



CRD Liquid Waste Management Survey of Opinions and Attitudes

FINAL Report

March 26th, 2004



Objectives and Methodology

- ◆ The Capital Regional District commissioned Ipsos-Reid to conduct a public opinion poll to better understand CRD residents' attitudes, values, and expectations with regards to the proposed Liquid Waste Management Plan.
- ◆ A total of 1,515 interviews were conducted with CRD residents between the dates of February 27th and March 3rd, 2004. Overall results are accurate to $\pm 2.6\%$, 19 times out of 20.



Objectives and Methodology (cont'd)

- ◆ Interviews were divided between municipalities as follows:

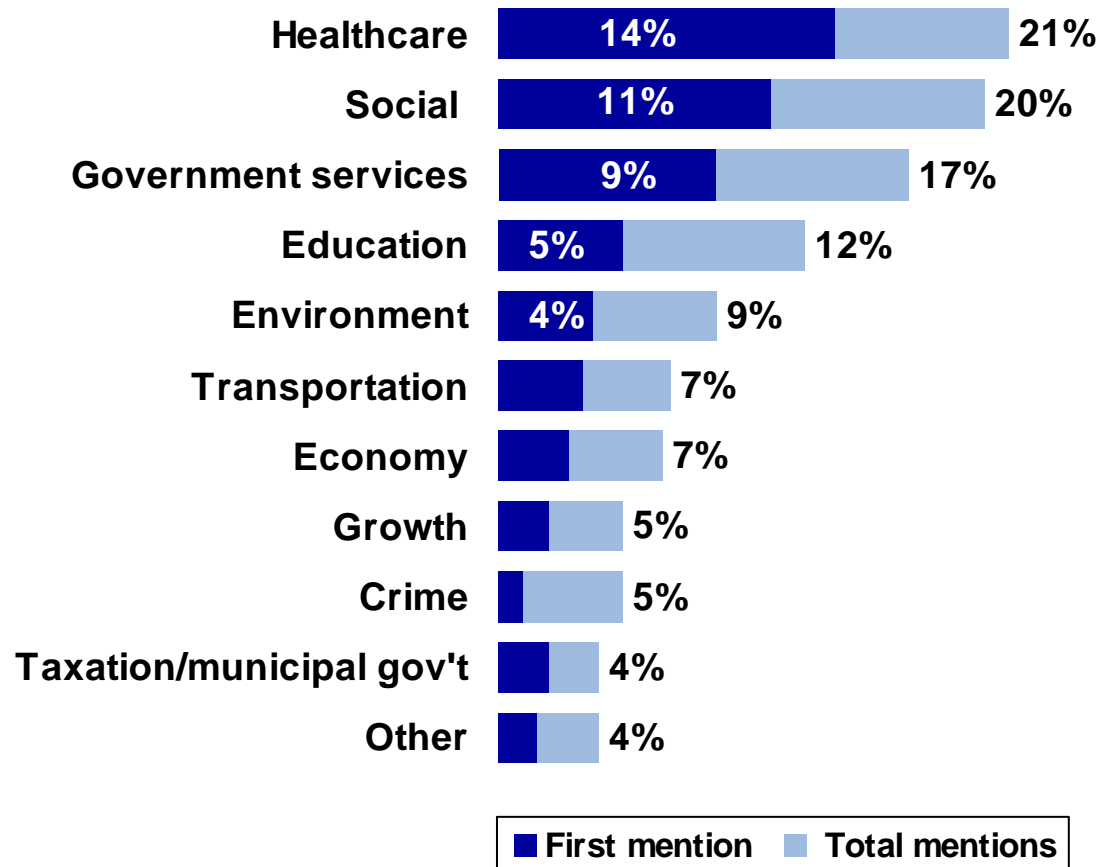
Region	Sample Size	Margin of Error
Victoria	249	±6.3%
Saanich	331	±5.5%
Langford	140	±8.5%
Oak Bay	110	±9.5%
Esquimalt, New Songhees	106	±9.7%
Central Saanich, South Saanich, East Saanich	131	±8.7%
Colwood	119	±9.2%
Sidney, North Saanich, Gulf Islands, Cole Bay, Union Bay	165	±7.8%
View Royal, Highlands, Juan de Fuca	164	±7.9%
TOTAL	1,515	±2.6%

- ◆ The final data were weighted using the 2001 census to reflect the actual population distribution between municipalities and to correct for any variations in demographics (age/gender).



Residents say healthcare and social issues are the region's most important issues

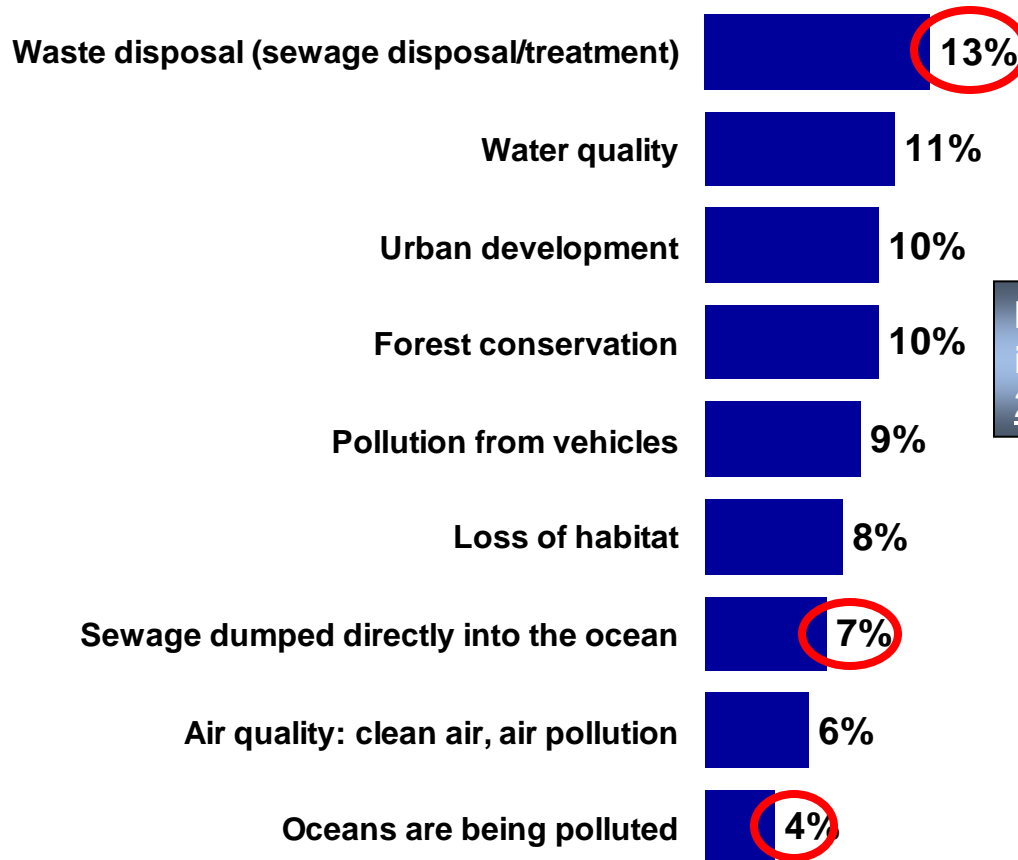
In your view, as a resident of Southern Vancouver Island, what is the most important issue facing your community, that is the one issue you feel should receive the greatest attention from you local leaders?





Liquid waste management is the most important environmental issue in the CRD

In your view, what is the most important environmental issue facing your community today? Anything else?



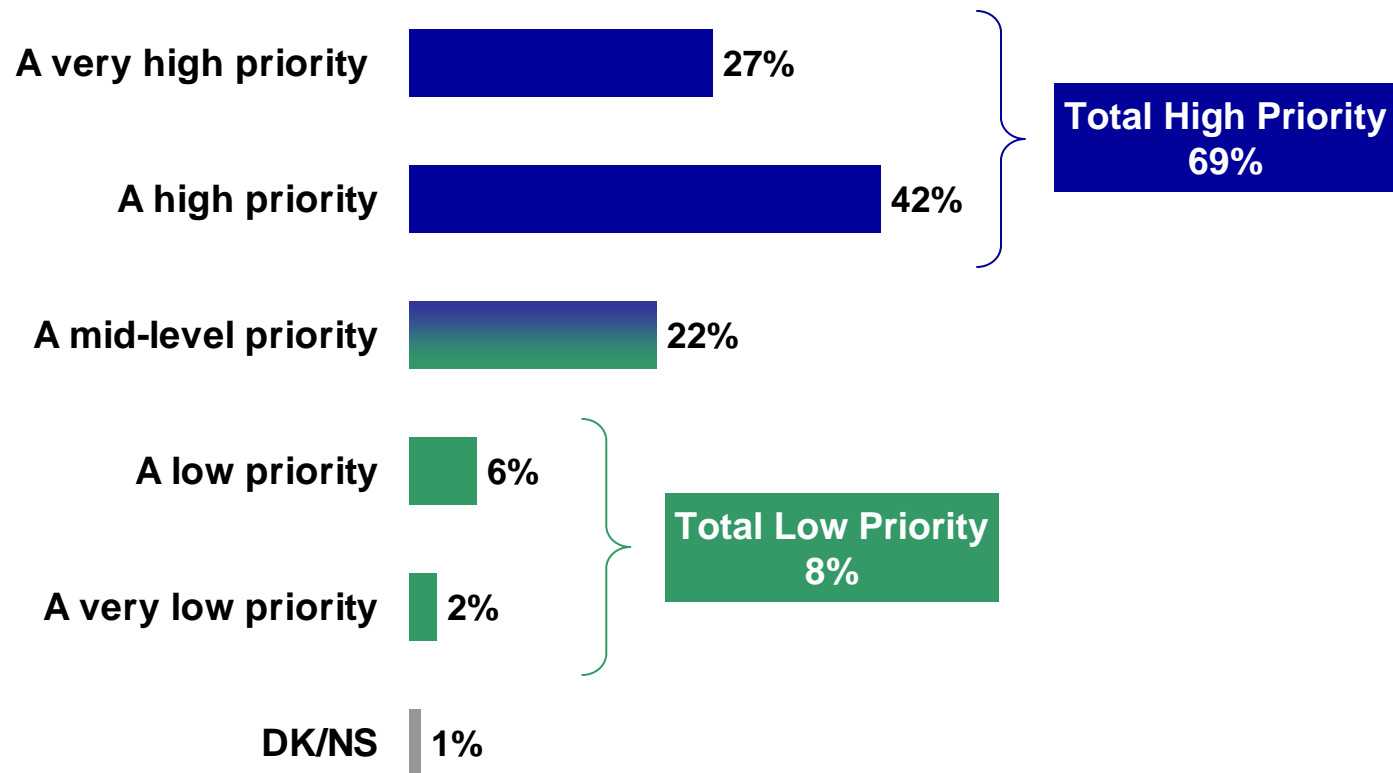
In all, liquid waste management is an environmental concern for 24% of CRD residents!

