

A wide-angle photograph of the Calgary skyline at dusk. The sky is a deep blue, and the city's lights are beginning to glow. Numerous skyscrapers are visible, including the Calgary Tower on the left. The buildings are illuminated with warm yellow and orange lights, contrasting with the cool blue of the twilight sky.

Calgary



Water Advisory Survey Report

Citizens' View Survey

June 2018



Key Findings



Drought is not very likely to happen according to respondents nor is it very concerning but it's on the radar of many.

- Not surprisingly, a majority of respondents (71%) think it's very likely that Calgary will face blizzards or snowstorms in the next five years and another 25% think it's somewhat likely.
- Windstorms are rated the next most likely to happen to our city, with 46% rating windstorms as very likely and 40% as somewhat likely.
- The occurrence of a drought is thought to be very likely by 28% of respondents and somewhat likely by 43%. More than one-quarter (29%) think it's not likely that Calgary will face a drought in the next five years.
- A flood disaster is believed to be very likely by one-quarter (25%) of respondents but slightly more than half (53%) think it's somewhat likely.
- Explosions or fires are anticipated to be the least likely of the natural disasters, with only 21% thinking this type of disaster is very likely and 39% think it's somewhat likely.
- The relative lack of anticipation of droughts in Calgary in the next five years is reflected in the level of concern about this weather event: only 17% are very concerned about this happening. Not quite half (47%) are somewhat concerned.

Water Use in Calgary

Respondents are not very knowledgeable about water use in Calgary.

- A slight majority (58%) of respondents admit to not knowing how much water their household uses per day or month; however, most (85%) report that they or someone in their household pays the water bill.
- Respondents are split on whether Calgary residents use the most or least water compared to businesses, schools/hospitals/other institutions, and The City of Calgary. One-third (33%) think residents use the most water and 35% think they use the least water.
- One-in-five (20%) think The City of Calgary uses the most water while 29% think The City uses the least.
- Businesses are believed to use the most water by 24% of respondents, with 18% thinking they use the least.
- Schools, hospitals and other institutions use the most water according to 24% of respondents and the least according to 17%.

Respondents believe they can make a difference in times of drought.

- Nearly half (46%) strongly agree that their water conservation actions can make a positive difference in protecting Calgary's water supplies during times of drought and another 43% somewhat agree.

Trust in The City to manage water supplies during a shortage is not strong.

- Trust in The City of Calgary managing water supplies during times of water shortage is not overwhelming: only one-quarter (25%) completely trust The City. Slightly more than half (53%) somewhat trust The City in this respect.

Respondents want The City to communicate with citizens about the likelihood of drought and don't want The City to wait until there will definitely be a drought before advising citizens.

- Almost all respondents (97%) agree that The City should communicate with citizens about the likelihood of drought (79% strongly agree and 18% somewhat agree).
- Almost one-third (30%) of these respondents would like to know when there might be a drought, 38% think communication should take place when there probably will be a drought, and 28% think it should happen when there very probably will be a drought.
- Only 5% would like The City to first communicate when there will definitely be a drought.

Voluntary Water Reduction Action

Support for, and predicted self-compliance with, voluntary water reduction actions is high; however, respondents are more willing to take certain actions over others.

- Most respondents (90%) support voluntary water reductions in Calgary during extended periods of dry and hot weather, with 62% strongly supporting and 28% somewhat supporting the idea.
- Half of respondents (50%) predict that they and other members of their household would completely comply with voluntary water reductions. Two-in-five (41%) think they would mostly comply.
- The water reduction actions that respondents are least willing to take are 4-minute showers (43% very likely and 13% somewhat likely) and flushing the toilet less often (48% very likely and 27% somewhat likely).
- Washing vehicles only at car washes (90% very likely) and washing only full loads of clothes and dishes (87% very likely) are actions that are more likely to be undertaken in the event of voluntary water reductions.
- Reducing outdoor water use is also acceptable to the majority of respondents: 81% are very likely to water well-established lawns 1 inch of water or less per week, 77% are very likely to hand water trees and vegetable gardens, and 75% are very likely to reduce outdoor water use to one day per week from 6 to 9 a.m. or 7 to 11 p.m.
- Respondents think they would also be very likely (82%) or somewhat likely (14%) to turn off the tap while brushing their teeth, washing dishes, etc.

