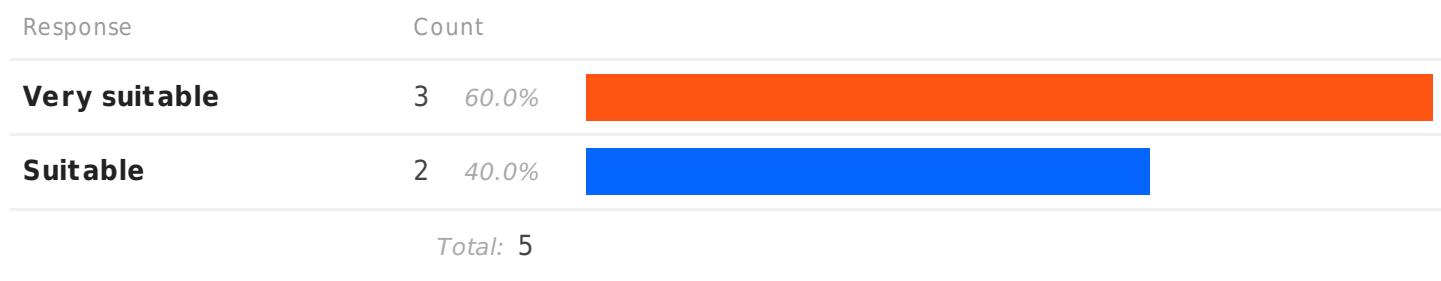
Colwood City Centre Adjacent

* Filtered: Colwood City Centre Adjacent

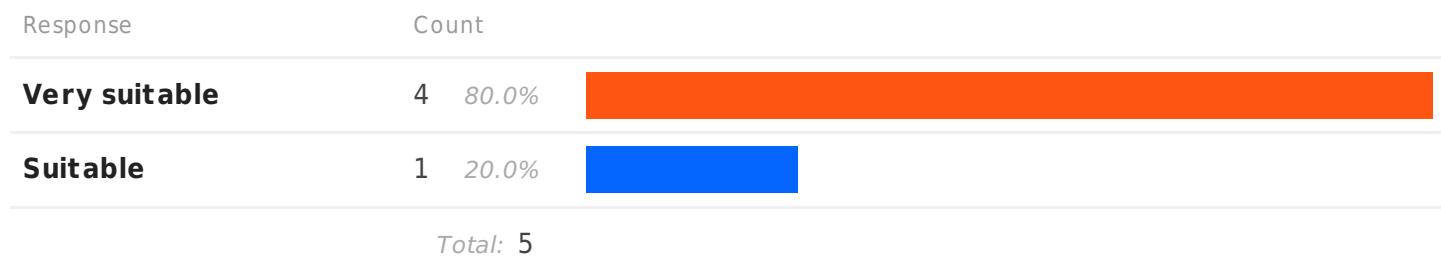
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?

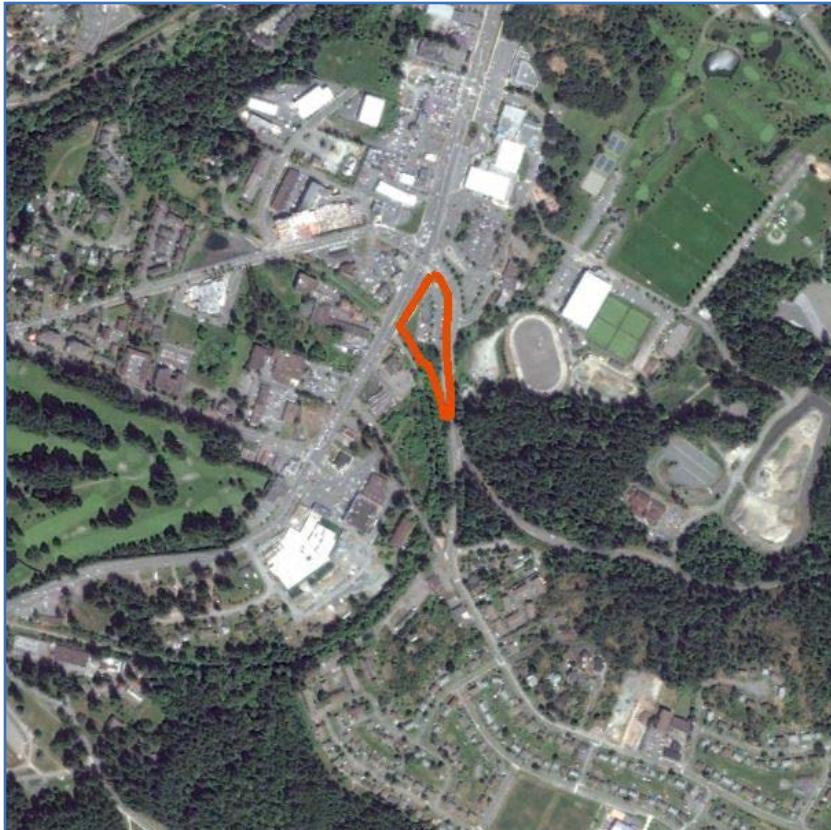


3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#11. Colwood Park and Ride

(must be combined with another site)



Address: Ocean Blvd., Colwood

Ownership: Private

Size of site: 0.99 hectares

Elevation of site: 46.5 metres

Current use: Parking Lot

Existing zoning: Park

OCP designation: City Centre

OCP factors:

- Encourage energy efficiency and green building technologies
- Colwood City Centre

Distance to truck route or arterial road:



10 metres

Distance to CRD trunk main:



7 metres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

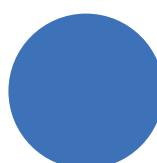
Seismic Concerns:

Low Moderate High

Other Considerations:

- Within regional growth centre
- Siting feasibility in conjunction with site Colwood - 9 and Colwood - 10

Access & Infrastructure



Land & Amenities

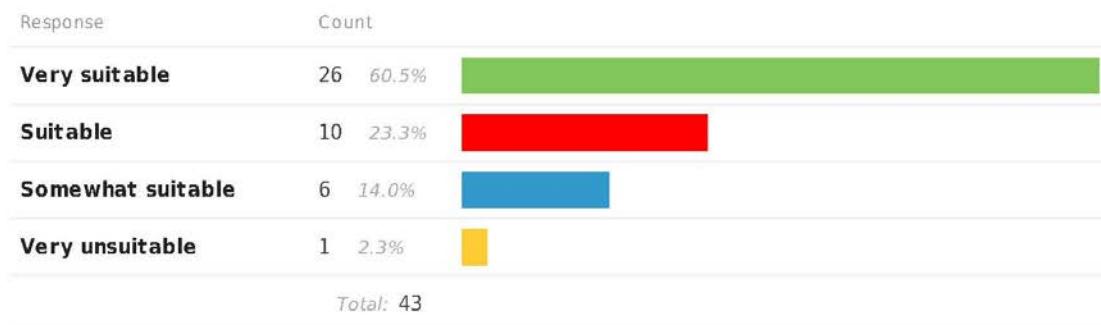


Resource Recovery

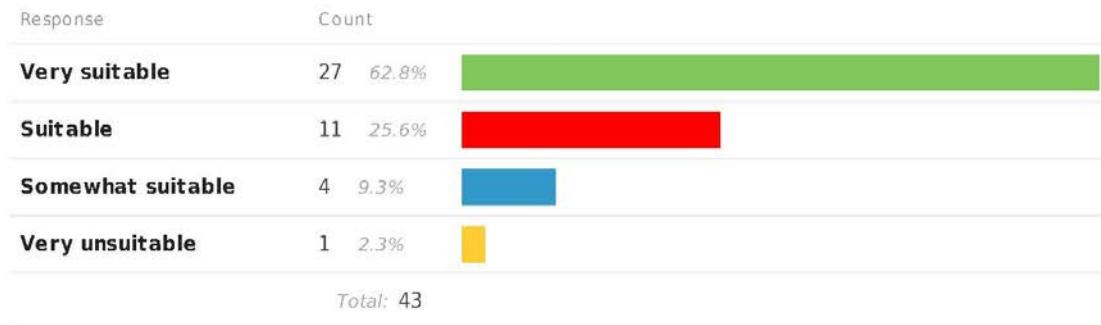


Colwood Park & Ride

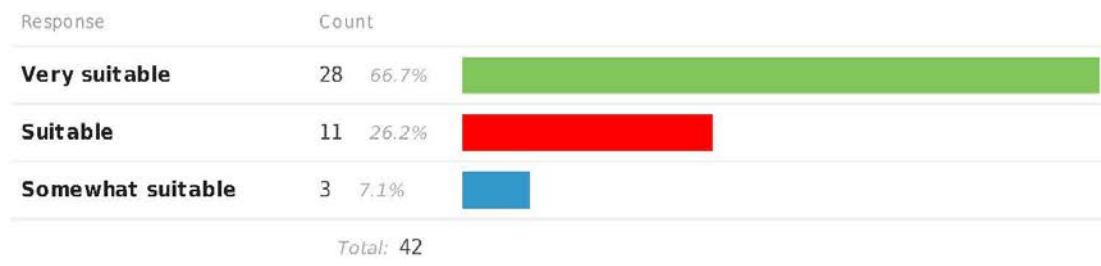
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



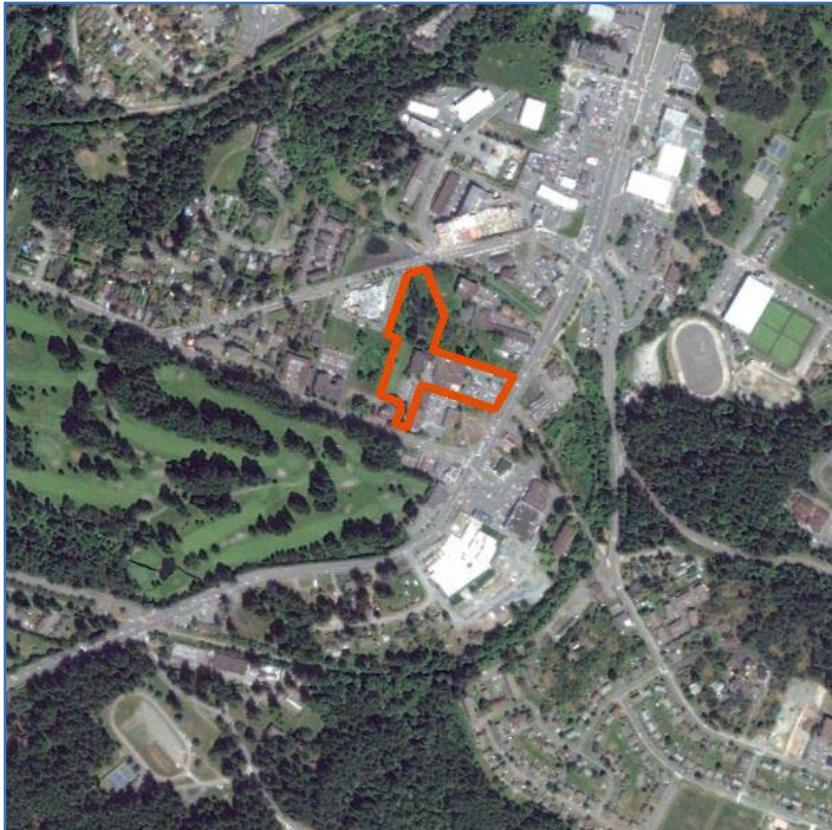
2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#12. Colwood Island Highway



Address: Island Hwy., Colwood

Ownership: Private

Size of site: 2.27 hectares

Elevation of site: 58.5 metres

Current use: Vacant

Existing zoning: Commercial

OCP designation: City Centre

OCP factors:

- Encourage energy efficiency and green building technologies
- Colwood City Centre

Distance to truck route or arterial road:



9 metres

Distance to CRD trunk main:



88 metres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

Seismic Concerns:

Low Moderate High

Other Considerations:

- Within regional growth centre
- Siting feasibility in conjunction with site Colwood - 13 (optional)