Base: All respondents (n=1515)



Seven-in-ten say treating sewage is a high priority

There has been a lot of discussion about the level of importance that the Capital Regional District should place on treating sewage. Thinking about all the issues currently facing CRD these days, do you think that treating sewage should be... for the CRD?

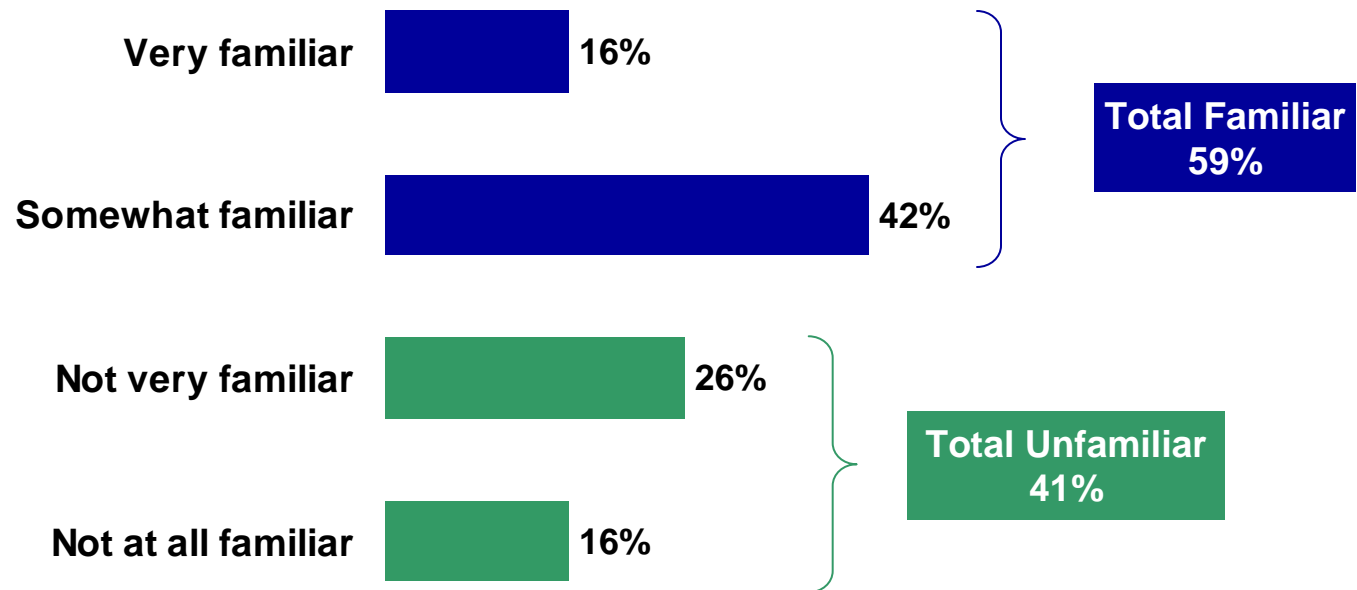


Base: All respondents (n=1515)



Familiarity with the way liquid waste is managed in the CRD is mixed

How familiar are you with the way that liquid waste is managed in your municipality?

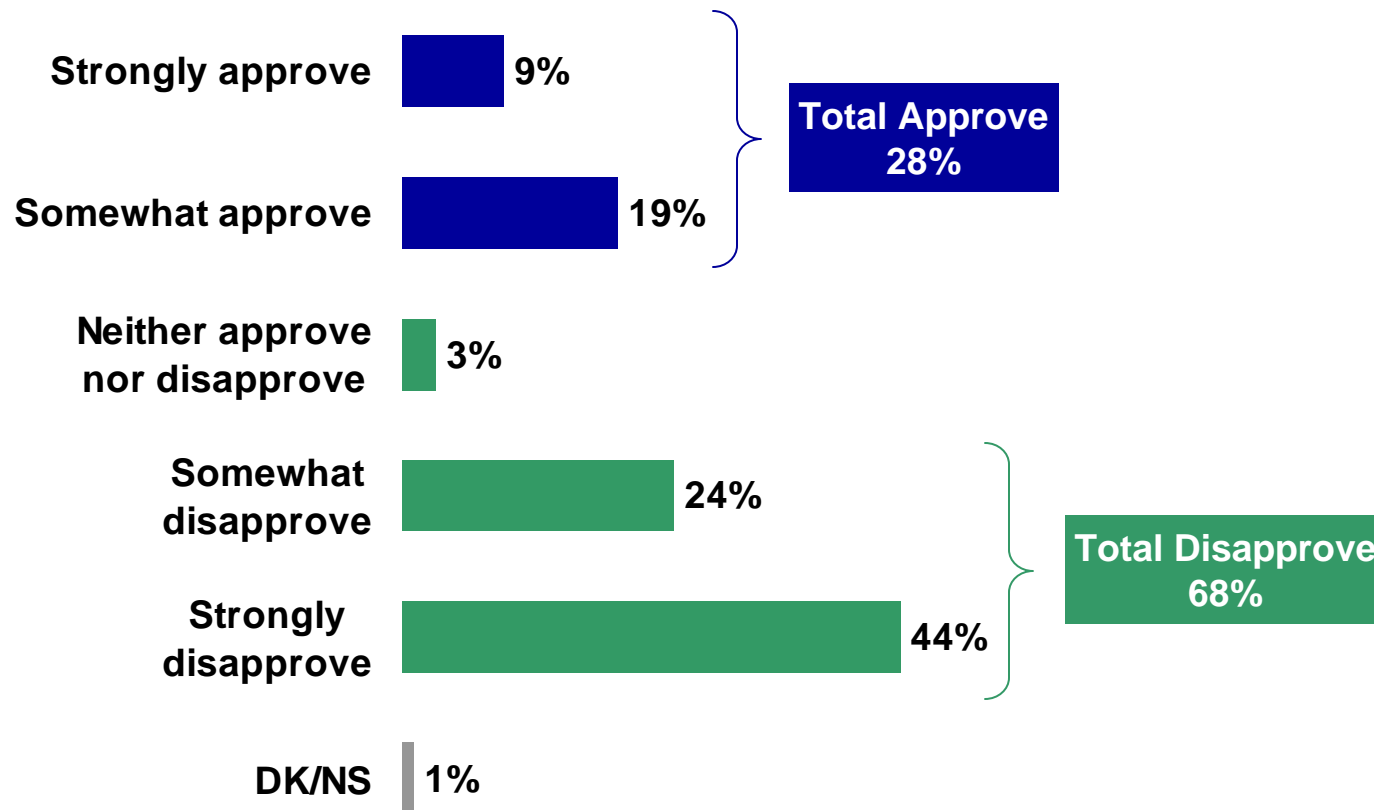


Base: All respondents (n=1515)



Most residents disapprove of the way liquid waste is currently managed in the CRD

Let me tell you a little about how liquid waste is managed in the Capital Region's urban core. First, the liquid waste is passed through screens to remove solid objects larger than a thumbtack. These solids are then sent to a landfill. The remaining liquid waste is pumped into the Strait of Juan de Fuca through two underwater outfalls (pipes) located more than a kilometre offshore at Macaulay Point and Clover Point and jetted from diffuser ports to encourage mixing with seawater. Overall, do you approve or disapprove?

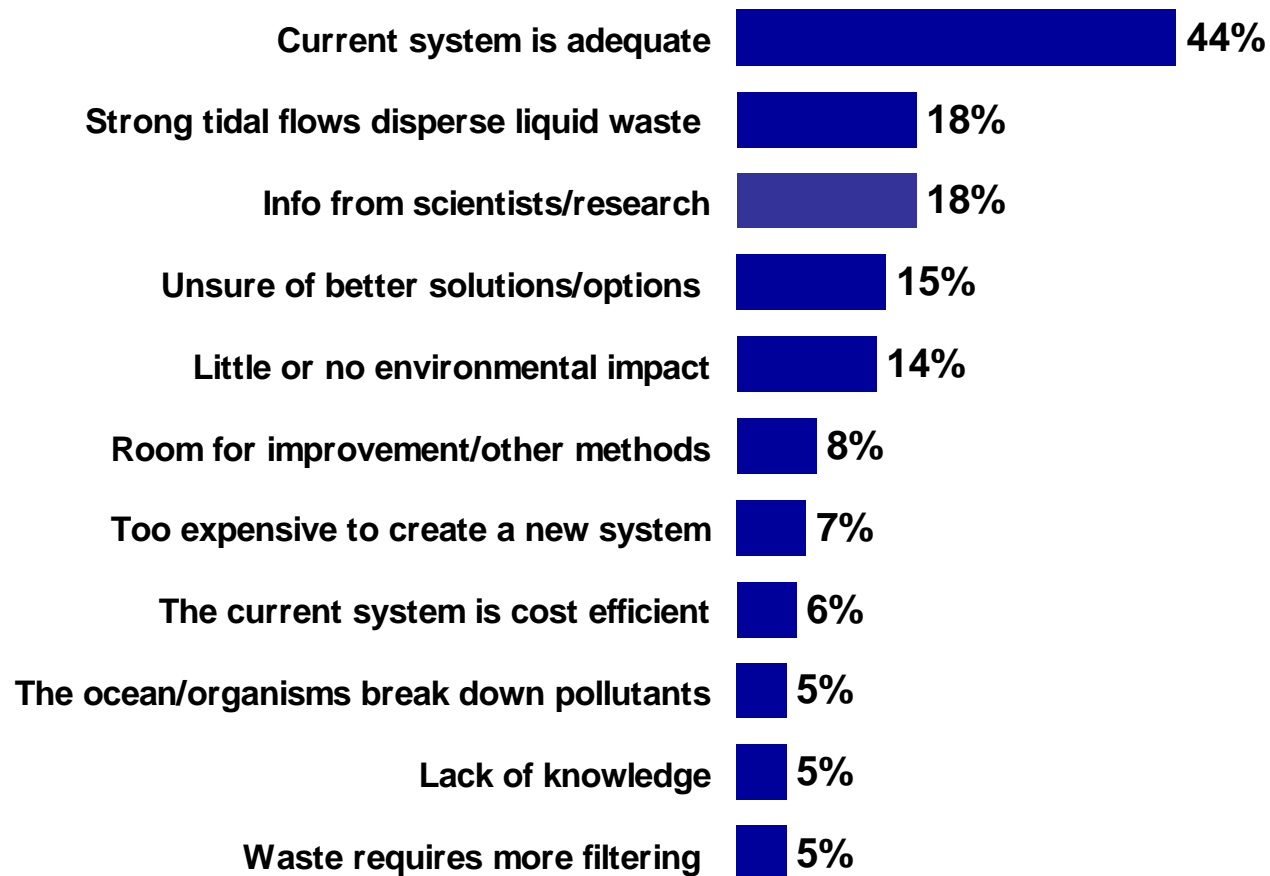


Base: All respondents (n=1515)



Those who approve cite a multitude of “rational” reasons

And why do you say that you approve of the current system for dealing with liquid waste? Any other reasons?

