

CORE AREA WASTEWATER SURVEY

Summary Results

February 22, 2016

Background

This document is a summary of the 1,357 valid and complete responses to the Core Area Wastewater Survey.

A total of 1,390 respondents completed the survey before the deadline of noon February 20, 2016, but 33 of these surveys were dropped from the results because they came from IP Addresses with more than the maximum 4 allowed surveys per IP Address (note: the first 4 completed surveys from these IP addresses are included in these results).

Survey results shown are percentages rounded to the nearest whole number. Some columns may not add to 100% due to rounding. Some summary statistics may not match component parts due to rounding.

Survey results are shown among all respondents, as well as broken out by Western and Eastern Communities, defined as follows:

Western Communities (361 interviews)

- Esquimalt (121 interviews)
- Colwood (95 interviews)
- Langford (88 interviews)
- View Royal (56 interviews)
- Songhees Nation (1 interviews)
- Esquimalt Nation (0 interviews)

Eastern Communities (937 interviews)

- Saanich (465 interviews)
- Victoria (393 interviews)
- Oak Bay (79 interviews)

An additional 59 respondents said they live in another community (n=29) or preferred not to say where they live (n=30).

This document was prepared by Kyle Braid, Vice-President of Ipsos Public Affairs. He is responsible for any errors or omissions.

Initial Priorities: Highest Priority

| <i>Q. Based on what you know or have heard about the need to treat wastewater, please rank your HIGHEST, SECOND HIGHEST and THIRD HIGHEST priorities for this project.</i> | Total (n=1,357) % | West (n=361) % | East (n=937) % |
|--|-------------------------|----------------------|----------------------|
| How the project costs will affect my taxes | 43 | 42 | 44 |
| Level of water quality being discharged into the ocean | 29 | 26 | 30 |
| Opportunities for water reuse and heat recovery | 10 | 10 | 9 |
| Location of the treatment plants | 9 | 11 | 7 |
| Completing the project on time | 5 | 4 | 5 |
| How the treatment facilities will integrate with my neighbourhood and community | 4 | 5 | 3 |
| How construction will impact the quality of life in my neighbourhood | 1 | 2 | 1 |
| How truck traffic will impact the quality of life in my neighbourhood | 1 | 1 | 1 |

Initial Priorities: Highest or Second or Third Priority

| <i>Q. Based on what you know or have heard about the need to treat wastewater, please rank your HIGHEST, SECOND HIGHEST and THIRD HIGHEST priorities for this project.</i> | Total (n=1,357) % | West (n=361) % | East (n=937) % |
|--|-------------------------|----------------------|----------------------|
| How the project costs will affect my taxes | 72 | 71 | 72 |
| Level of water quality being discharged into the ocean | 53 | 52 | 53 |
| Opportunities for water reuse and heat recovery | 43 | 41 | 42 |
| Location of the treatment plants | 42 | 43 | 41 |
| Completing the project on time | 29 | 25 | 31 |
| How the treatment facilities will integrate with my neighbourhood and community | 28 | 32 | 27 |
| How truck traffic will impact the quality of life in my neighbourhood | 11 | 13 | 9 |
| How construction will impact the quality of life in my neighbourhood | 9 | 12 | 9 |

Municipality

| <i>Q. In which of the following municipalities or areas do you live?</i> | Total (n=1,357) % | West (n=361) % | East (n=937) % |
|--|-------------------------|----------------------|----------------------|
| Saanich | 34 | | 50 |
| Victoria | 29 | | 42 |
| Esquimalt | 9 | 34 | |
| Colwood | 7 | 26 | |
| Langford | 6 | 24 | |
| Oak Bay | 6 | | 8 |
| View Royal | 4 | 16 | |
| Songhees Nation | <1 | <1 | |
| Esquimalt Nation | 0 | 0 | |
| Other (specify) | 2 | | |
| Prefer not to answer | 2 | | |

Acceptability: One Plant - Secondary Treatment

Note: Question was not asked of the 30 respondents who did not indicate where they live.