Access & Infrastructure



Land & Amenities



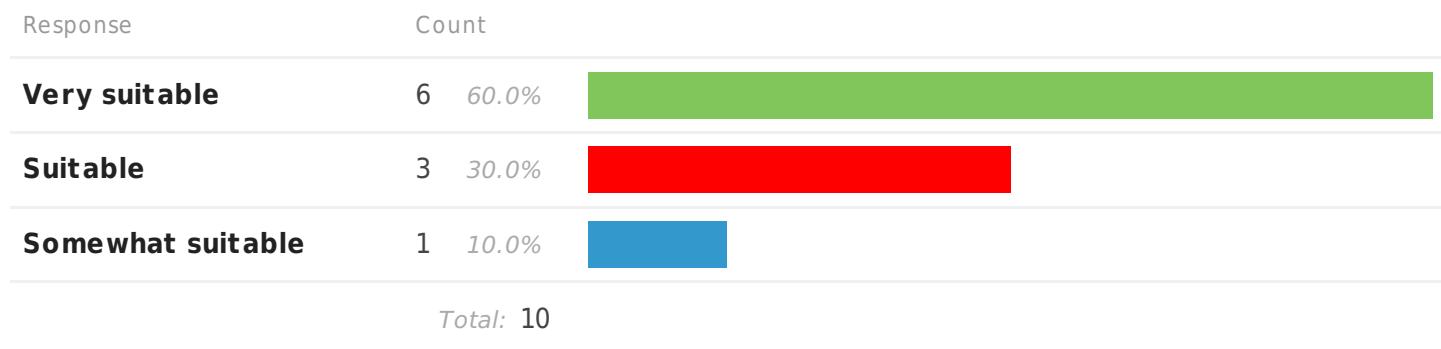
Resource Recovery



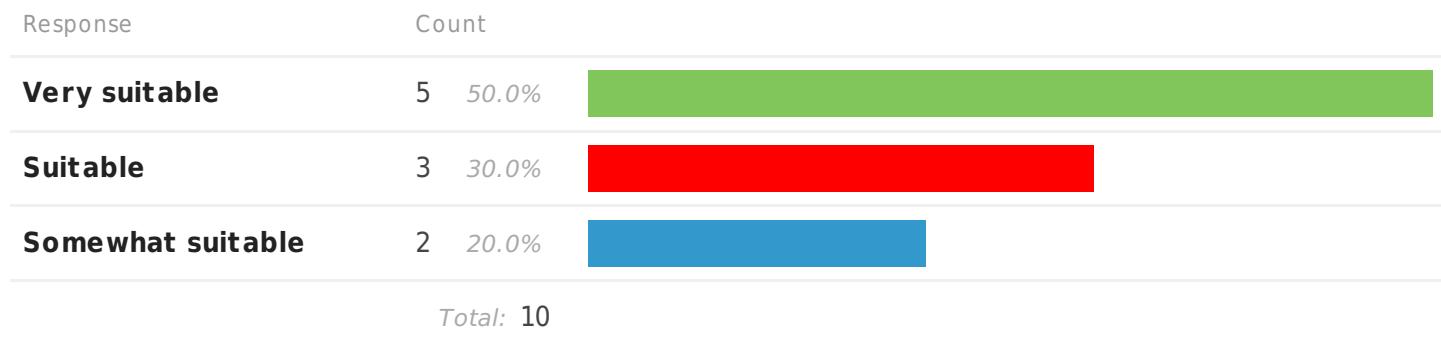
Colwood Island Highway at Goldstream

* Filtered: Colwood Island Highway at Goldstream

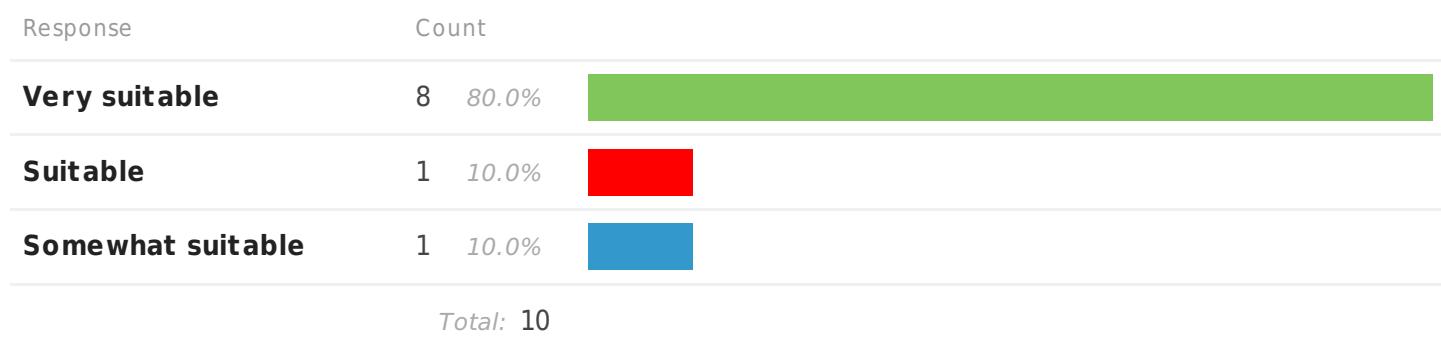
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#13. Colwood Wale Road

(must be combined with another site)



Address: Wale Rd., Colwood

Ownership: Private

Size of site: 0.55 hectares

Elevation of site: 51 metres

Current use: Vacant

Existing zoning: Residential

OCP designation: City Centre

OCP factors:

- Encourage energy efficiency and green building technologies
- Colwood City Centre

Distance to truck route or arterial road:

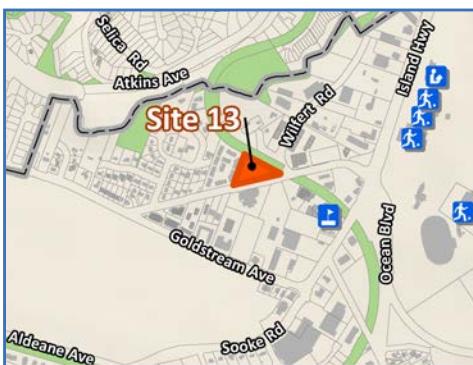


207 metres

Distance to CRD trunk main:



246 metres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

Seismic Concerns:

Low Moderate High

Other Considerations:

- Within regional growth centre
- Siting feasibility in conjunction with site Colwood - 12

Access & Infrastructure



Land & Amenities

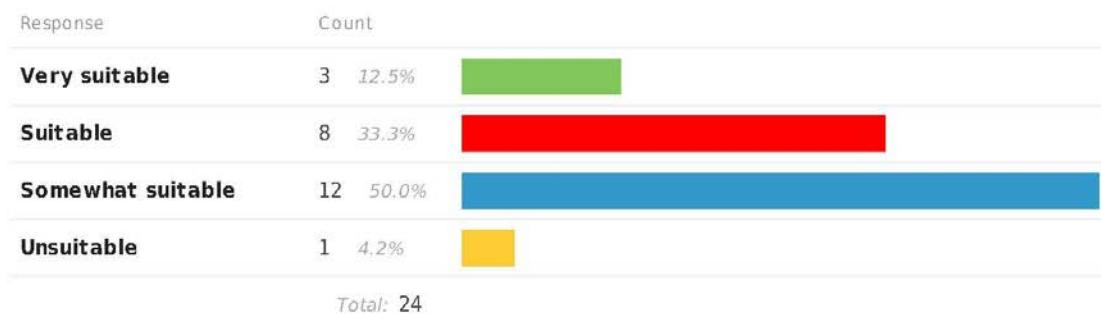


Resource Recovery

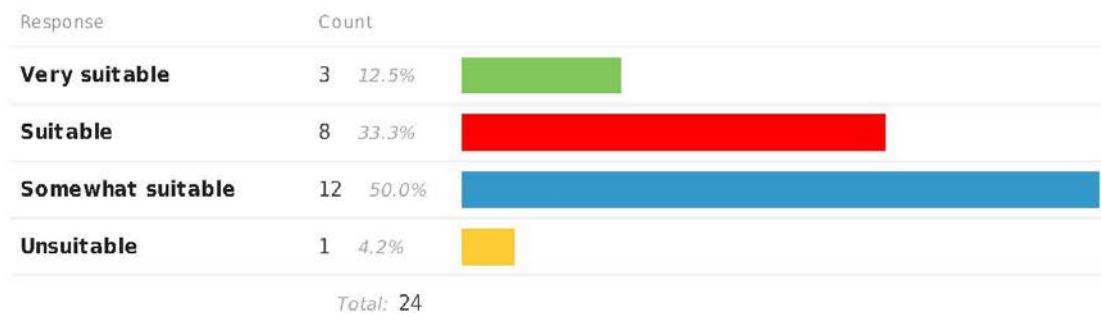


Colwood Wale Road

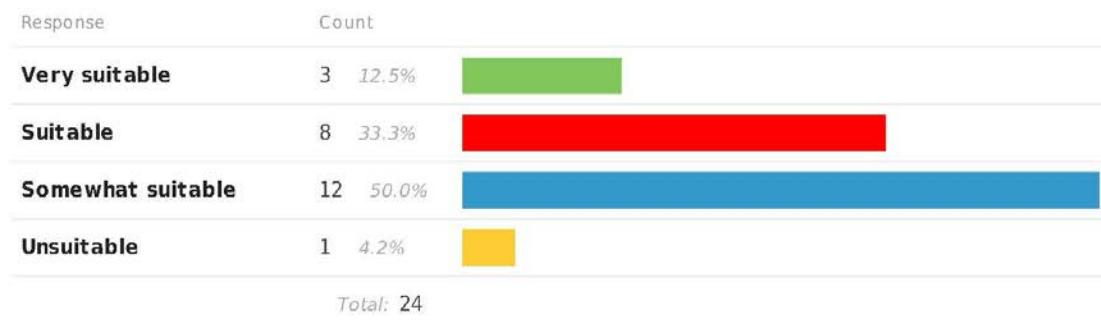
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#14. Colwood West Shore Parks & Rec



Address: Island Hwy., Colwood

Ownership: Multiple Municipalities (5)

Size of site: 44.10 hectares

Elevation of site: 29 metres

Current use: Recreation Centre / Sport Fields

Existing zoning: Park / Recreation

OCP designation: Park

OCP factors:

- Colwood City Centre
- Encourage energy efficiency and green building development
- Sensitive Ecosystems and Hazardous Conditions Development Permit Area

Distance to truck route or arterial road:

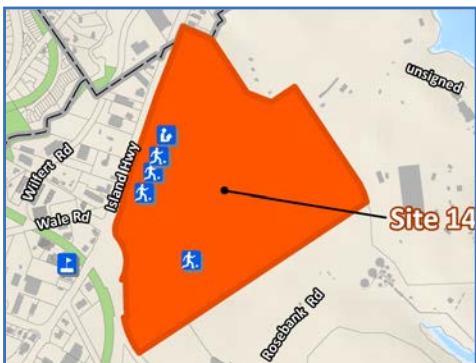


7 metres

Distance to CRD trunk main:



5 metres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

Seismic Concerns:

Low Moderate High

Other Considerations:

- Multiple municipal owners (5)
- Adjacent to regional centre
- Recreational opportunities need to be maintained