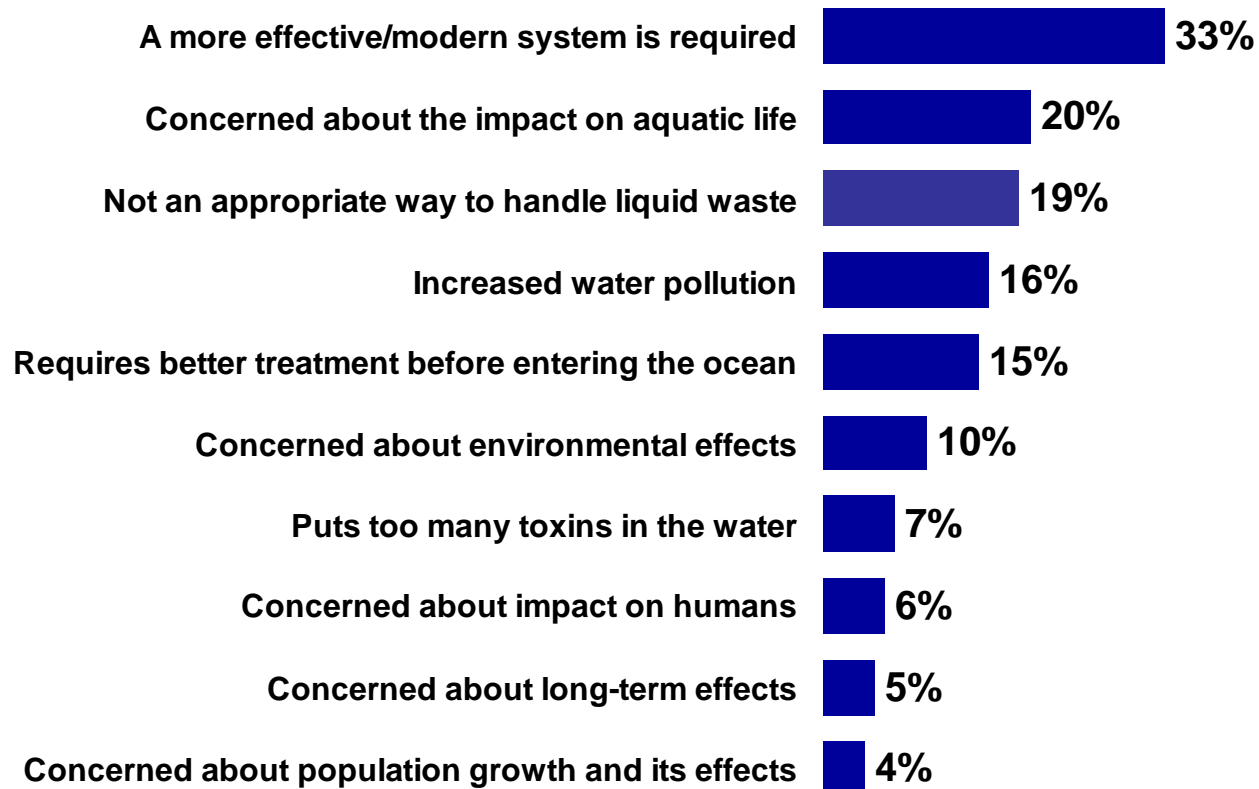


Base: Approve of the current system for dealing with liquid waste (n=443)



Those who disapprove cite a few mostly “emotional” reasons

And why do you say that you disapprove of the current system for dealing with liquid waste? Any other reasons?

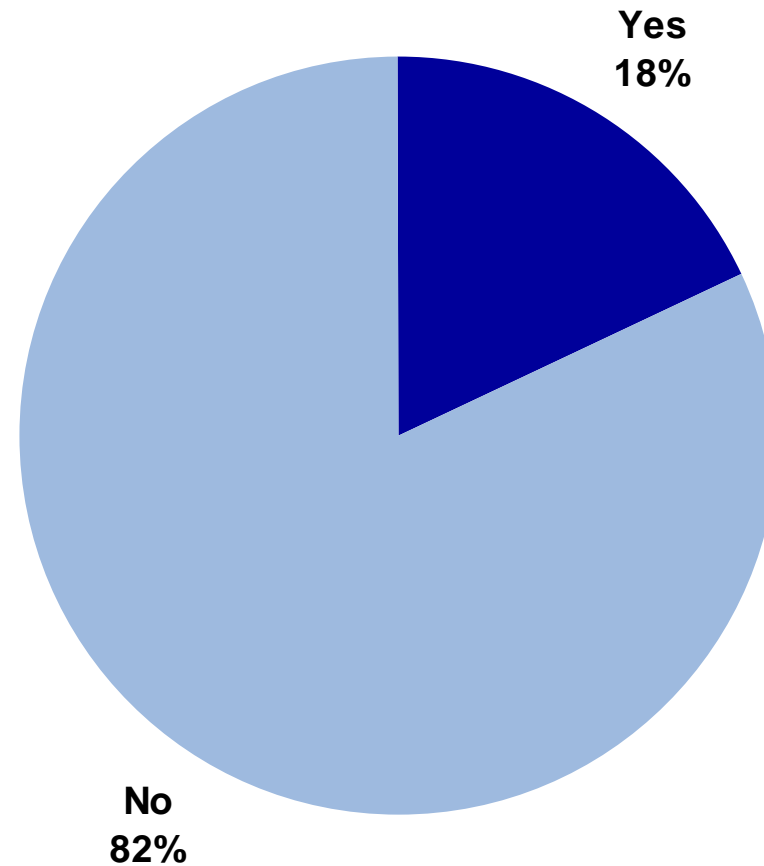


Base: Disapprove of the current system for dealing with liquid waste (n=1007)



Few residents are aware of the CRD's Liquid Waste Management Plan (LWMP)

Have you read, seen or heard anything about the Capital Region's urban core Liquid Waste Management Plan?

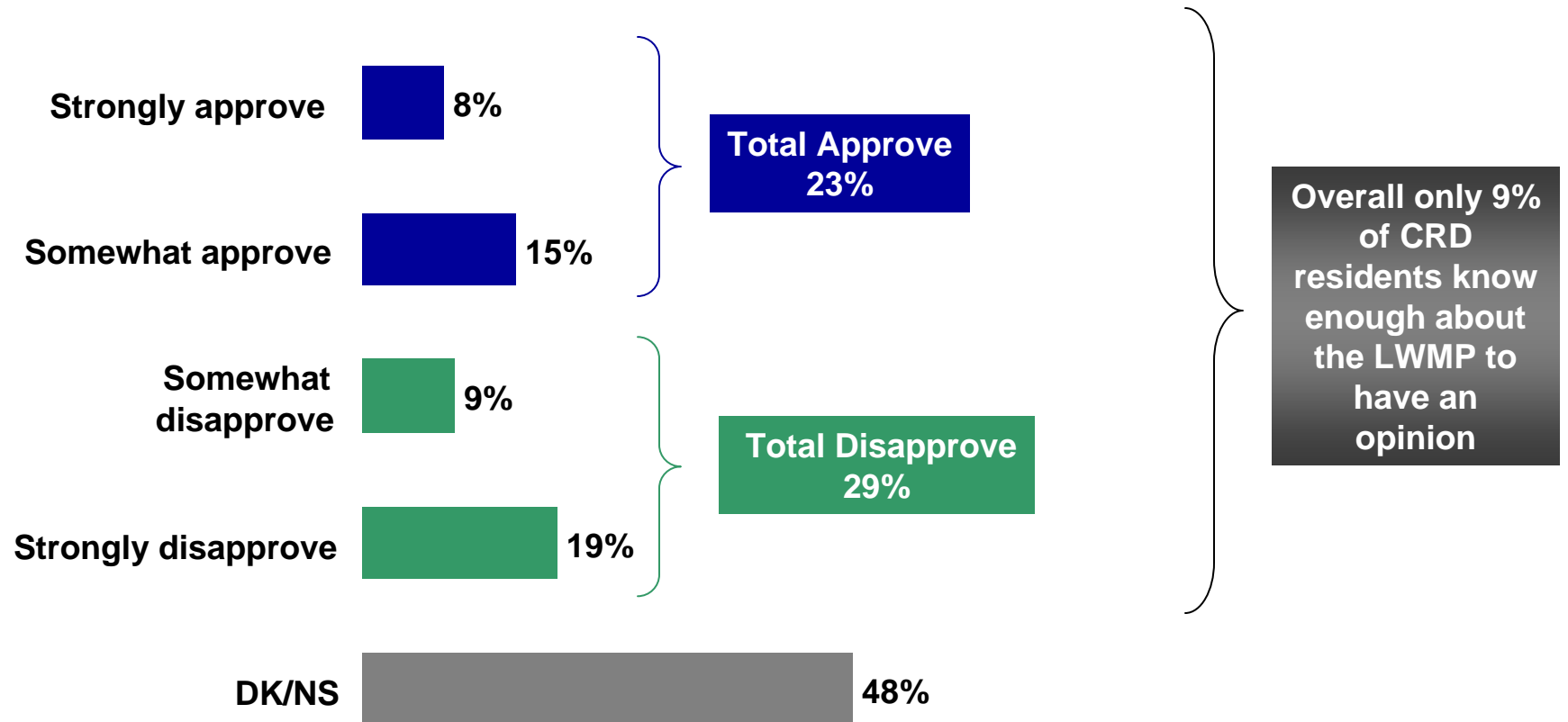


Base: All respondents (n=1515)



Even fewer actually know enough about the LWMP to have an opinion

And based on what you've read, seen, or heard, do you generally approve or disapprove of the Liquid Waste Management Plan or do you not know enough to say? Is that strongly or somewhat?