| <i>Q. In your view, how acceptable is this option for treatment of liquid waste in the Core Area?</i> | Total (n=1,327) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| Very acceptable | 30 | 33 | 30 |
| Somewhat acceptable | 31 | 35 | 29 |
| Not very acceptable | 13 | 14 | 12 |
| Not at all acceptable | 25 | 17 | 28 |
| No opinion | 2 | 2 | 2 |
| Very + Somewhat Acceptable | 61 | 68 | 58 |

Acceptability: One Plant - Tertiary Treatment

Note: Question was not asked of the 30 respondents who did not indicate where they live.

| <i>Q. In your view, how acceptable is this option for treatment of liquid waste in the Core Area?</i> | Total (n=1,327) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| Very acceptable | 28 | 34 | 27 |
| Somewhat acceptable | 27 | 32 | 26 |
| Not very acceptable | 14 | 14 | 14 |
| Not at all acceptable | 27 | 16 | 31 |
| No opinion | 3 | 4 | 2 |
| Very + Somewhat Acceptable | 56 | 66 | 52 |

Acceptability: Two Plant – Option

Note: Question was not asked of the 30 respondents who did not indicate where they live.

| <i>Q. In your view, how acceptable is this option for treatment of liquid waste in the Core Area?</i> | Total (n=1,327) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| Very acceptable | 19 | 23 | 17 |
| Somewhat acceptable | 30 | 30 | 30 |
| Not very acceptable | 17 | 18 | 18 |
| Not at all acceptable | 30 | 26 | 32 |
| No opinion | 4 | 3 | 4 |
| <i>Very + Somewhat Acceptable</i> | 49 | 53 | 47 |

Acceptability: Three Plant - Secondary Treatment

Note: Question was not asked of the 30 respondents who did not indicate where they live.

| <i>Q. In your view, how acceptable is this option for treatment of liquid waste in the Core Area?</i> | Total (n=1,327) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| Very acceptable | 7 | 9 | 7 |
| Somewhat acceptable | 21 | 20 | 22 |
| Not very acceptable | 27 | 29 | 26 |
| Not at all acceptable | 41 | 38 | 42 |
| No opinion | 3 | 4 | 3 |
| <i>Very + Somewhat Acceptable</i> | 29 | 29 | 28 |

Acceptability: Three Plant - Tertiary Treatment

Note: Question was not asked of the 30 respondents who did not indicate where they live.

| <i>Q. In your view, how acceptable is this option for treatment of liquid waste in the Core Area?</i> | Total (n=1,327) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| Very acceptable | 9 | 10 | 9 |
| Somewhat acceptable | 21 | 17 | 22 |
| Not very acceptable | 22 | 23 | 22 |
| Not at all acceptable | 44 | 46 | 44 |
| No opinion | 4 | 4 | 3 |
| <i>Very + Somewhat Acceptable</i> | 30 | 27 | 30 |

Acceptability: Four Plant Option

Note: Question was not asked of the 30 respondents who did not indicate where they live.

| <i>Q. In your view, how acceptable is this option for treatment of liquid waste in the Core Area?</i> | Total (n=1,327) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| Very acceptable | 6 | 5 | 6 |
| Somewhat acceptable | 17 | 18 | 16 |
| Not very acceptable | 23 | 23 | 23 |
| Not at all acceptable | 50 | 50 | 51 |
| No opinion | 4 | 4 | 4 |
| <i>Very + Somewhat Acceptable</i> | 23 | 23 | 22 |

Acceptability: Seven Plant Concept

Note: Question was not asked of the 30 respondents who did not indicate where they live.

| <i>Q. In your view, how acceptable is this option for treatment of liquid waste in the Core Area?</i> | Total (n=1,327) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| Very acceptable | 7 | 6 | 7 |
| Somewhat acceptable | 10 | 9 | 11 |
| Not very acceptable | 16 | 16 | 16 |
| Not at all acceptable | 64 | 66 | 63 |
| No opinion | 3 | 3 | 3 |
| <i>Very + Somewhat Acceptable</i> | 17 | 15 | 18 |