Access & Infrastructure



Land & Amenities

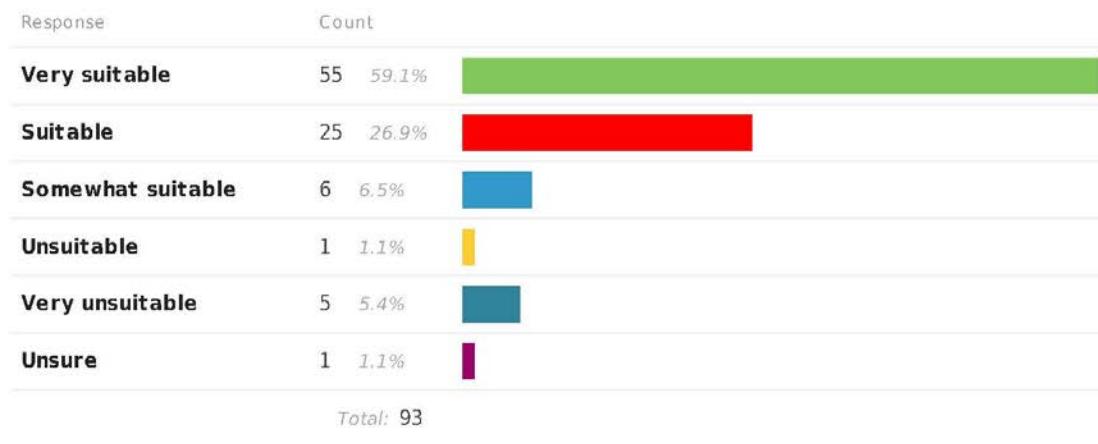


Resource Recovery

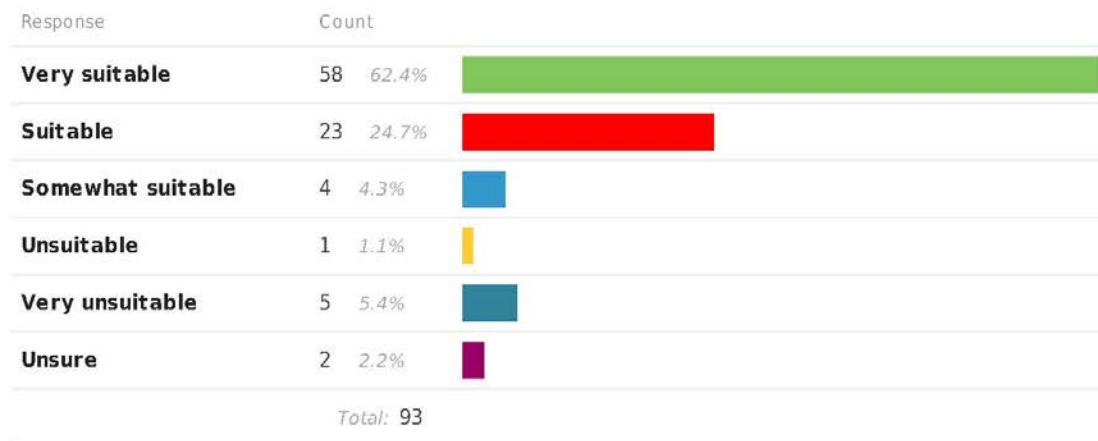


Colwood West Shore Parks & Recreation

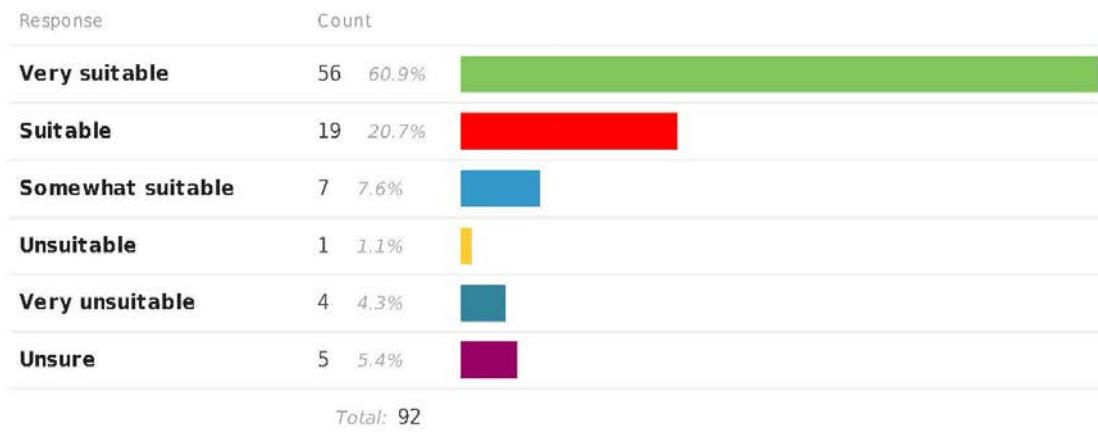
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#21. Colwood Golf Club



Address: Aldeane Ave, Colwood

Ownership: Private

Size of site: 1.2 hectares

Elevation of site: 62 metres

Current use: Vacant

Existing zoning: Agricultural

OCP designation: Open Space

OCP factors:

- Adjacent to Colwood Creek (riparian area)

Distance to truck route or arterial road:



270 metres

Distance to CRD trunk main:



5 metres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

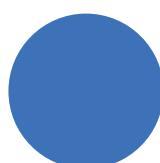
Seismic Concerns:

Low Moderate High

Other Considerations:

- Adjacent to Galloping Goose Trail
- Proximal to Royal Roads University
- Conditional exclusion from the Agricultural Land Reserve (ALR) in 2014

Access & Infrastructure



Land & Amenities

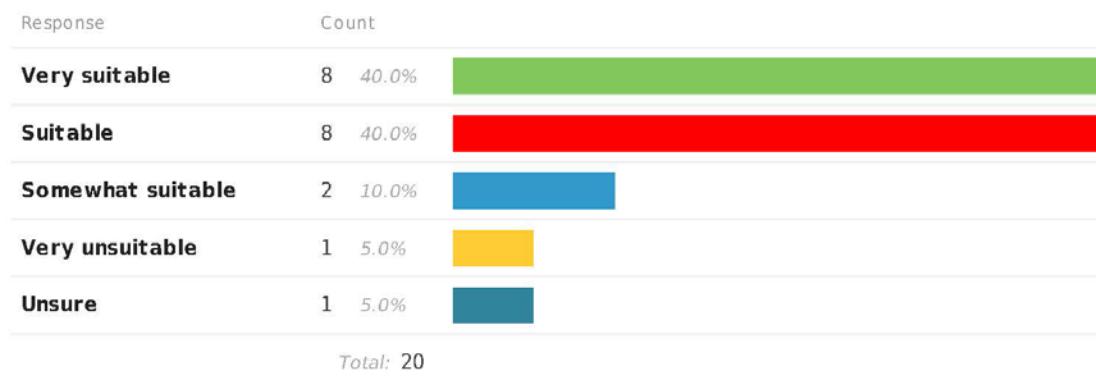


Resource Recovery

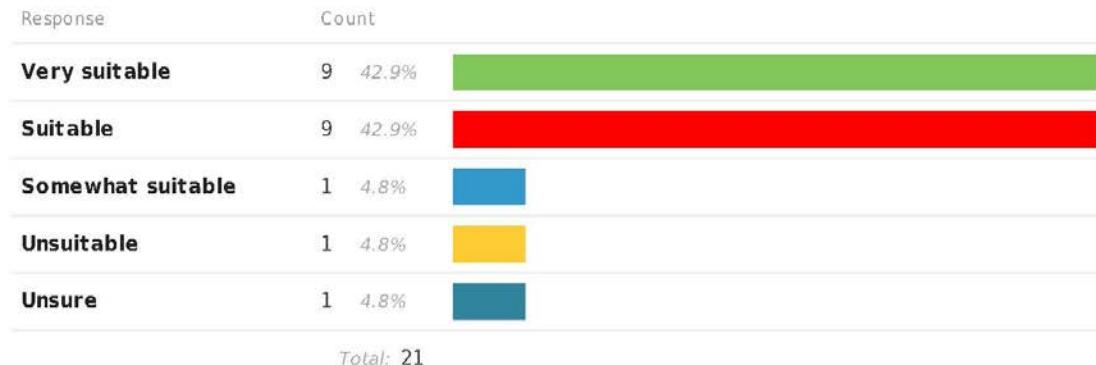


Colwood Royal Colwood Golfcourse

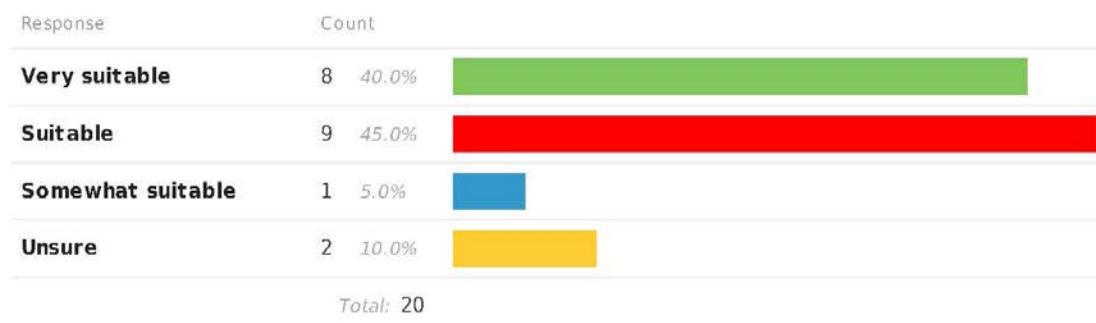
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#15. Esquimalt Nation



Address: Admirals Rd., Esquimalt Nation

Ownership: First Nation

Size of site: 4.65 hectares

Elevation of site: 13 metres

Current use: Vacant

Existing zoning: Not applicable

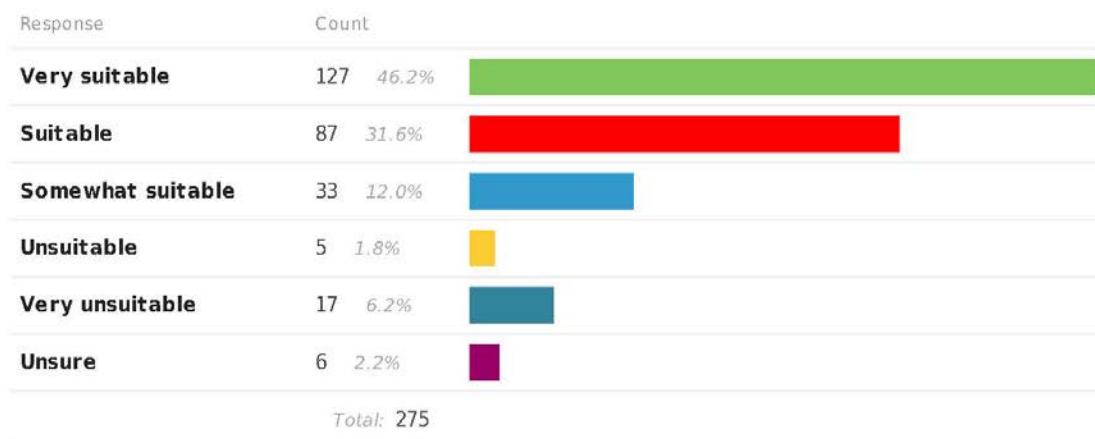
OCP designation: Not applicable

OCP factors: Not applicable

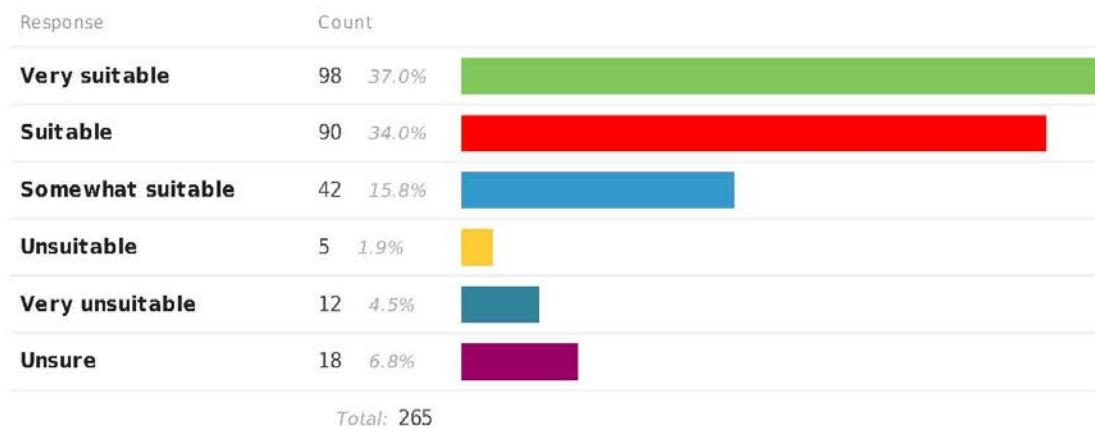
<p>Distance to truck route or arterial road:</p>  <p>5 metres</p> <p>Distance to CRD trunk main:</p>  <p>5 metres</p>	<p>Current water reuse recovery potential:</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>Low</td> <td>Moderate</td> <td>High</td> </tr> </table> <p>Current heat recovery potential:</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>Low</td> <td>Moderate</td> <td>High</td> </tr> </table> <p>Seismic Concerns:</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>Low</td> <td>Moderate</td> <td>High</td> </tr> </table>	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High	<p>Other Considerations:</p> <ul style="list-style-type: none"> Subject site adjacent to Songhees Nation and Town of View Royal
Low	Moderate	High									
Low	Moderate	High									
Low	Moderate	High									
	<p>Access & Infrastructure</p> 	<p>Land & Amenities</p> 									