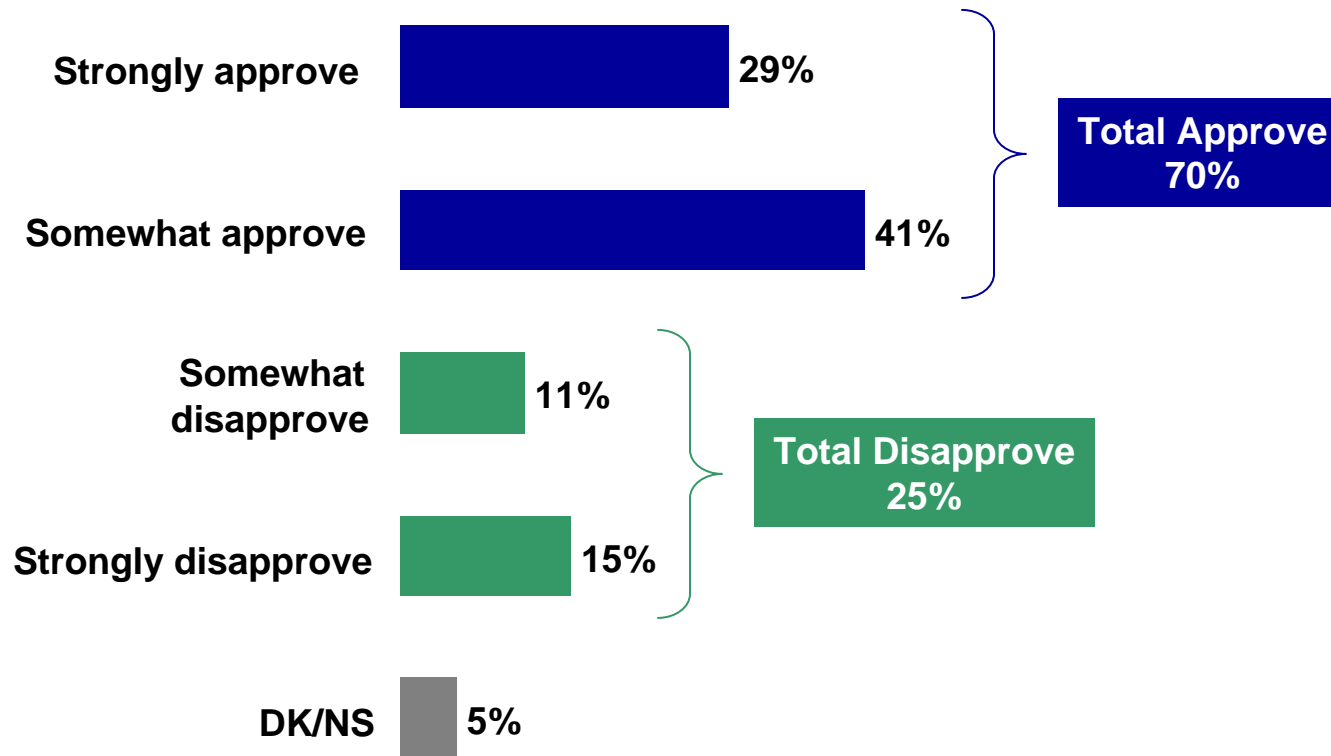
Base: Aware of the Capital Region's urban core Liquid Waste Management Plan (n=286)



Once informed about its specifics, seven-in-ten support the LWMP

In March 2003 the province approved of a liquid waste management plan for the Capital Region's urban core. In this plan the core area will continue to dispose of its screened liquid waste into the Strait of Juan de Fuca as we mentioned earlier. At the same time, it will expand its programs to make its sewage less harmful by reducing the chemicals going into the sewer system. It will also increase its monitoring of the ocean around the outflows, and if the negative environmental impact exceeds acceptable limits, the urban core will begin to treat its sewage within three years.

*Would you say you approve or disapprove of the Capital Region urban core's liquid waste management plan?
Is that strongly or somewhat?*

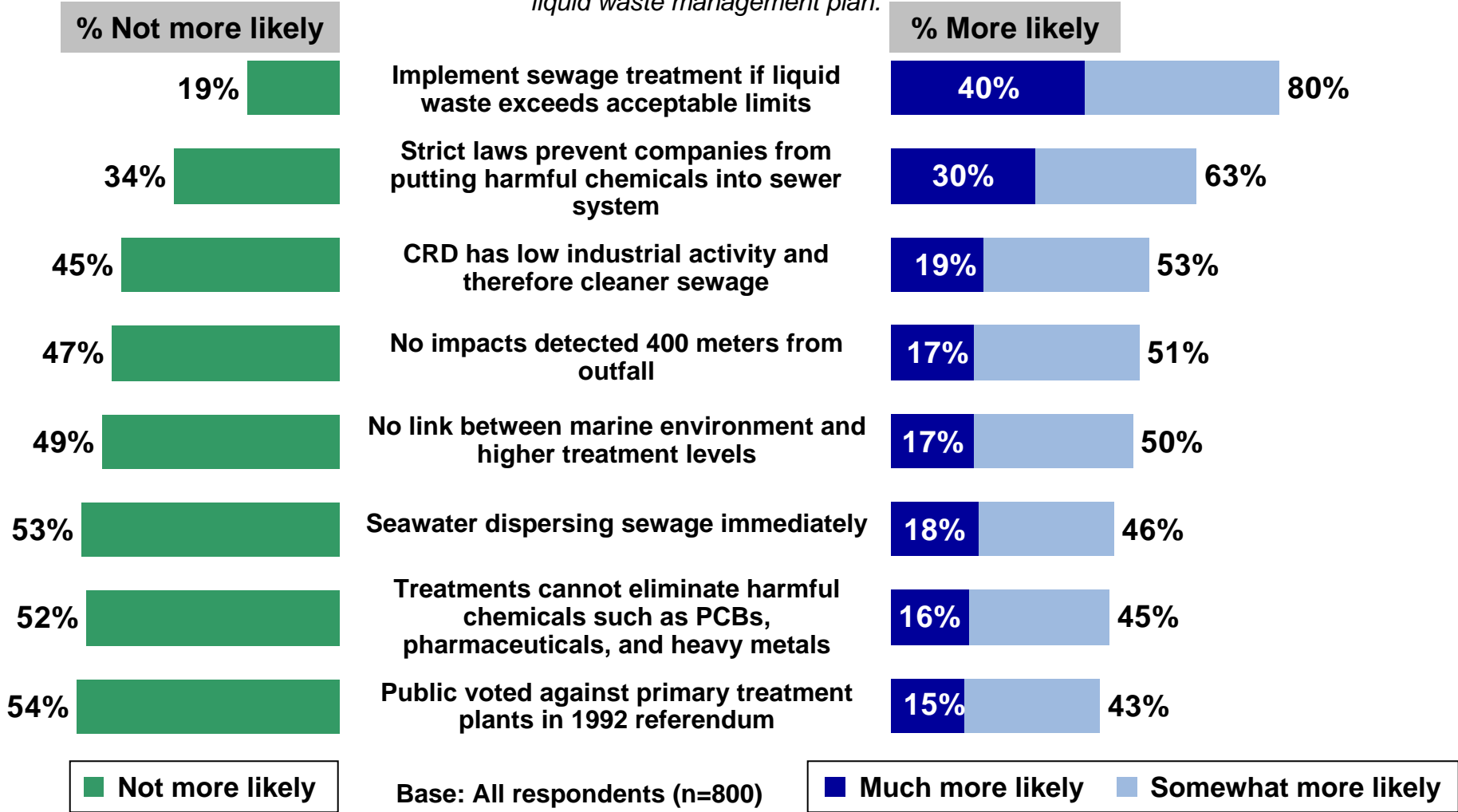


Base: All respondents (n=1515)



Messages indicating that the CRD is taking action are most effective

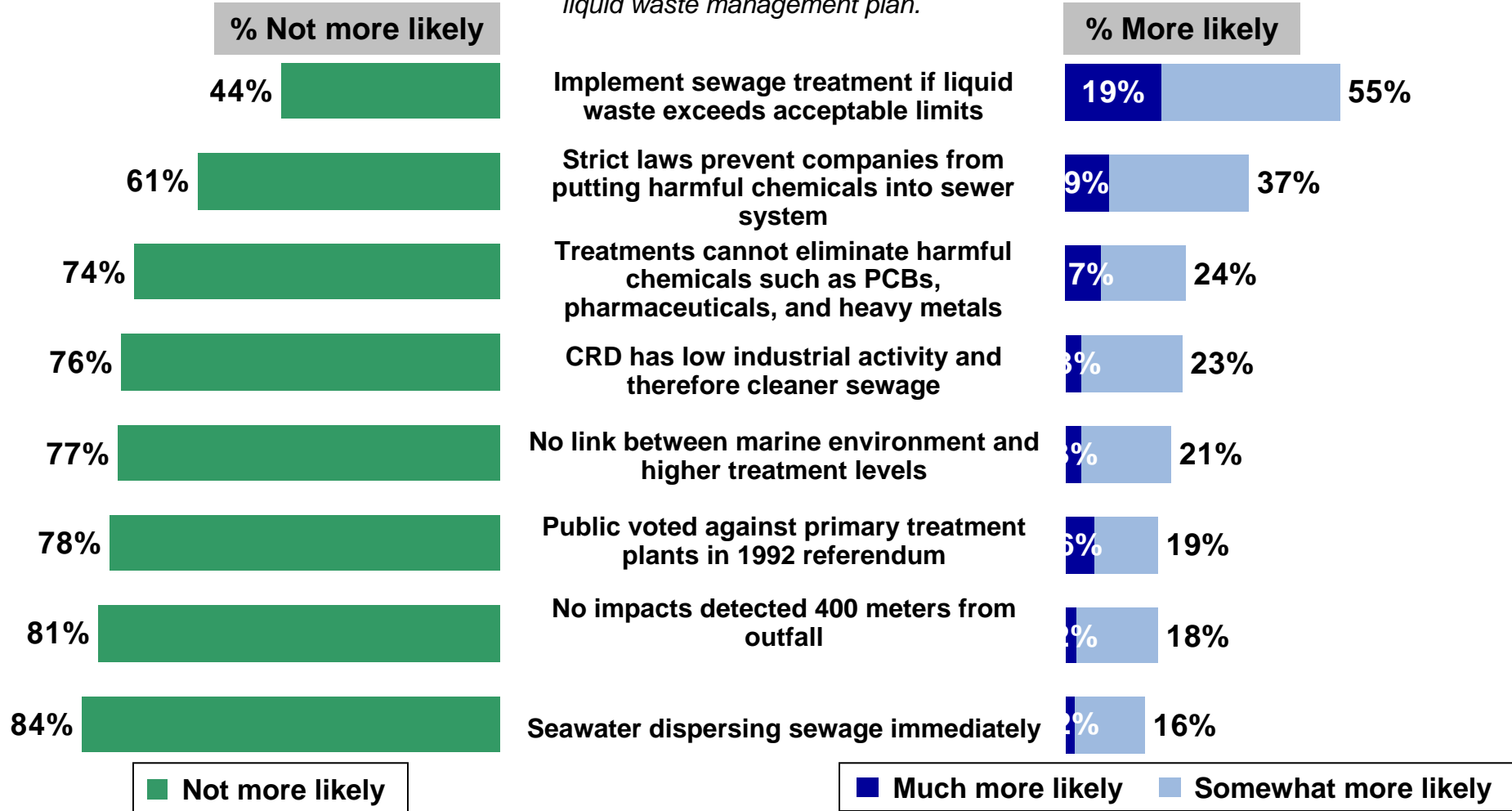
I am going to read you some more information about the current system for dealing with liquid waste in the CRD. Please tell me if knowing this would make you much more likely, somewhat more likely or not more likely to approve of the urban core's liquid waste management plan.