Three Acceptable Options: Pre-Change

Note: A 'None of the Above' option was added after 986 surveys. These results are before the change.

| <i>Q. Please choose 3 options, in no particular order, that are in your view, acceptable options for wastewater treatment.</i> | Total (n=986) % | West (n=274) % | East (n=669) % |
|--|-----------------------|----------------------|----------------------|
| Two Plant - Rock Bay & Colwood - Secondary & Tertiary | 66 | 69 | 65 |
| One Plant - Rock Bay - Tertiary | 63 | 70 | 60 |
| One Plant - Rock Bay - Secondary | 59 | 62 | 58 |
| Three Plant Esquimalt Nation, Rock Bay & Colwood - Tertiary | 28 | 25 | 28 |
| Three Plant - Esquimalt Nation, Rock Bay & Colwood - Secondary | 20 | 21 | 19 |
| Seven Plant - Langford, Colwood, View Royal, Rock Bay, East Saanich, Saanich Core & Esquimalt | 15 | 13 | 16 |
| Four Plant - Esquimalt Nation, Rock Bay, Colwood & East Saanich | 13 | 10 | 15 |
| No answer | 12 | 9 | 13 |

Three Acceptable Options: Post-Change

Note: A 'None of the Above' option was added after 986 surveys. These results are after the change.

| <i>Q. Please choose 3 options, in no particular order, that are in your view, acceptable options for wastewater treatment.</i> | Total (n=371) % | West (n=87) % | East (n=268) % |
|--|-----------------------|---------------------|----------------------|
| Two Plant - Rock Bay & Colwood - Secondary & Tertiary | 33 | 51 | 28 |
| One Plant - Rock Bay – Tertiary | 30 | 47 | 25 |
| One Plant - Rock Bay – Secondary | 28 | 43 | 23 |
| Three Plant Esquimalt Nation, Rock Bay & Colwood – Tertiary | 13 | 20 | 11 |
| Three Plant - Esquimalt Nation, Rock Bay & Colwood – Secondary | 9 | 15 | 8 |
| Four Plant - Esquimalt Nation, Rock Bay, Colwood & East Saanich | 7 | 10 | 6 |
| Seven Plant - Langford, Colwood, View Royal, Rock Bay, East Saanich, Saanich Core & Esquimalt | 7 | 11 | 5 |
| None of the above | 55 | 33 | 62 |
| No answer | 2 | 1 | 3 |

Final Priorities: Highest Priority

| <i>Q. Now that you have seen all 7 options, please rank your HIGHEST, SECOND HIGHEST and THIRD HIGHEST priorities for this project.</i> | Total (n=1,357) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| How the project costs will affect my taxes | 44 | 45 | 44 |
| Level of water quality being discharged into the ocean | 28 | 26 | 29 |
| Opportunities for water reuse and heat recovery | 10 | 9 | 9 |
| Location of the treatment plants | 8 | 10 | 7 |
| How the treatment facilities will integrate with my neighbourhood and community | 5 | 5 | 4 |
| Completing the project on time | 4 | 4 | 5 |
| How construction will impact the quality of life in my neighbourhood | 1 | 1 | 1 |
| How truck traffic will impact the quality of life in my neighbourhood | <1 | 0 | <1 |

Final Priorities: Highest or Second or Third Priority

| <i>Q. Now that you have seen all 7 options, please rank your HIGHEST, SECOND HIGHEST and THIRD HIGHEST priorities for this project.</i> | Total (n=1,357) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| How the project costs will affect my taxes | 72 | 75 | 72 |
| Level of water quality being discharged into the ocean | 52 | 51 | 53 |
| Opportunities for water reuse and heat recovery | 43 | 43 | 43 |
| Location of the treatment plants | 36 | 36 | 35 |
| Completing the project on time | 30 | 24 | 33 |
| How the treatment facilities will integrate with my neighbourhood and community | 26 | 30 | 25 |
| How truck traffic will impact the quality of life in my neighbourhood | 11 | 12 | 10 |
| How construction will impact the quality of life in my neighbourhood | 10 | 12 | 10 |