Esquimalt Nation

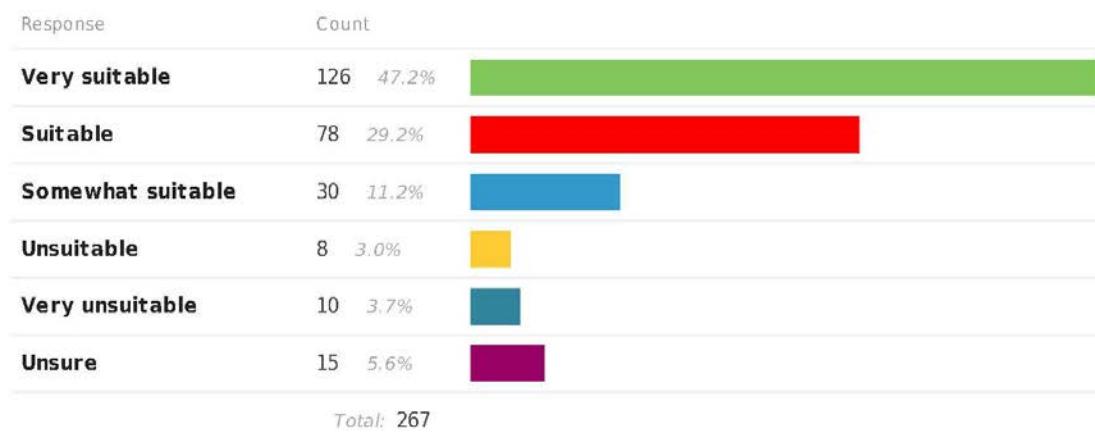
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#16. View Royal Burnside & Watkiss



Address: Burnside Rd., View Royal

Ownership: Provincial

Size of site: 2.26 hectares

Elevation of site: 10 metres

Current use: Vacant / Archery Club

Existing zoning: Park

OCP designation: Park

OCP factors:

- Hospital Neighbourhood
- Terrestrial Sensitive Ecosystem Development Permit Area

Distance to truck route or arterial road:



26 metres

Distance to CRD trunk main:



354 metres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

Seismic Concerns:

Low Moderate High

Other Considerations:

- Potential Archeological Concerns
- BC Hydro right-of-way (ROW)

Access & Infrastructure



Land & Amenities

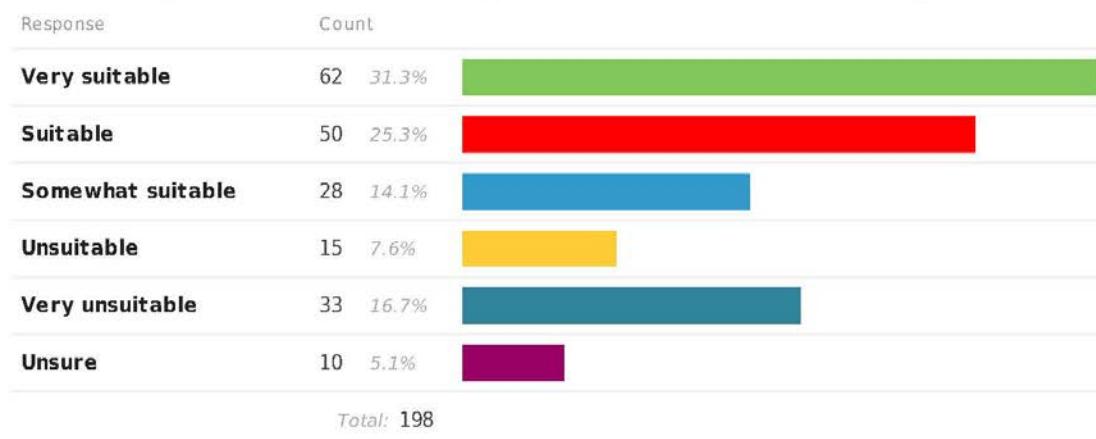


Resource Recovery

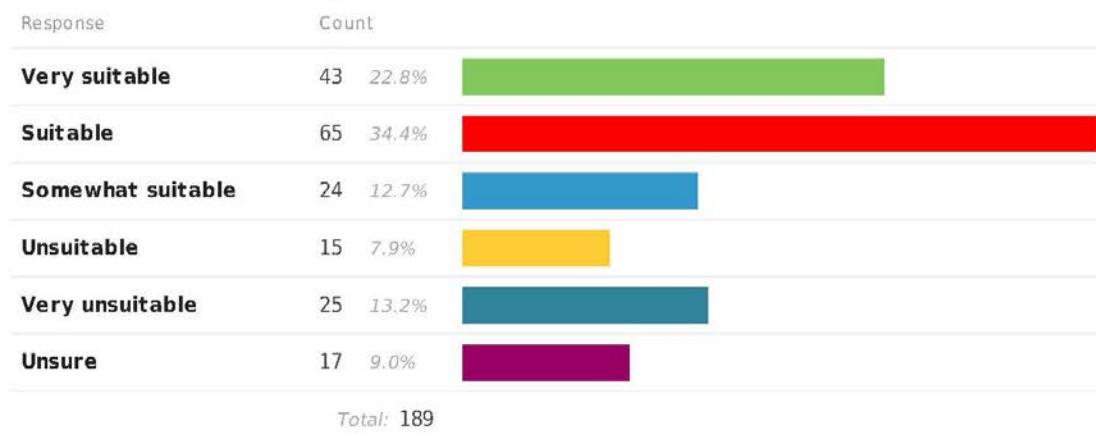


View Royal

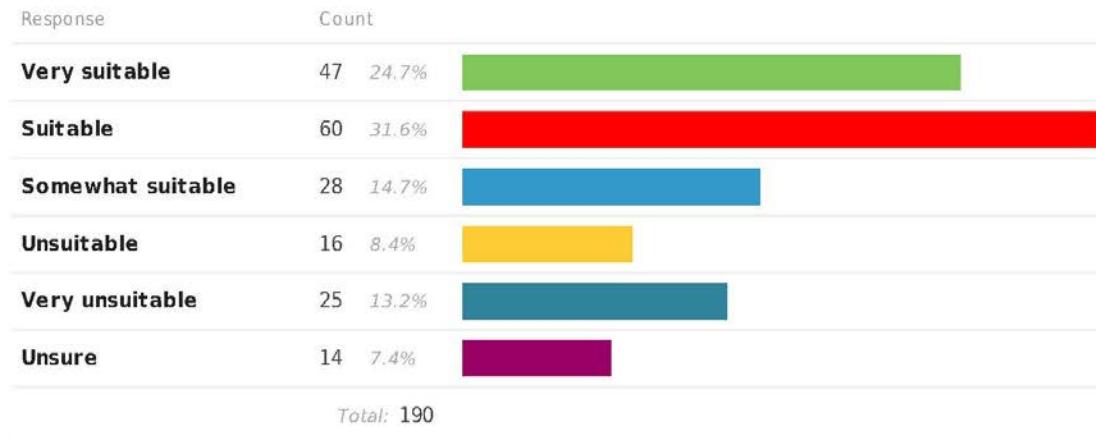
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2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#17. Esquimalt Bullen Park



Address: Fraser St., Esquimalt

Ownership: Municipal

Size of site: 3.64 hectares

Elevation of site: 20.5 metres

Current use: Sports Field

Existing zoning: Park

OCP designation: Institutional / Parks and Open Space

OCP factors:

- ## • Esquimalt Village

Distance to truck route or arterial road:



160 metres

Distance to CRD trunk main:



6 metres

Current water reuse recovery potential:

Low **Moderate** **High**

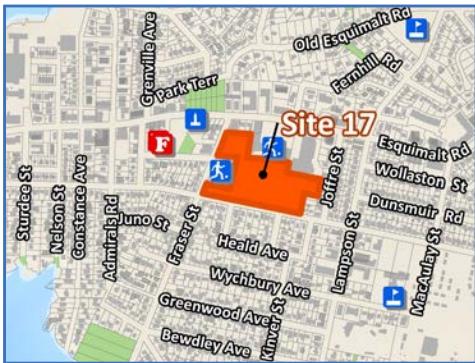
Current heat recovery potential:

Low **Moderate** **High**

Seismic Concerns:

Low **Moderate** **High**

- Within regional growth centre
 - Would likely pump back from Macaulay pump station (1460 m)
 - Recreational opportunities need to be maintained



Access & Infrastructure



Land & Amenities



Resource Recovery

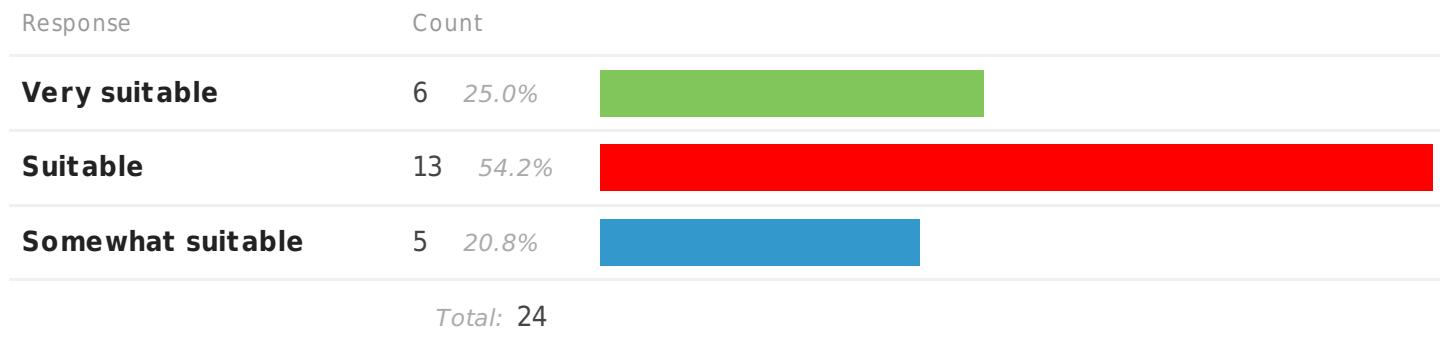


Please refer to information source sheet for source reference.

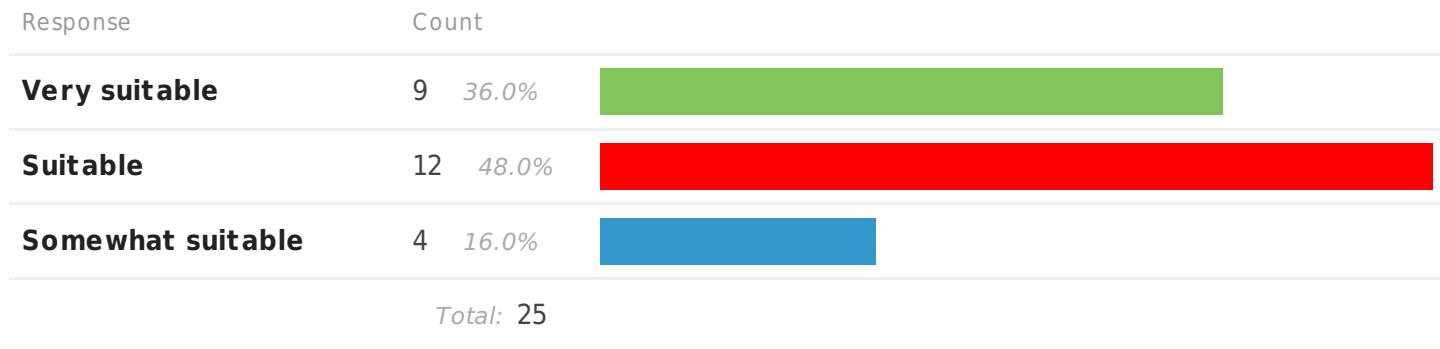
Esquimalt Bullen Park

* Filtered: Esquimalt Bullen Park

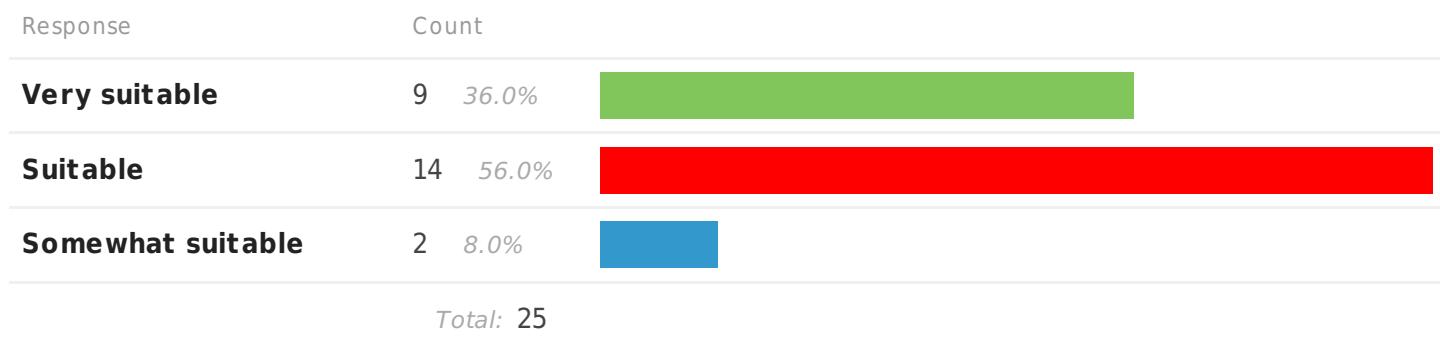
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2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#18. Esquimalt Town Centre