On average, the CRD's messages convince 26% of those who disapprove of the LWMP

I am going to read you some more information about the current system for dealing with liquid waste in the CRD. Please tell me if knowing this would make you much more likely, somewhat more likely or not more likely to approve of the urban core's liquid waste management plan.

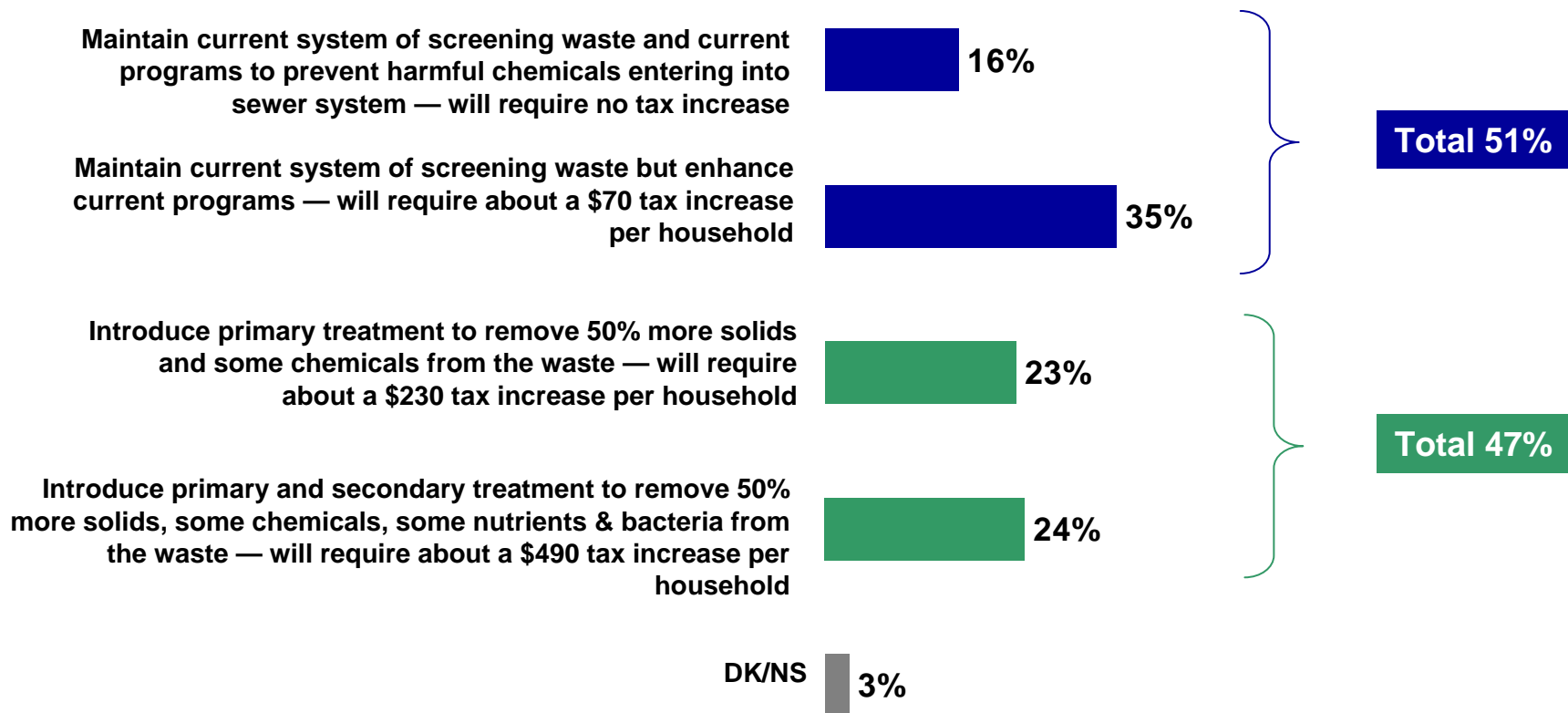


Base: Those who Disapprove of the LWM Plan After Hearing the Description (n=369)



A plurality want enhanced source control programs - large minority want treatment

There are a number of options the Capital Region urban core has to deal with its liquid waste. Each one has its own costs and benefits. Please tell me which of the following options you would most like the Capital Region urban core to pursue.....

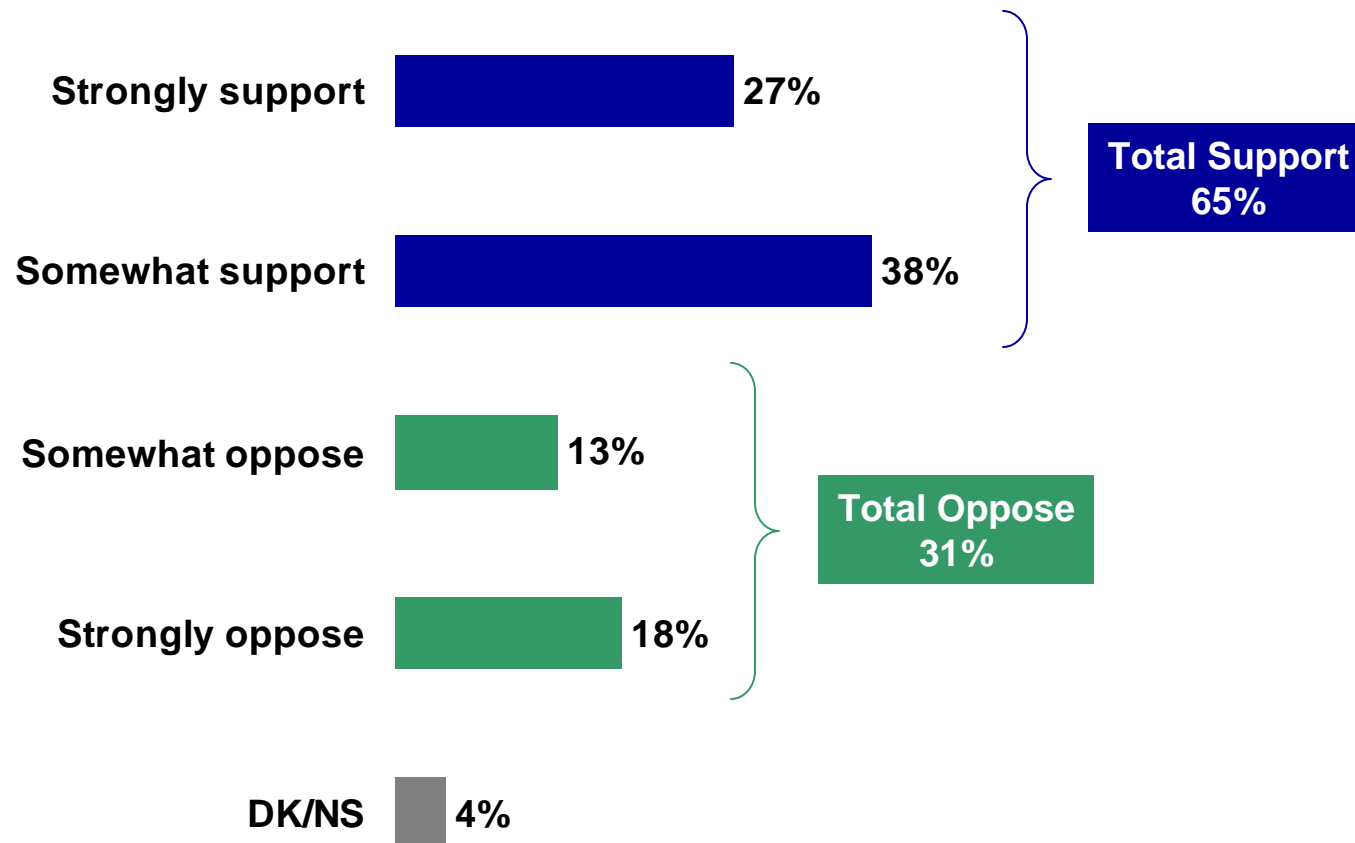


Base: All respondents (n=1515)



Two-thirds support a treatment facility in their community - consistent across region

If sewage treatment is needed, a 10-hectare site will be purchased to treat and compost the solids removed in the sewage treatment process. Would you support or oppose having this solids treatment facility located in your community?



Base: All respondents (n=1515)



Residents on board with removing harmful chemicals at source - but 3 years is too long

Many people have commented about the Capital Region's urban core Liquid Waste Management Plan and I'd like you to tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with each of the following statements.