Interest in Variation of 3 Plant Option

| <i>Q. There is a potential for a variation of the 3 Plant Option - 3 Plant Fully Tertiary Option. Would this option interest you?</i> | Total (n=1,357) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| Yes | 39 | 37 | 39 |
| No | 61 | 63 | 61 |

Site Preferred for Solids

| <i>Q. Now that you have seen both sites for treatment of wastewater solids in the Core Area, is there a site that you prefer?</i> | Total (n=1,357) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| Hartland Landfill | 36 | 35 | 37 |
| Rock Bay | 36 | 37 | 35 |
| No preference | 28 | 28 | 28 |

See Challenges with Sites

| <i>Q. Do you see challenges with the sites?</i> | Total (n=1,357) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| Yes | 61 | 59 | 60 |
| No | 39 | 41 | 40 |

See Opportunities with Sites

| <i>Q. Do you see opportunities for these sites?</i> | Total (n=1,357) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| Yes | 65 | 68 | 64 |
| No | 35 | 32 | 36 |

Solids Considerations: First Consideration

| Q. Please rank your top three considerations among the following: | Total (n=1,357) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| Truck traffic for moving solids | 19 | 20 | 18 |
| Ability to be integrated with waste like food scraps, wood and construction waste, yard waste | 14 | 16 | 14 |
| Proximity of facilities to residential and business | 14 | 13 | 14 |
| Disposal of treated solids | 13 | 11 | 13 |
| Ability to generate resources like gas | 12 | 13 | 12 |
| Potential emissions | 12 | 12 | 12 |
| Piping to move solids | 9 | 6 | 9 |
| Ability to integrate into place | 7 | 8 | 7 |

Solids Considerations: First or Second or Third Considerations

| Q. Please rank your top three considerations among the following: | Total (n=1,357) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| Disposal of treated solids | 44 | 42 | 45 |
| Truck traffic for moving solids | 41 | 41 | 42 |
| Potential emissions | 41 | 42 | 41 |
| Ability to be integrated with waste like food scraps, wood and construction waste, yard waste | 40 | 45 | 38 |
| Ability to generate resources like gas | 36 | 35 | 37 |
| Proximity of facilities to residential and business | 33 | 34 | 32 |
| Piping to move solids | 29 | 28 | 29 |
| Ability to integrate into place | 25 | 24 | 26 |

Age

| Q. How old are you? | Total (n=1,357) % | West (n=361) % | East (n=937) % |
|----------------------|-------------------------|----------------------|----------------------|
| Under 18 | <1 | <1 | <1 |
| 18 to 24 | 1 | 1 | 1 |
| 25 to 34 | 8 | 7 | 8 |
| 35 to 44 | 14 | 15 | 13 |
| 45 to 54 | 18 | 24 | 16 |
| 55 to 64 | 27 | 25 | 27 |
| 65 to 74 | 23 | 20 | 26 |
| 75 or older | 4 | 4 | 4 |
| Prefer not to answer | 5 | 4 | 5 |

Own or Rent

| Q. Do you own or rent your home? | Total (n=1,357) % | West (n=361) % | East (n=937) % |
|----------------------------------|-------------------------|----------------------|----------------------|
| Own | 83 | 88 | 81 |
| Rent | 11 | 7 | 13 |
| Other | 2 | 1 | 2 |
| Prefer not to answer | 4 | 4 | 4 |

Sewer or Septic

| Q. Is your home on septic or sewer service? | Total (n=1,357) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| Sewer | 86 | 75 | 92 |
| Septic | 11 | 24 | 5 |
| Other | 1 | <1 | 1 |
| Prefer not to answer | 2 | 1 | 2 |

Own Business in Core Area

| Q. Does anyone in your household own a business in the Core Area? | Total (n=1,357) % | West (n=361) % | East (n=937) % |
|---|-------------------------|----------------------|----------------------|
| Yes | 14 | 12 | 15 |
| No | 79 | 83 | 77 |
| Prefer not to say | 7 | 4 | 8 |