Address: Esquimalt Rd., Esquimalt

Ownership: Municipal

Size of site: 1.03 hectares

Elevation of site: 22.5 metres

Current use: Parking Lot

Existing zoning: Town Centre

OCP designation: Institutional

OCP factors:

- Esquimalt Village

Distance to truck route or arterial road:



58 metres

Distance to CRD trunk main:



98 metres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

Seismic Concerns:

Low Moderate High

Other Considerations:

- Within regional growth centre
- Small site

Access & Infrastructure



Land & Amenities

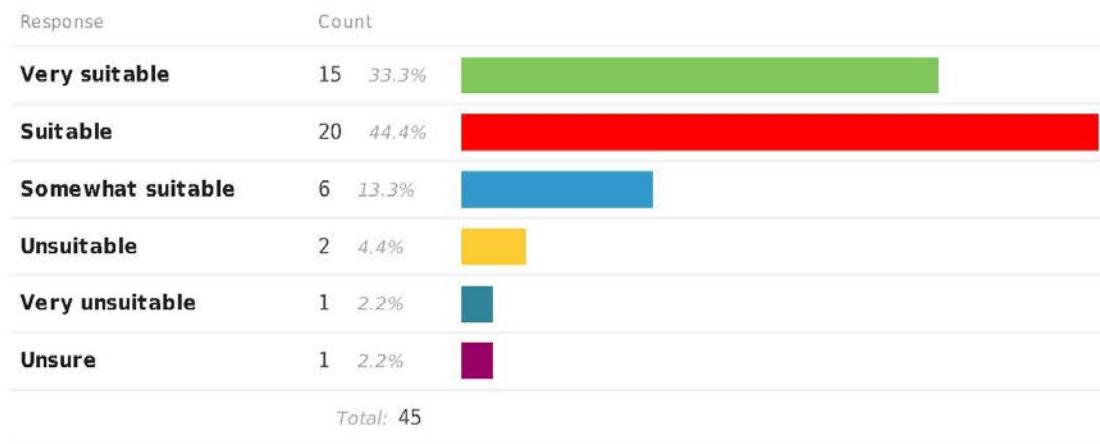


Resource Recovery

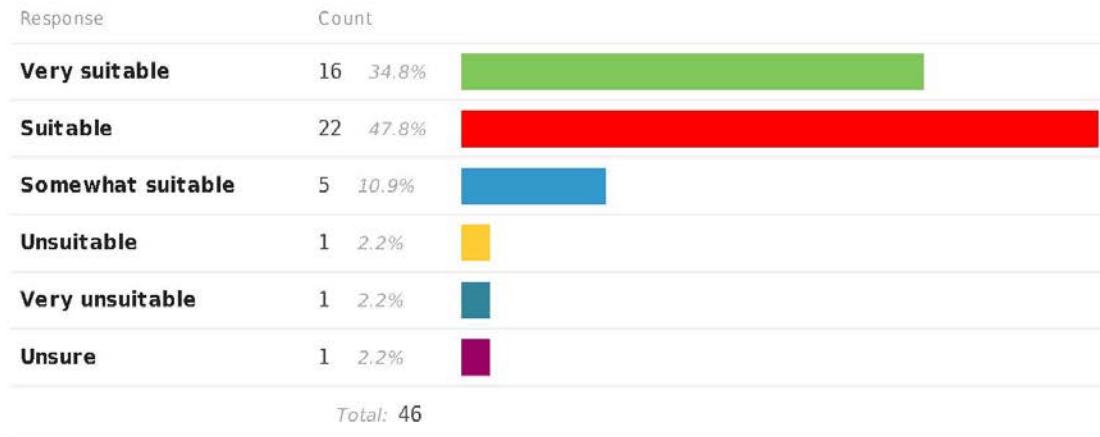


Esquimalt Town Centre

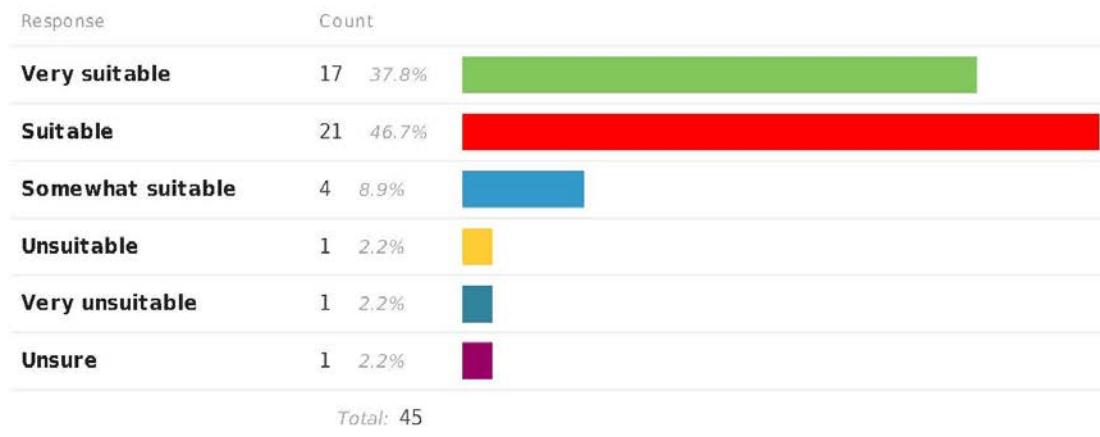
1. How suitable do you consider this site in terms of how the land is currently used, how a wastewater resource facility would fit with the surrounding area and future plans for the community?



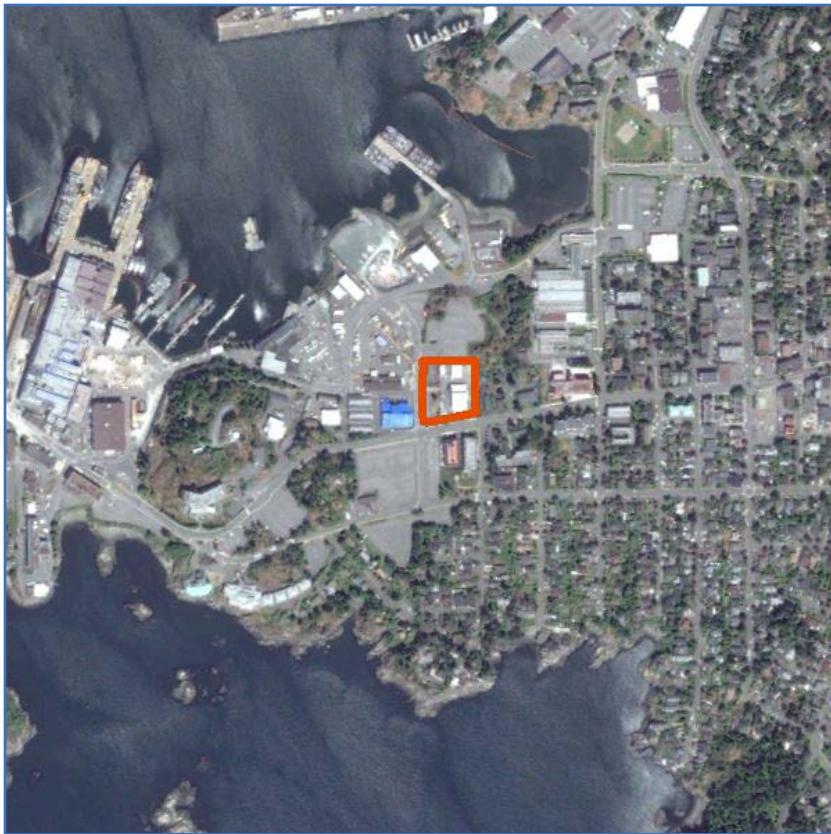
2. How suitable do you consider this site in terms of potential for use of reclaimed water and energy recovered from the treatment process?



3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#19. Esquimalt Works Yard



Address: Esquimalt Rd., Esquimalt

Ownership: Municipal

Size of site: 0.86 hectares

Elevation of site: 14 metres

Current use: Esquimalt public works yard

Existing zoning: Industrial

OCP designation: Institutional

OCP factors:

Distance to truck route or arterial road:



510 metres

Distance to CRD trunk main:



358 metres

Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

Seismic Concerns:

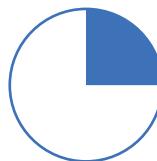
Low Moderate High

Other Considerations:

- Potential for heat recovery on DND land, but would require partnership
- Small site