% Disagree

12%



5

Money is better spent on preventing harmful chemicals from getting into the sewer system than trying to take them out afterwards

% Agree

60%



87%

22%



7

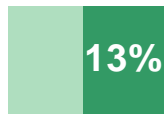
Three years is too long to wait for a treatment plant if monitoring identifies that environmental impacts exceed acceptable limits

49%



77%

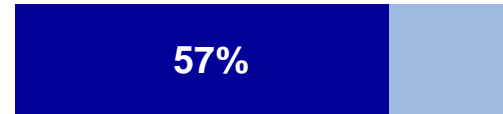
24%



13%

Regardless of the scientific evidence, its simply unacceptable to be dumping untreated sewage into the ocean

57%



75%

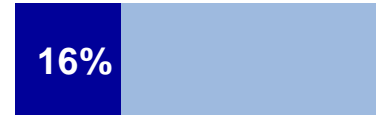
43%



21%

I trust the Capital Region District to do what's right when it comes to liquid waste management

16%



57%

■ Somewhat disagree ■ Strongly disagree

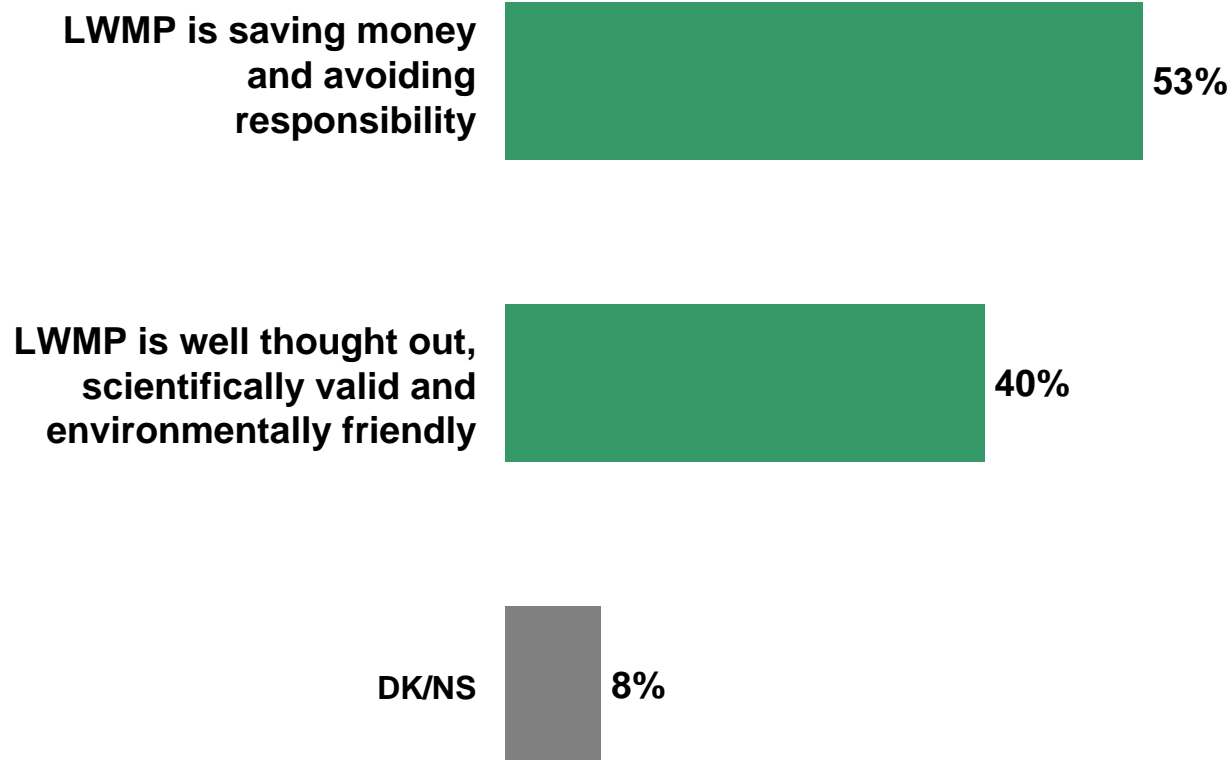
■ Strongly agree ■ Somewhat agree

Base: All respondents (n=1515)



Slim majority are sceptical of the CRD's motives - large minority say LWMP is valid

Some people say the Capital Region's urban core liquid waste management plan is a well thought out, scientifically valid and environmentally friendly way of dealing with liquid waste. Other people say the Capital Region's urban core liquid waste management plan is simply a way for the CRD to save money and avoid taking full responsibility for dealing with its liquid waste. Which of these opinions is closest to your own?

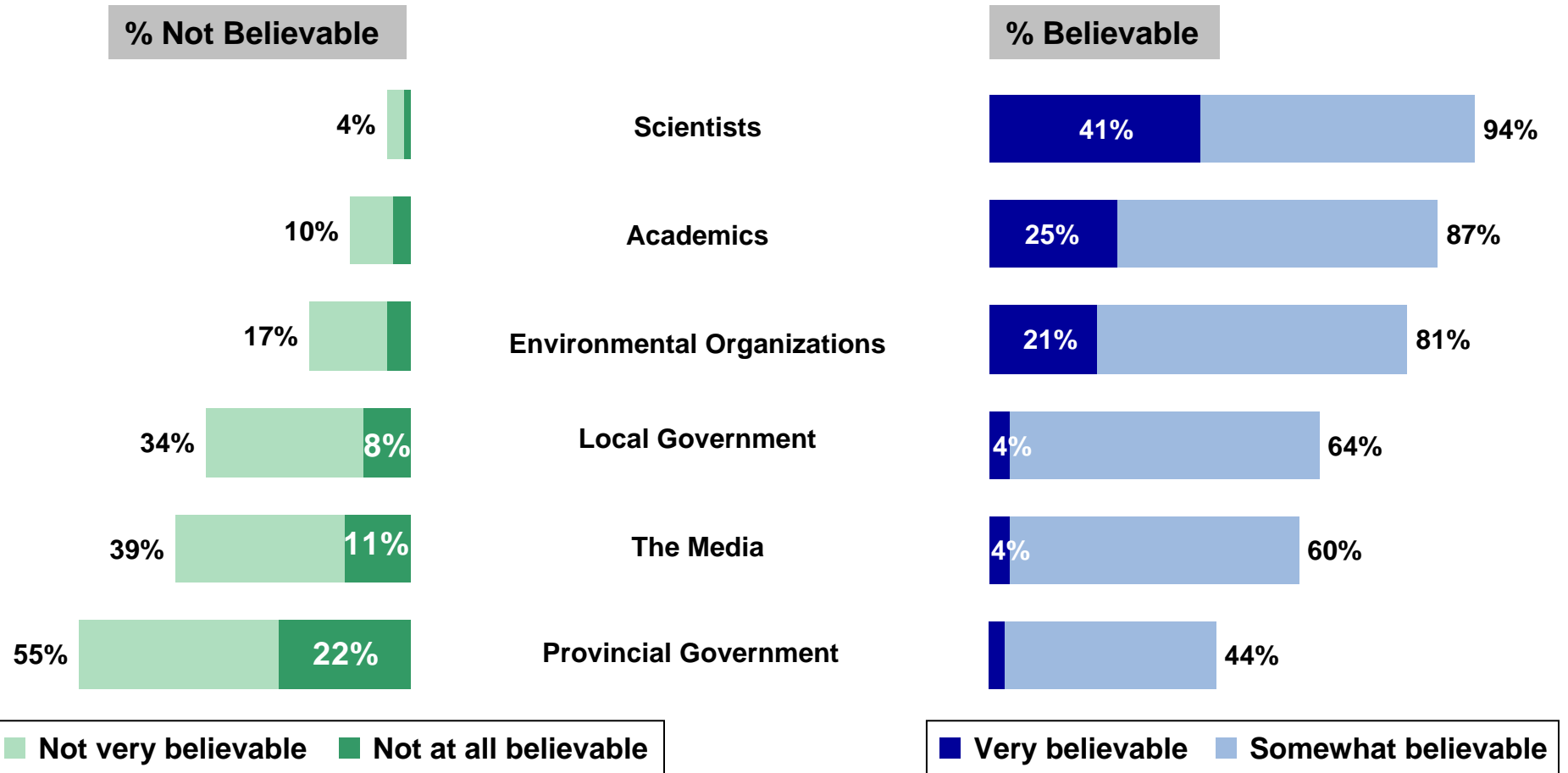


Base: All Respondents (n=1515)



Scientists and academics are most believable about liquid waste management issues

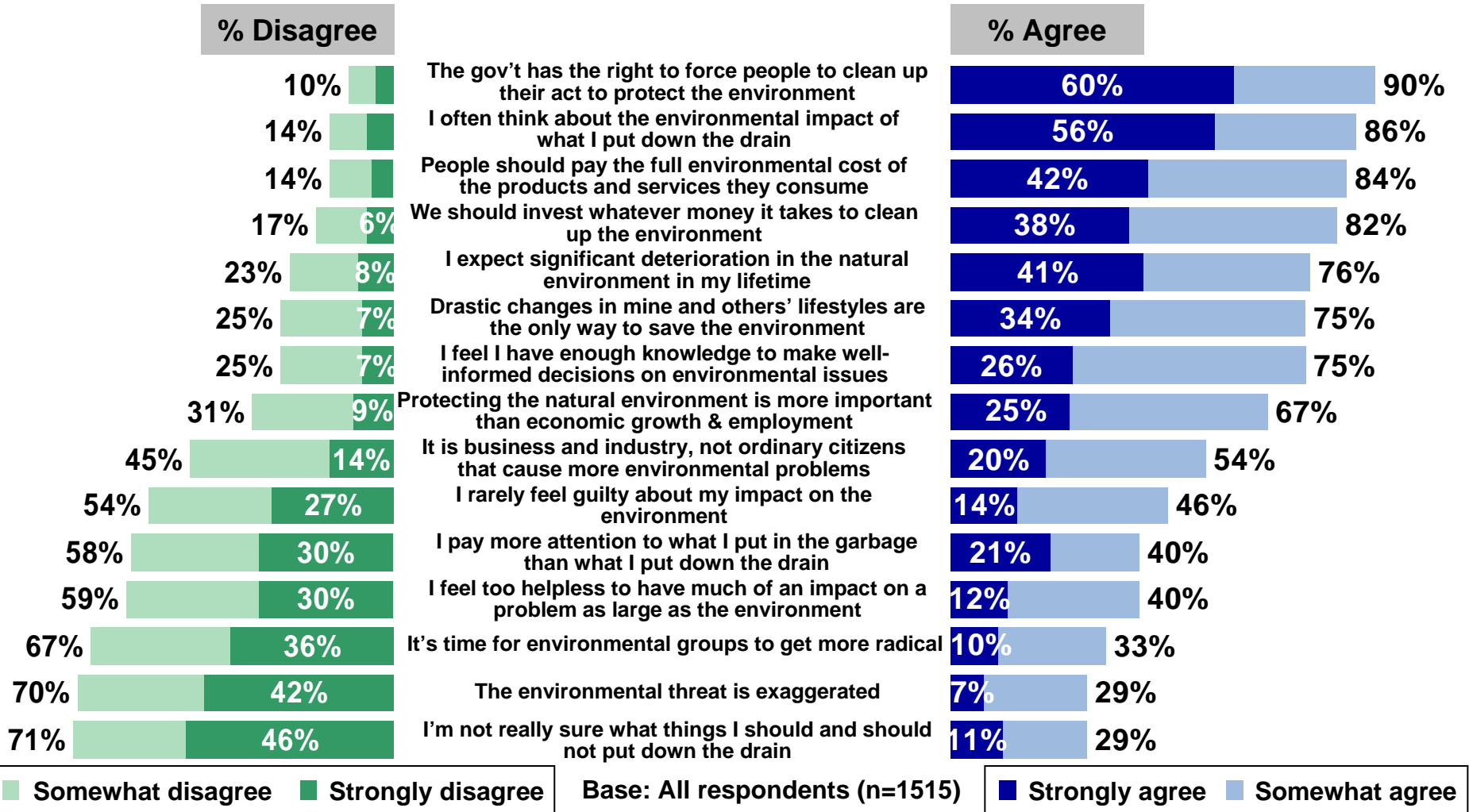
How believable would you find each of the following when it comes to speaking about liquid waste management issues in the CRD? Would you say they are very believable, somewhat believable, not very believable or not at all believable?