Access & Infrastructure



Land & Amenities

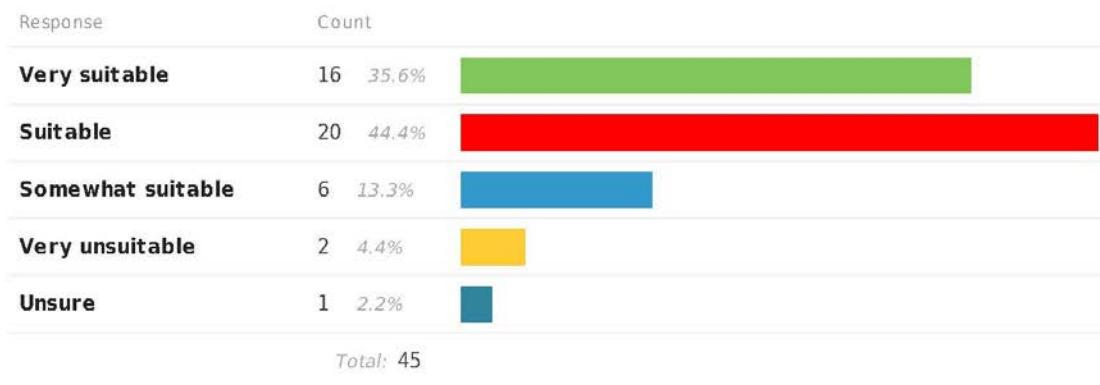


Resource Recovery

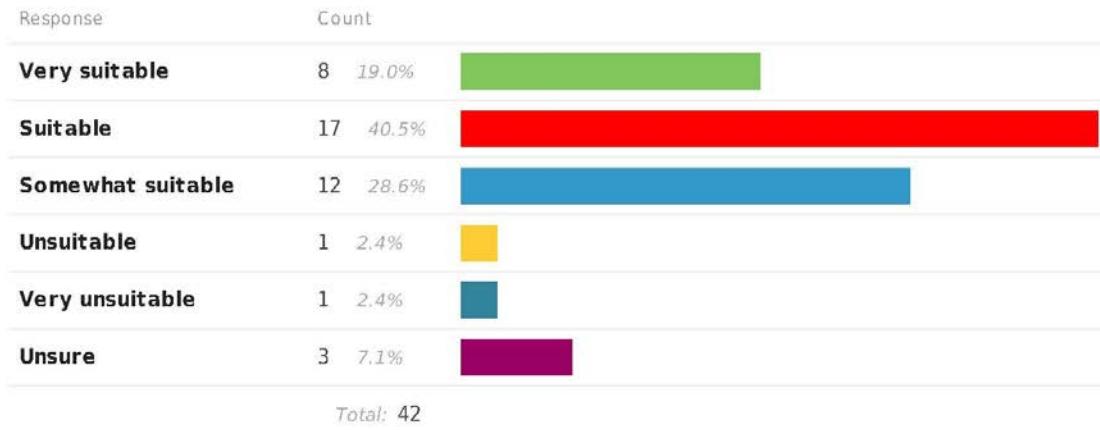


Esquimalt Works Yard

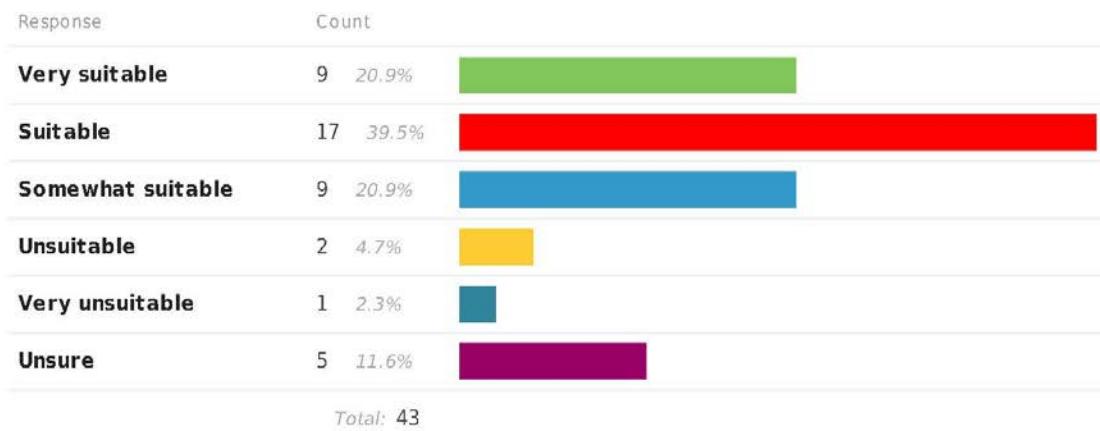
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3. How suitable do you consider this site in terms of how close it is to existing sewer trunk and truck routes?



#20. Esquimalt Lampson Field



Address: Lampson St., Esquimalt

Ownership: Municipal

Size of site: 1.97 hectares

Elevation of site: 6.5 metres

Current use: Sports Field

Existing zoning: Park

OCP designation: Parks and Open Space

OCP factors:

Distance to truck route or arterial road:



427 metres

Distance to CRD trunk main:



556 metres



Current water reuse recovery potential:

Low Moderate High

Current heat recovery potential:

Low Moderate High

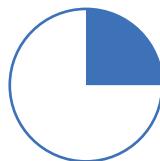
Seismic Concerns:

Low Moderate High

Other Considerations:

- Recreational opportunities need to be maintained

Access & Infrastructure



Land & Amenities

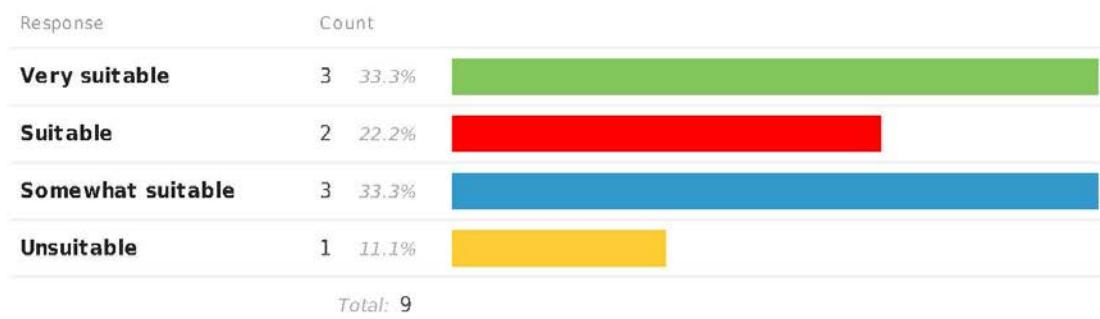


Resource Recovery

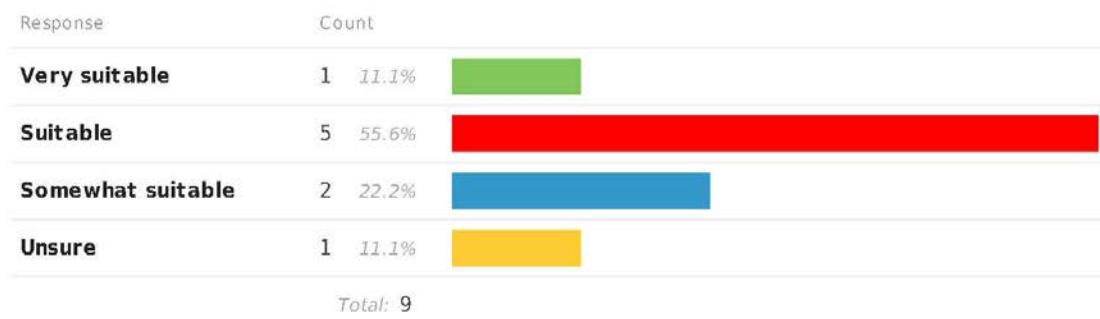


Esquimalt Lampson Field

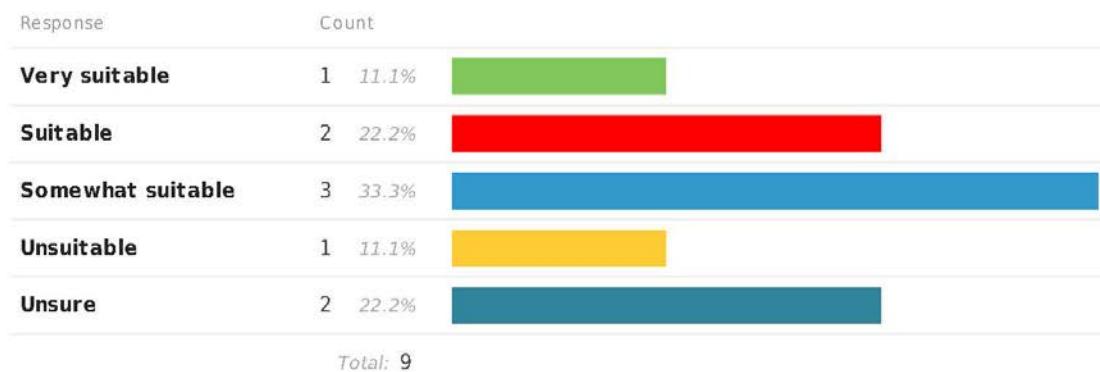
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**WESTSIDE
SOLUTIONS**

Wastewater Treatment & Resource Recovery



WESTSIDE SOLUTIONS

Westside Wastewater Treatment & Resource Recovery



SiteSpeak Promotion

- Options Launch Delta Hotel
- Media release
- Community Newspaper ads
- Times Colonist online ad
- Used Victoria online ad
- CRD Face book ad
- Westside Solutions website
- Municipal websites
- Postal drop across the westside
- Social media
 - Twitter
 - Facebook
- Community events
 - Vic West Fest
 - Canada Day Fort Rodd Hill
 - Goldstream Market
 - Esquimalt Market
 - Neighbourhood Nights – View Royal



WESTSIDE SITESPEAK

Wastewater Treatment & Resource Recovery

**VOICE YOUR VIEWS
about wastewater treatment sites in
Esquimalt, View Royal,
Colwood, Langford,
& Esquimalt First Nation.**

Go to the SiteSpeak Survey

INFORMATION

SiteSpeak duration

- Launched June 24
- Closed July 22
- Additional site (Royal Colwood Golf Course) added July 16

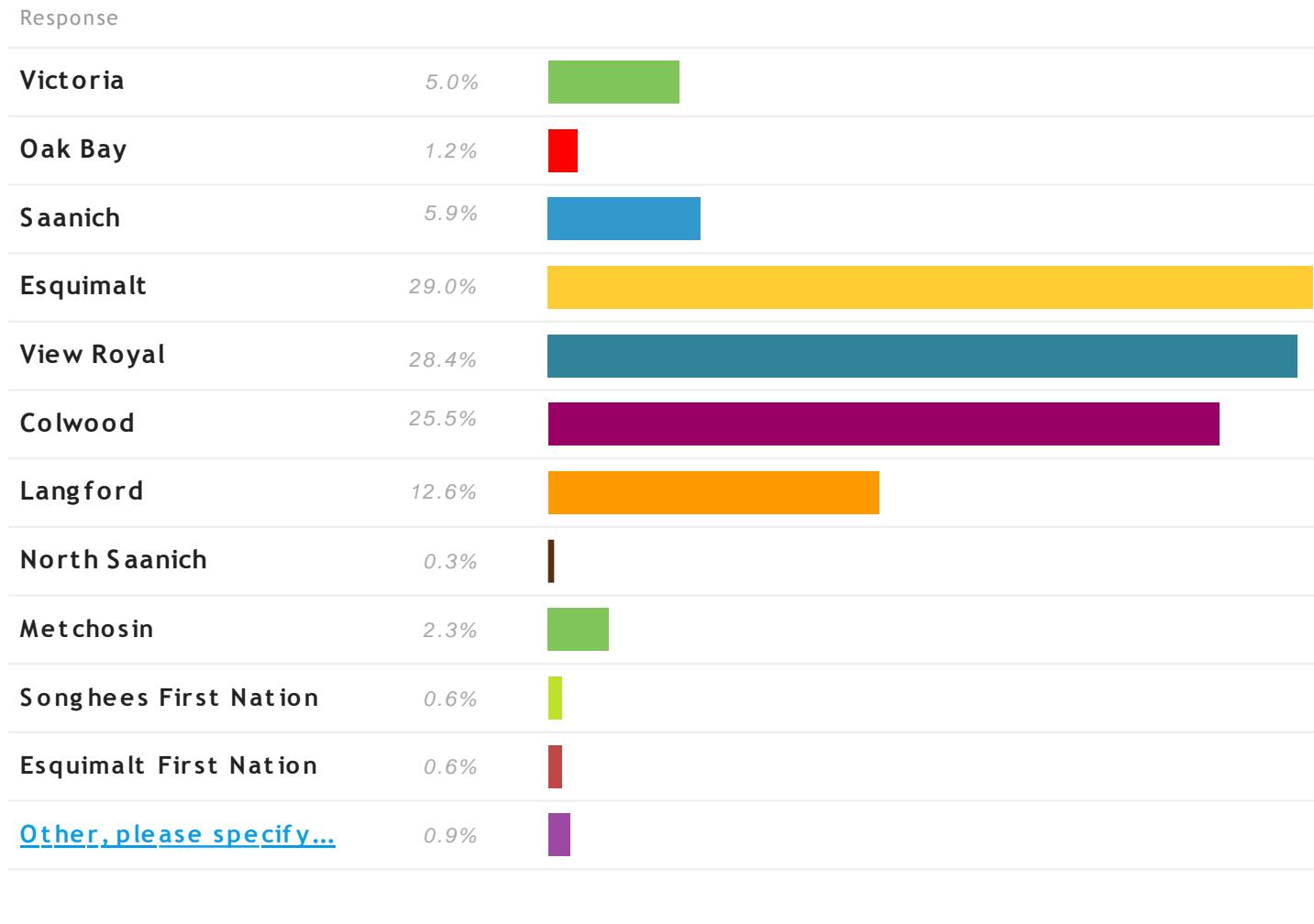
Participation

- 619 respondents
- ~ 85% Westside residents

Average length of time to complete

- 1 hour 25 minutes
-

Responses by community



Langford Node

Response

1. Langford VMP at

Kelly Road

10.1%



2a and # 2b Langford

VMP and Colwood VMP

at Meaford Ave.