CRD residents are committed to the environment and think they are well informed

Now, I'm going to read you some general statements about the environment and I'd like you to tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with each one.





Ipsos  **Reid**

Attitudinal Segmentation



Why is segmentation important?

- ◆ When it comes to the environment, the general population is not a homogenous group. However, many people share similar attitudes about what we should or should not do to protect the environment and the importance of addressing certain environmental problems such as liquid waste.
- ◆ Based on their responses to a set of attitudinal and behavioural questions we can use a specialized statistical technique to group these like-minded people into segments. Once we've found attitudinally similar segments we then look at behavioural and demographic differences so that we can profile them and "see" them in everyday life.
- ◆ From a communications perspective this is very valuable because instead of blanketing the general population with one generic message it is possible to identify those segments that will be most receptive to your message and target them. Using the insights from the research, it is also possible to design messages tailored to individual segments.
- ◆ Thus, communication efforts can be far more effective because the CRD is able to direct resources where they provide the greatest return.



Segment Inputs – Attitudes Towards LWMP

- ◆ Regardless of the scientific evidence, it's simply unacceptable to be dumping untreated sewage into the ocean.
- ◆ Three years is too long to wait for a treatment plant if monitoring identifies that environmental impacts exceed acceptable limits.
- ◆ Money is better spent on preventing harmful chemicals from getting into the sewer system than trying to get them out afterwards.
- ◆ I trust the Capital Region District to do what's right when it comes to liquid waste management.

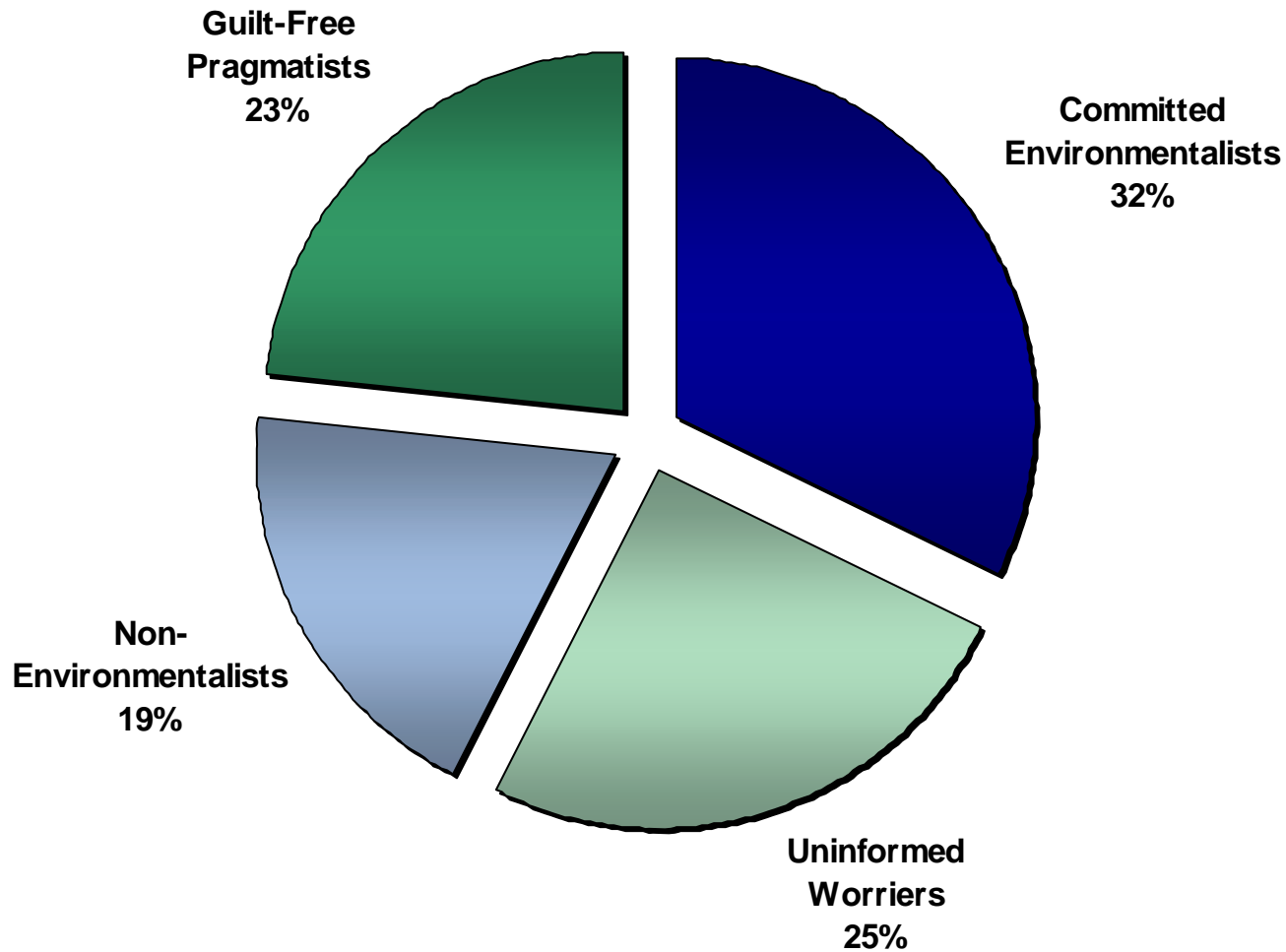


Segment Inputs – Attitudes Towards the Environment

- ◆ I expect significant deterioration in the natural environment in my lifetime.
- ◆ Drastic changes in mine and others' lifestyles are the only way to save the environment.
- ◆ People should pay the full environmental cost of the products and services they consume.
- ◆ I feel I have enough knowledge to make well-informed decisions on environmental issues.
- ◆ It's time for environmental groups to get more radical.
- ◆ For me, protecting the natural environment is more important than creating economic growth and employment.
- ◆ I feel personally too helpless to have much of an impact on a problem as large as the environment.
- ◆ I often think about the environmental impact of what I put down the drain.
- ◆ I'm not really sure what things I should and should not put down the drain.
- ◆ I pay more attention to what I put in the garbage than what I put down the drain.
- ◆ It is business and industry, not ordinary citizens that cause most environmental problems.
- ◆ I often feel guilty about my impact on the environment.
- ◆ The environmental threat is exaggerated.
- ◆ We should invest whatever money it takes to clean up the environment.
- ◆ The government has the right to force people to clean up their act to protect the environment.

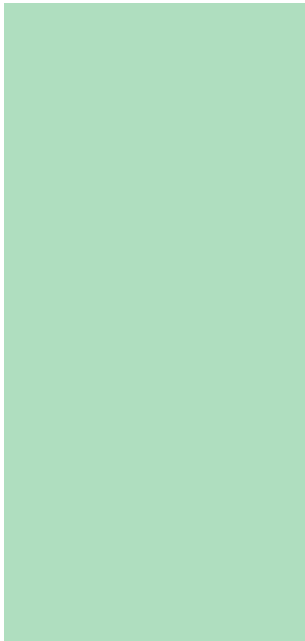


The best solution was a four segment solution...





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Segment 1
“Committed Environmentalists”



Segment 1 – Committed Environmentalists

- ◆ Comprise 32% of the population
- ◆ High level of environmental awareness:
 - More likely to be familiar with how liquid waste is treated in their municipality
 - More likely to be aware of LWMP
- ◆ High level of environmental commitment:
 - Most likely to mention the environment as the top of mind concern facing the CRD, also most likely to mention issues related to liquid waste management when asked specifically about environmental issues
 - Most likely to say sewage treatment should be a very high or high priority
 - Most likely to disapprove of current liquid waste management system
 - Also most likely to disapprove of LWMP (both pre- and post-description)
 - Most likely to support paying \$490 tax increase in order to obtain primary and secondary treatment
 - Most likely to support having a sewage treatment facility located in their community



Segment 1 – Committed Environmentalists

- ◆ Attitudes towards LWMP:
 - Consider it unacceptable to be dumping untreated sewage into the ocean
 - Most likely to believe three years is too long to wait for treatment
 - Believe money is better spent on prevention than treatment
 - Generally do not trust the CRD to manage liquid waste
 - Three-quarters believe LWMP is a means of saving money and avoiding responsibility
 - Will believe either environmental organizations or scientists when it comes to communications about liquid waste management



Segment 1 – Committed Environmentalists

- ◆ Attitudes towards the environment:
 - Most likely to expect significant environmental deterioration in their lifetime
 - Believe drastic changes in lifestyle are the only way to save the environment
 - Most likely to believe people should pay the full environmental costs of products/services they consume
 - Feel well-informed about environmental issues
 - Most likely to believe environmental groups should get more radical
 - Most likely to believe environmental protection is more important than creating economic growth and employment
 - Generally do not feel powerless when it comes to helping the environment
 - Most likely to think about the environmental impact of what they put down the drain
 - Aware as to what they should/should not put down drain
 - Pay attention to both their solid and liquid waste
 - Half believe business/industry are most responsible for environmental issues
 - Tendency to feel guilty about their impact on the environment
 - Do not feel the environmental threat is exaggerated
 - Most willing to invest whatever money it takes to clean up the environment
 - Most likely to believe the government has the right to force people to clean up their act to protect the environment



Segment 1 – Committed Environmentalists

- ◆ How to effectively communicate with this segment:
 - Need to demonstrate the CRD is a leader in liquid waste management
 - Most effective messages are those that show the CRD is actively taking steps to limit the environmental impact of liquid waste:
 - Independent scientists will review impact and treatment will be implemented if it exceeds acceptable limits
 - Messages that simply show CRD is doing no harm are largely ineffective!
 - Although the CRD will never convince all of this segment to support its LWMP, carefully crafted messages might help gain the support of some (10% or less)
 - Segment 1 needs to be carefully managed → the CRD does not want these citizens rallying against its LWMP!

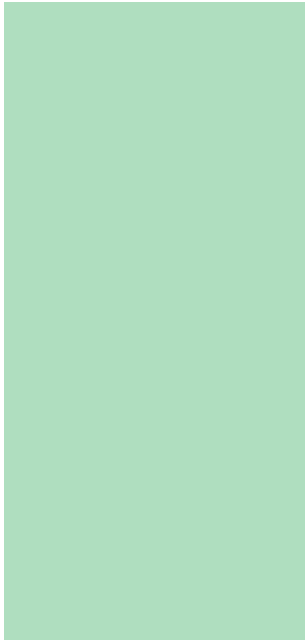


Segment 1 – Committed Environmentalists

- ◆ Demographic profile:
 - More likely to be female
 - Middle-aged
 - Shorter residence in Southern Vancouver Island
 - Slightly more likely to have children living at home
 - More educated
 - Tendency towards lower-income



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Segment 2
“Uninformed Worriers”



Segment 2 – Uninformed Worriers

- ◆ Comprise 25% of the population
- ◆ Low level of environmental awareness:
 - Less likely to be familiar with how liquid waste is treated in their municipality
 - Less likely to be aware of LWMP
 - Furthermore, those aware of LWMP tend to not know enough about it to say whether they approve or disapprove (pre-description)
- ◆ Environmental commitment is driven by a high level of concern for the environment:
 - More likely to mention the environment as the top of mind concern in the CRD
 - Tendency to believe sewage treatment should be a very high or high priority
 - Tendency to disapprove of current liquid waste management system
 - Tendency to approve of LWMP after being read description; however, level of approval still is lower than what is reported by Segments 3 and 4
 - Although more willing than Segments 3 and 4 to pay a \$490 tax increase in order to obtain primary and secondary treatment, the majority of Segment 2 supports a \$70 tax increase to improve current systems/programs of treatment
 - Moderate level of support for having a sewage treatment facility located in their community



Segment 2 – Uninformed Worriers

- ◆ Attitudes towards LWMP:
 - Consider it unacceptable to be dumping untreated sewage into the ocean
 - Believe three years is too long to wait for treatment
 - Believe money is better spent on prevention than treatment
 - Only somewhat trust the CRD to manage liquid waste
 - Generally divided on motives of LWMP, although slight majority believes LWMP is a means of saving money and avoiding responsibility
 - Will believe scientists, environmental organizations or academics when it comes to communications about liquid waste management



Segment 2 – Uninformed Worriers

- ◆ Attitudes towards the environment:
 - Expect significant environmental deterioration in their lifetime
 - Believe drastic changes in lifestyle are the only way to save the environment
 - Believe people should pay the full environmental costs of products/services they consume
 - Less likely to feel well-informed about environmental issues
 - More likely to believe environmental groups should get more radical
 - Tendency to believe environmental protection is more important than creating economic growth and employment
 - More likely to feel powerless when it comes to helping the environment
 - Generally consider the environmental impact of what they put down the drain. But, most likely to be unsure as to what they should/should not put down the drain
 - Most likely to pay more attention to their solid waste than liquid waste
 - Half believe business/industry are most responsible for environmental issues
 - Most likely to feel guilty about their impact on the environment
 - Do not feel the environmental threat is exaggerated
 - Willing to invest whatever money it takes to clean up the environment
 - Believe government has the right to force people to clean up their act to protect the environment



Segment 2 – Uninformed Worriers

- ◆ How to effectively communicate with this segment:
 - Receptive to messages that will alleviate their concern/worry for the environment
 - Again, most effective messages are those that show the CRD is actively taking steps to limit the environmental impact of liquid waste
 - Independent scientists will review impact and treatment will be implemented if it exceeds acceptable limits
 - CRD has strictest laws in NA
 - Messages that simply show CRD is doing no harm are less effective than above, although will still help convince approximately 50% of this segment
 - Concern for the CRD: Segment 2 will be easily swayed by negative emotional appeals, and is thus susceptible to arguments of environmental groups or Segment 1



Segment 2 – Uninformed Worriers

- ◆ Demographic profile
 - More likely to be female
 - Younger
 - Shorter residence in Southern Vancouver Island
 - Slightly more likely to have children living at home
 - Less educated
 - Low to mid-income



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Segment 3
“Non-Environmentalists”



Segment 3 – Non-Environmentalists

- ◆ Comprise 19% of the population
- ◆ High level of environmental awareness:
 - More likely to be familiar with how liquid waste is treated in their municipality
 - More likely to be aware of LWMP
- ◆ Low level of environmental commitment:
 - Less likely to mention the environment as the top of mind concern facing the CRD
 - Least likely to say sewage treatment should be a very high or high priority
 - Most likely to approve of current liquid waste management system
 - Also most likely to approve of LWMP (both pre- and post-description)
 - Most likely to support treatment programs/systems that result in no tax increase or a minimal increase of \$70; virtually all unwilling to pay \$490 tax increase in order to obtain primary and secondary treatment
 - Least likely to support having a sewage treatment facility located in their community



Segment 3 – Non-Environmentalists

- ◆ Attitudes towards LWMP:
 - Believe it is acceptable to be dumping untreated sewage into the ocean
 - Tendency to believe three years is not too long to wait for treatment
 - More likely to believe money is better spent on prevention than treatment
 - Most trusting of the CRD's ability to manage liquid waste
 - Most believe LWMP is well thought out, scientifically valid, and environmentally friendly
 - Will believe scientists, academics, or local government when it comes to communications about liquid waste management



Segment 3 – Non-Environmentalists

◆ Attitudes towards the environment:

- Least likely to expect significant environmental deterioration in their lifetime and least likely to believe drastic changes in lifestyle are the only way to save the environment
- Believe people should pay the full environmental costs of products/services they consume
- Feel informed about environmental issues
- Least likely to believe environmental groups should get more radical
- Less likely to believe environmental protection is more important than creating economic growth and employment
- Tendency to not feel powerless when it comes to helping the environment
- Aware of the environmental impact of what they put down the drain and aware as to what they should/should not put down drain
- Generally pay equal attention to their solid waste as liquid waste
- Half believe business/industry most responsible for environmental issues
- Generally do not feel guilty about their impact on the environment
- Most likely to feel the environmental threat is exaggerated
- Least willing to invest whatever money it takes to clean up the environment
- Believe government has the right to force people to clean up their act to protect the environment



Segment 3 – Non-Environmentalists

- ◆ How to effectively communicate with this segment:
 - This segment just needs to know the CRD is taking steps to manage its liquid waste
 - Most effective messages are:
 - Independent scientists will review impact and treatment will be implemented if it exceeds acceptable limits
 - Seawater disperses sewage almost immediately and prevents it from reaching the surface
 - CRD has strictest laws in NA
 - CRD's urban core has low level of industrial activity
 - No significant messaging is really required to gain the support of this segment
→ Segment 3 is already on-board
 - Despite this segment's support for LWMP, it is unlikely other residents will perceive them as a credible source of information → Segment 3 should not be used as "poster boys" to promote LWMP!



Segment 3 – Non-Environmentalists

- ◆ Demographic profile:
 - Male
 - Older
 - Longer residence in Southern Vancouver Island
 - *Slightly* more likely to have children living at home
 - More educated
 - Higher-income



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Segment 4
“Guilt-Free Pragmatists”



Segment 4 – Guilt-Free Pragmatists

- ◆ Comprise 23% of the population
- ◆ Moderate level of environmental awareness:
 - Less likely to be familiar with how liquid waste is treated in their municipality
 - Less likely to be aware of LWMP
 - Furthermore, those aware of LWMP tend to not know enough about it to say whether they approve or disapprove (pre-description)
- ◆ Moderate level of environmental commitment balanced by cost-conscious behavior:
 - Less likely to mention the environment as the top of mind concern facing the CRD
 - Tendency to believe sewage treatment should be a very high or high priority
 - Tendency to disapprove of current liquid waste management system
 - Approve of LWMP after being read the description
 - Majority support \$70 tax increase in order to enhance current treatment services/programs; very little support for \$490 tax increase in order to obtain primary and secondary treatment
 - Moderate support for having a sewage treatment facility located in their community



Segment 4 – Guilt-Free Pragmatists

- ◆ Attitudes towards LWMP:
 - Believe it is unacceptable to be dumping untreated sewage into the ocean
 - Believe three years is too long to wait for treatment
 - Believe money is better spent on prevention than treatment
 - Tendency to trust the CRD to manage liquid waste
 - Generally divided on impressions of LWMP, although slight majority believes LWMP is a means of saving money and avoiding responsibility
 - Will believe scientists and academics when it comes to communications about liquid waste management



Segment 4 – Guilt-Free Pragmatists

- ◆ Attitudes towards the environment:
 - Tendency to expect significant environmental deterioration in their lifetime and tendency to believe drastic changes in lifestyle are the only way to save the environment
 - Tendency to believe people should pay the full environmental costs of products/services they consume
 - Moderately informed about environmental issues
 - Do not believe environmental groups should get more radical
 - Less likely to believe environmental protection is more important than creating economic growth and employment
 - Most likely to feel powerless when it comes to helping the environment
 - Tendency to think about the environmental impact of what they put down the drain and aware as to what they should/should not put down drain
 - Tendency to pay more attention to their solid waste than liquid waste
 - Most likely to believe business/industry most responsible for environmental issues
 - Generally do not feel guilty about their impact on the environment
 - Half feel the environmental threat is exaggerated
 - Moderately willing to invest whatever money it takes to clean up the environment
 - Believe government has the right to force people to clean up their act to protect the environment



Segment 4 – Guilt-Free Pragmatists

- ◆ How to effectively communicate with this segment:
 - Will be receptive to the CRD's messages
 - This segment just needs to be reassured the CRD is managing its liquid waste and no significant environmental or economic consequences will result from LWMP
 - Most effective messages are those that show the CRD is actively taking steps to limit the environmental impact of liquid waste:
 - Independent scientists will review impact and treatment will be implemented if it exceeds acceptable limits
 - CRD has strictest laws in NA
 - Messages that simply show CRD is doing no harm are less effective than above, although will still help convince approximately 50% to 60% of this segment
 - Segment 4 is less susceptible to counter arguments of Segment 1 or other environmentalists → environmentalists are perceived as too radical for Segment 4



Segment 4 – Guilt-Free Pragmatists

◆ Demographic profile

- Most representative of the general population
- Approximately equal gender split
- All ages
- Longer residence in Southern Vancouver Island
- Slightly less likely to have children living at home
- Tendency to be less educated, although all education levels are represented
- Mid-income



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Demographics



Demographics

	All Respondents (n=1515) %
Gender:	
Male	47
Female	53
Age Group:	
18–24	10
25–34	17
35–44	15
45–54	22
55–64	17
65+	17
Summary	
Mean	48 years



Demographics

	All Respondents (n=1515) %
Years Lived in Southern Vancouver Island Area	
0–9 years	27
10–19 years	22
20–29 years	19
30+ years	32
DK/NS	1
Summary	
Mean number of years	22
Standard deviation	17



Demographics

	All Respondents (n=1515) %
Children in Household	
Yes	26
No	74
Education	
Completed high school or less	24
Some post secondary or college diploma	38
Completed University degree or post-grad degree	38
Household Income	
Under \$20,000	11
\$20,000 to less than \$40,000	22
\$40,000 to less than \$60,000	20
\$60,000 to less than \$80,000	16
\$80,000 or more	21
DK/NS	10