41.7%



**I do not wish to provide
input on these sites.**

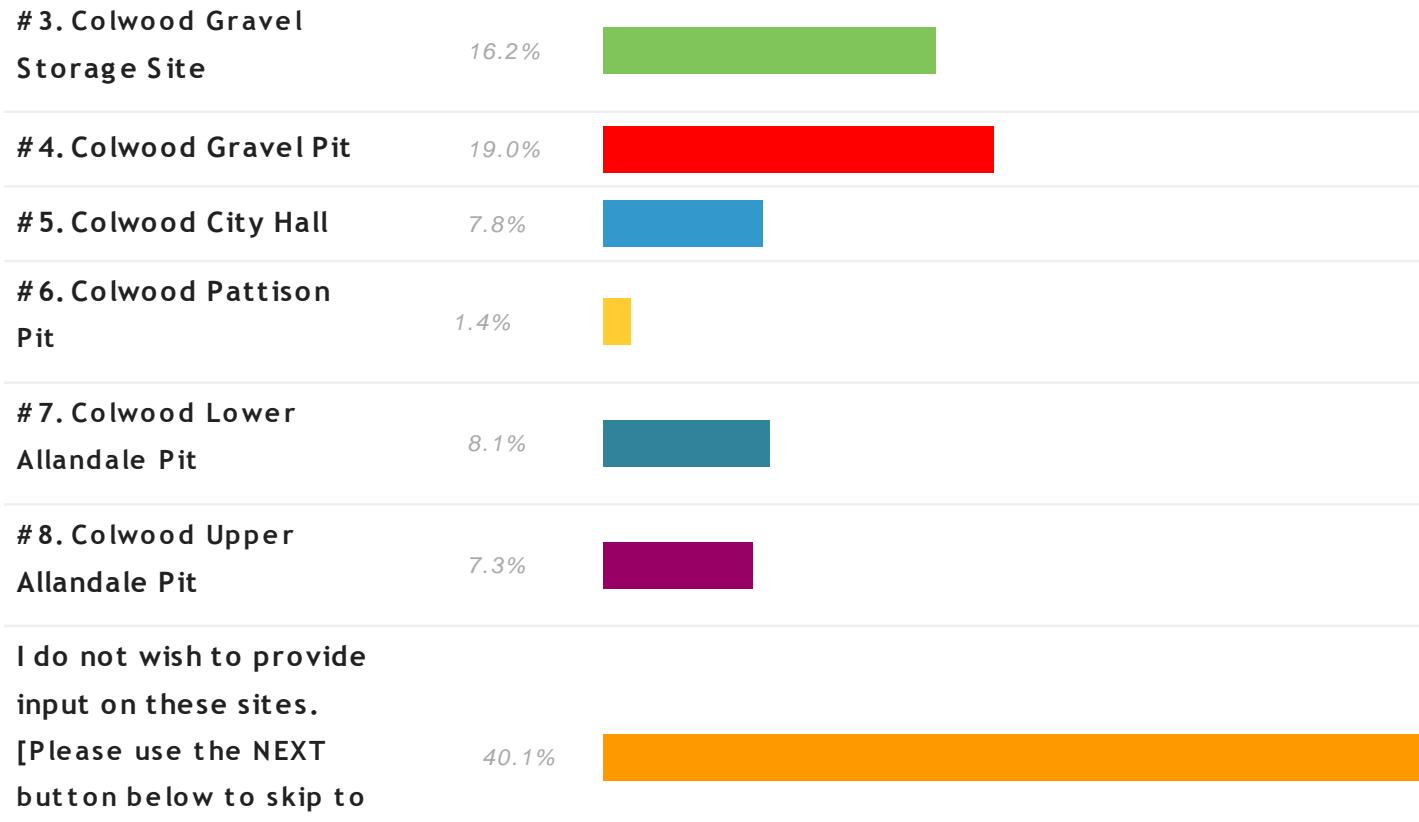
**[Please use the NEXT
button below to skip to
the next page.]**

48.2%



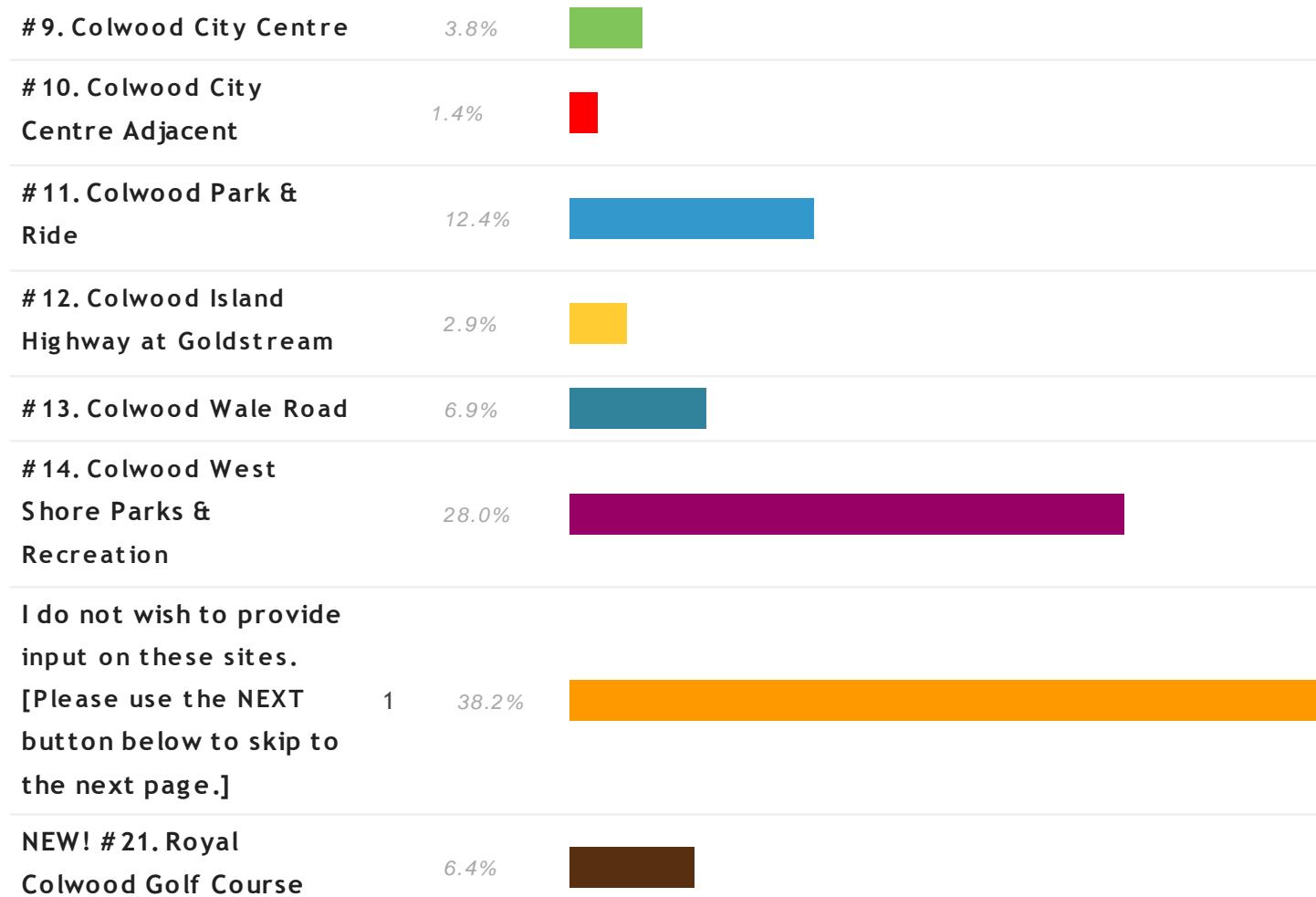
South-Central Colwood Node

Response



North Colwood Node

Response



View Royal Node

 WESTSIDE
SOLUTIONS
Wastewater Treatment & Resource Recovery

#16. View Royal Burnside & Watkiss



Address: Burnside Rd., View Royal
Ownership: Provincial
Size of site: 2.26 hectares
Elevation of site: 10 metres
Current use: Vacant / Archery Club
Existing zoning: Park
OCP designation: Park
OCP factors:

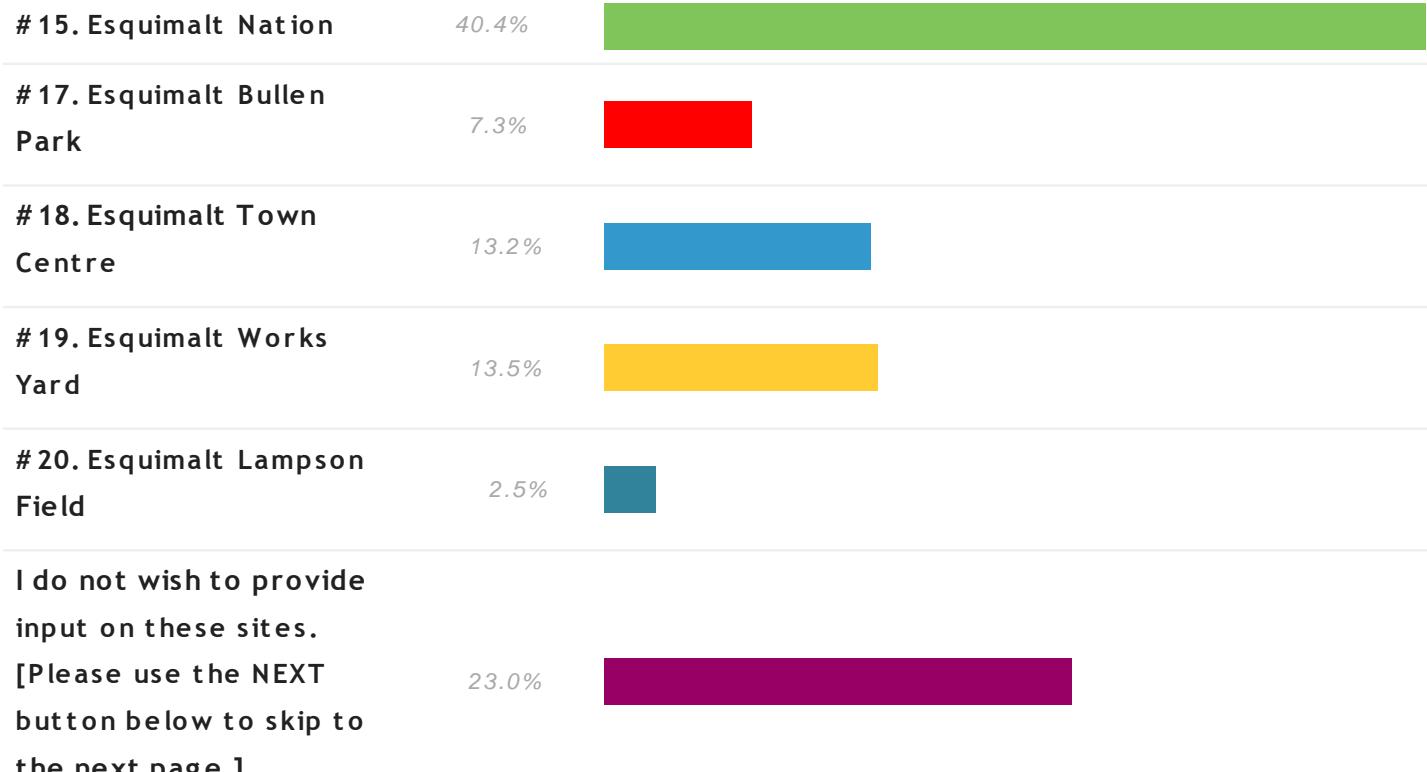
- Hospital Neighbourhood
- Terrestrial Sensitive Ecosystem Development Permit Area

Distance to truck route or arterial road:  26 metres	Current water reuse recovery potential:  Low  Moderate  High	Other Considerations: <ul style="list-style-type: none">Potential Archeological ConcernsBC Hydro right-of-way (ROW)	
Distance to CRD trunk main:  354 metres	Current heat recovery potential:  Low  Moderate  High	Seismic Concerns:  Low  Moderate  High	
	Access & Infrastructure 	Land & Amenities 	Resource Recovery 

Please refer to information source sheet for source reference.

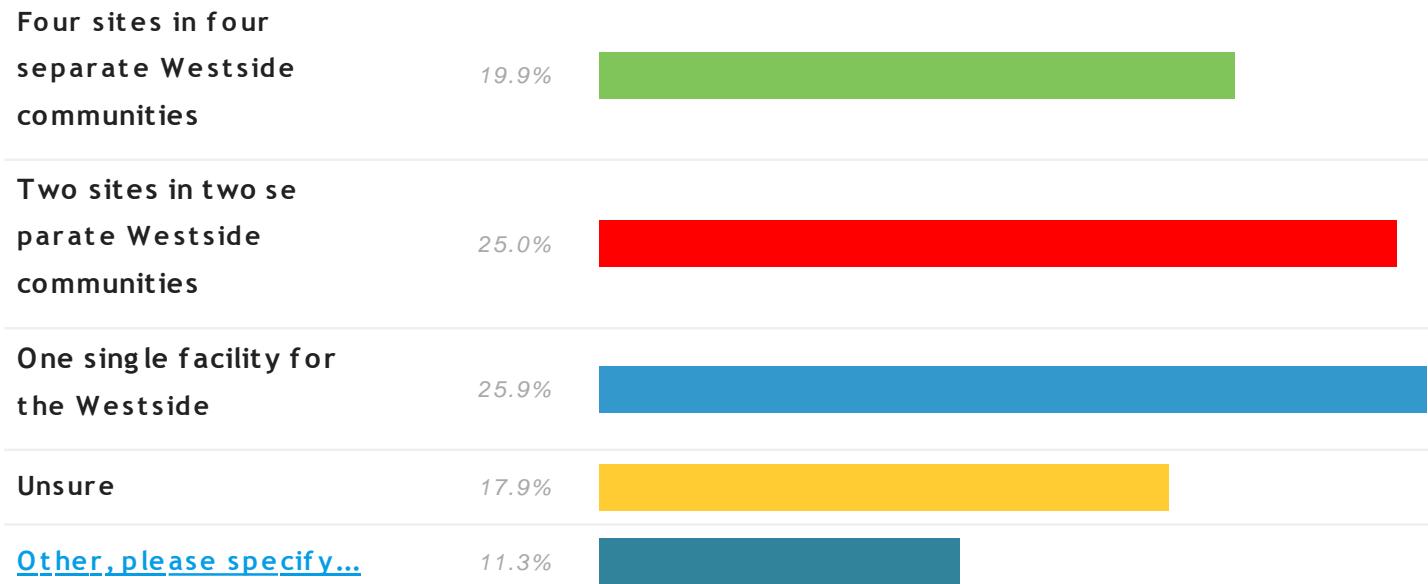
Esquimalt Node

Response



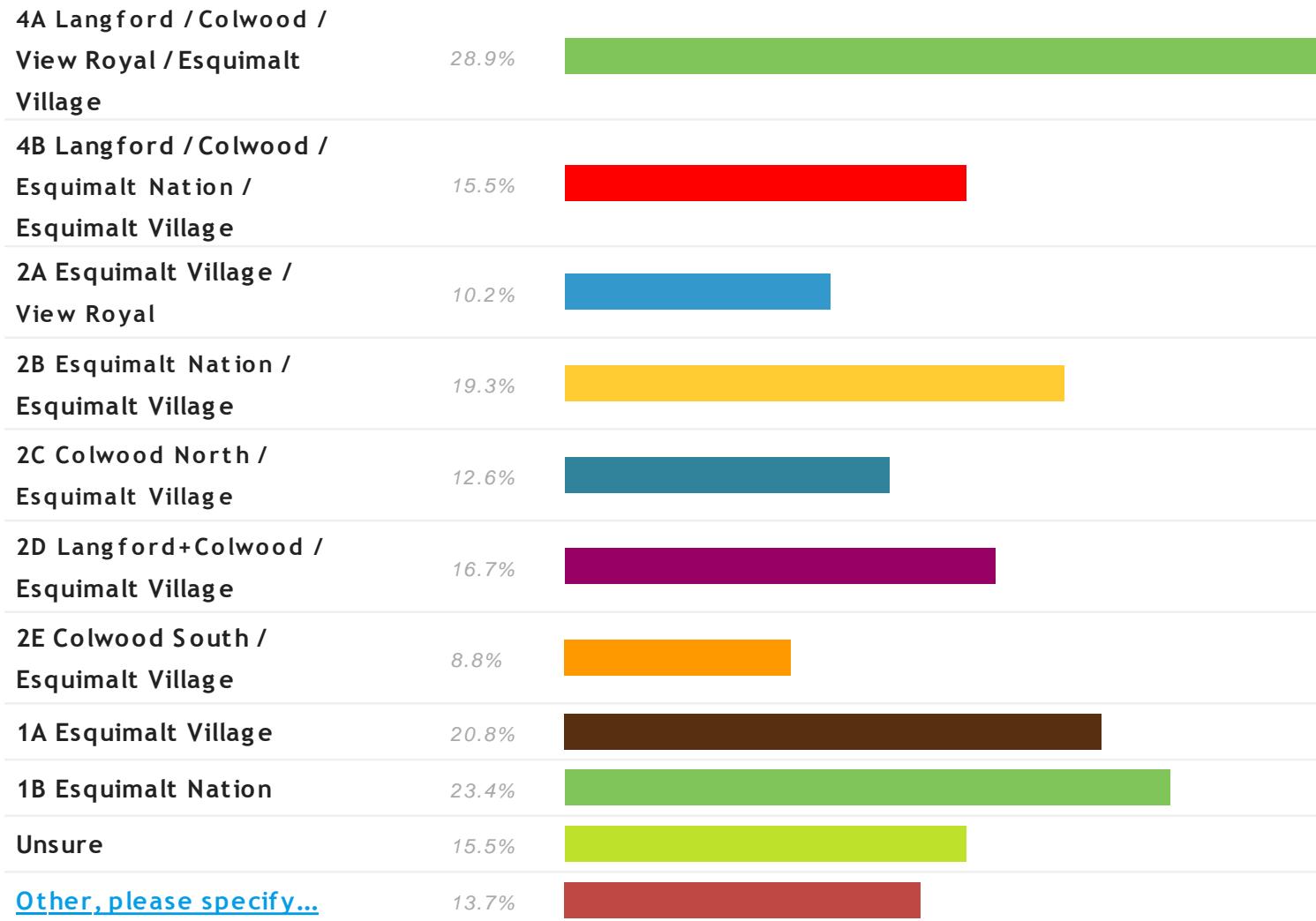
NUMBER OF SITES

Response



Preferred Option

Response



Additional Costs Acceptable?

If your chosen wastewater resource solution would cost significantly more than another option, would that affect your choice?

Response

Yes

43.3%



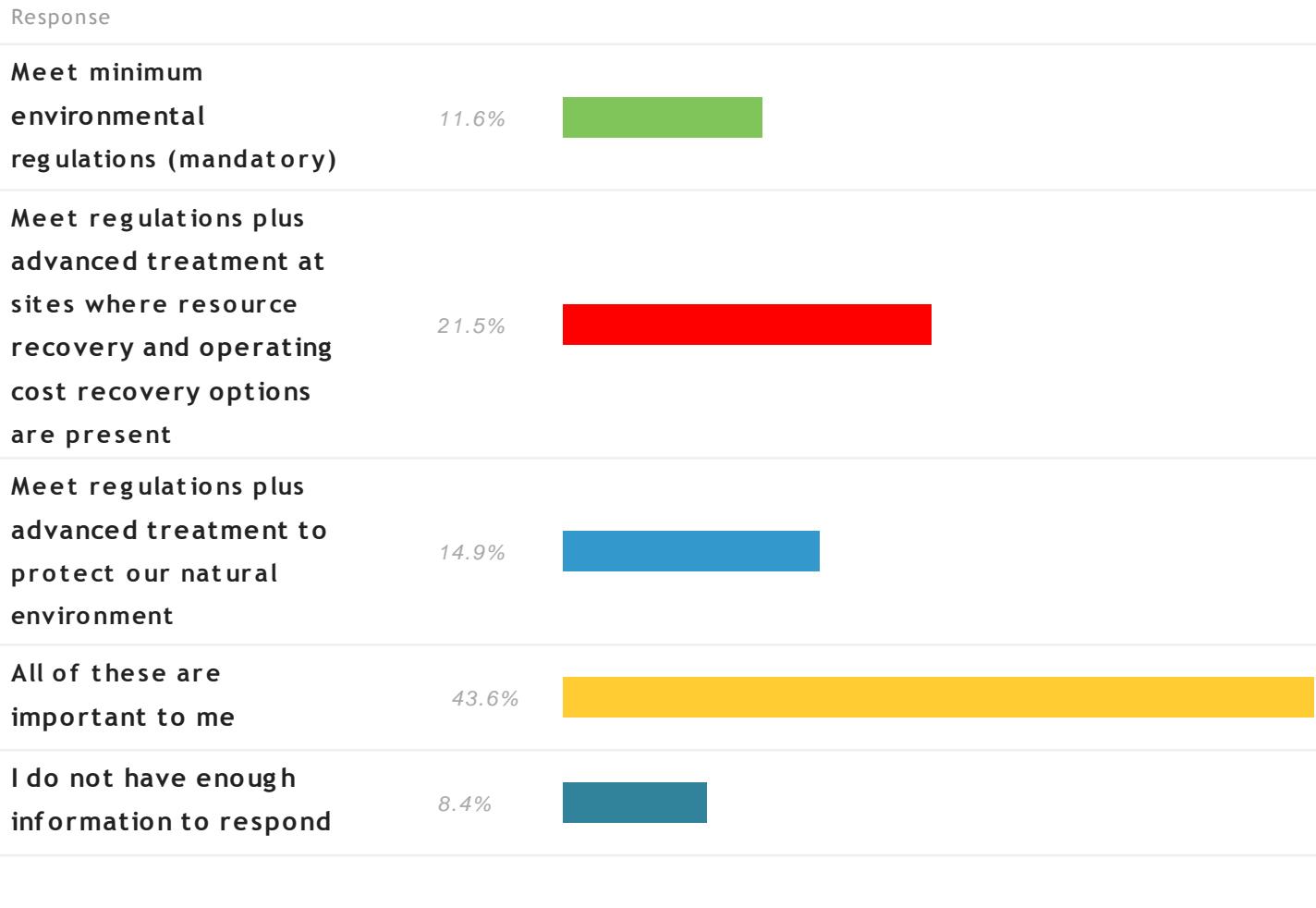
No

56.7%



Total: 326

LEVEL OF TREATMENT

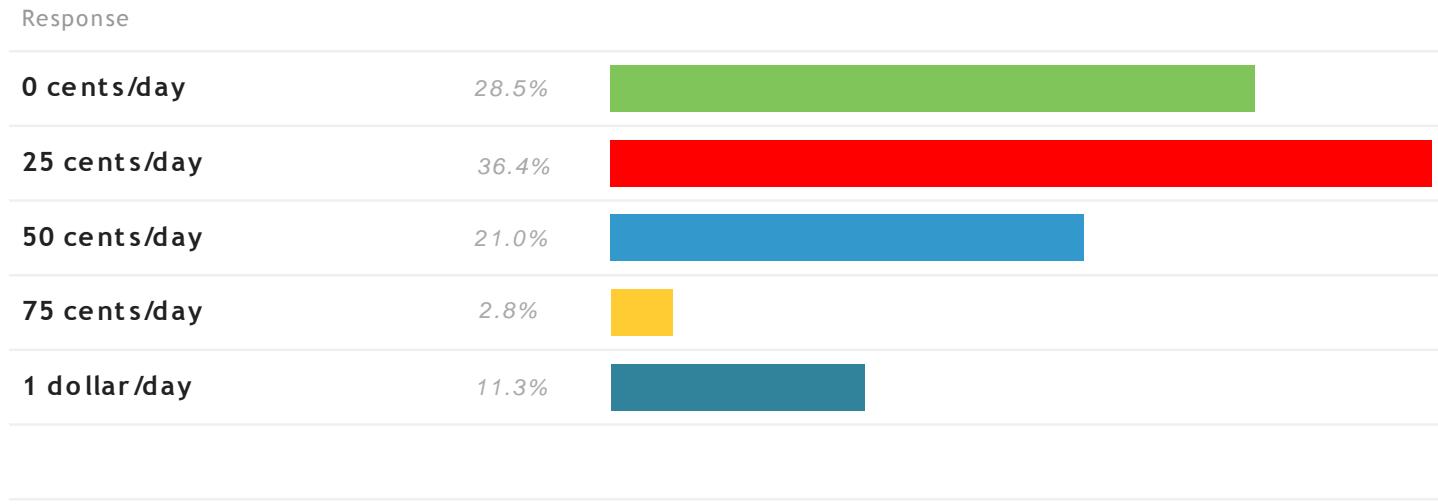


TECHNOLOGY

Response



COSTS







**WESTSIDE
SOLUTIONS**

Westside Wastewater Treatment & Resource Recovery



QUESTIONS