Voluntary Water Reduction Information

The media and The City are the sources that respondents would mostly turn to for information about voluntary water reductions.

- In the event of voluntary water reductions, 65% of respondents report they would turn to the media (newspapers, radio) for information about actions to take. Nearly as many (62%) would look to City of Calgary water experts for advice.
- Half (49%) would check online sources, including websites and social media while 41% would turn to Province of Alberta water experts. ENMAX, emergency service providers, gardening experts and others were cited by one-quarter or fewer respondents.

Believability of Messages

Respondents tend to find it believable that The City monitors water levels to anticipate drought, that we can avoid mandatory water restrictions by complying with voluntary reductions and that shorter showers and reducing outdoor water use can help in times of water shortage.

- The messages with the most respondents rating them as very believable are:
 - “Our region is prone to drought, which means we often have long periods of dry weather and high temperatures. The City of Calgary regularly monitors water levels in our region to know when a drought is likely to develop – and once begun – how severe it is likely to become.” (56% very believable)
 - “If everyone cooperates with voluntary water reductions, we may avoid moving to mandatory water restrictions where specific water use restrictions are mandated and enforced.” (54% very believable)
 - “We can all do our part by shortening our showers by two minutes, flushing our toilet three times less per day or reducing outdoor watering to once per week.” (54% very believable)

Believability of Messages (cont'd)

Fewer respondents believe the messages about The City's efforts at saving water and those referencing specific amounts of water consumption or reduction.

- The messages with the least respondents rating them as very believable are:
 - “The City has invested in its infrastructure to use water as efficiently and effectively as possible and throughout the year we work hard to save water.” (28% very believable)
 - “You can help solve the problem. We are asking customers to voluntarily reduce their water use to less than 210 litres per day. If everyone targets 210 per day we can save billions of litres of water.” (34% very believable)
 - “Collectively, we need to reduce overall water consumption in Calgary by 10 per cent. This means each Calgarian should use 20 litres less per day.” (39% very believable)

Messages Rated by Respondents as Very Likely to Encourage Water Reduction Actions

The message that encourages citizens to comply with voluntary water reductions to avoid mandatory restrictions could be the most effective one based on respondents' ratings.

- Of the four messages that include a call to action, the one with the most respondents rating it as very likely to trigger them and their household members to reduce water consumption is:
 - “If everyone cooperates with voluntary water reductions, we may avoid moving to mandatory water restrictions where specific water use restrictions are mandated and enforced.” (57% very likely)
 - One-third (33%) reported that this message would be somewhat likely to reduce their water consumption.

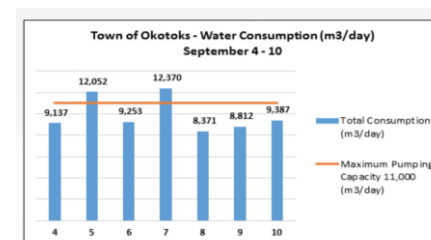
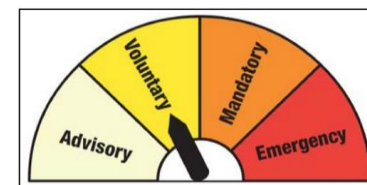
Respondents were less receptive to messages referencing specific amounts of water consumption or reduction.

- The messages directing citizens to reduce their water use by or to a certain number of litres were anticipated by respondents to be less effective:
 - “Collectively, we need to reduce overall water consumption in Calgary by 10 per cent. This means each Calgarian should use 20 litres less per day.” (39% very likely)
 - “You can help solve the problem. We are asking customers to voluntarily reduce their water use to less than 210 litres per day. If everyone targets 210 per day we can save billions of litres of water.” (39% very likely)

Perceived Likelihood of Images Having the Desired Impact on Respondents' Actions

The image of a dial “spoke” to the most respondents while the graph was rated as the least likely to encourage voluntary water reduction actions.

- Of the four images shown to respondents, the dial – similar to what is used to convey forest fire risk – was reported by 52% as being the most likely to encourage them to reduce their household water use.
- The ad was rated most likely to encourage reduced household water use by 34% of respondents.
- The image of water drops with the Advisory one highlighted was rated by only 9% as being the most likely to encourage water reduction behaviours.
- The graph was rated by 63% as the least likely to have the desired impact and by only 5% as the most likely.

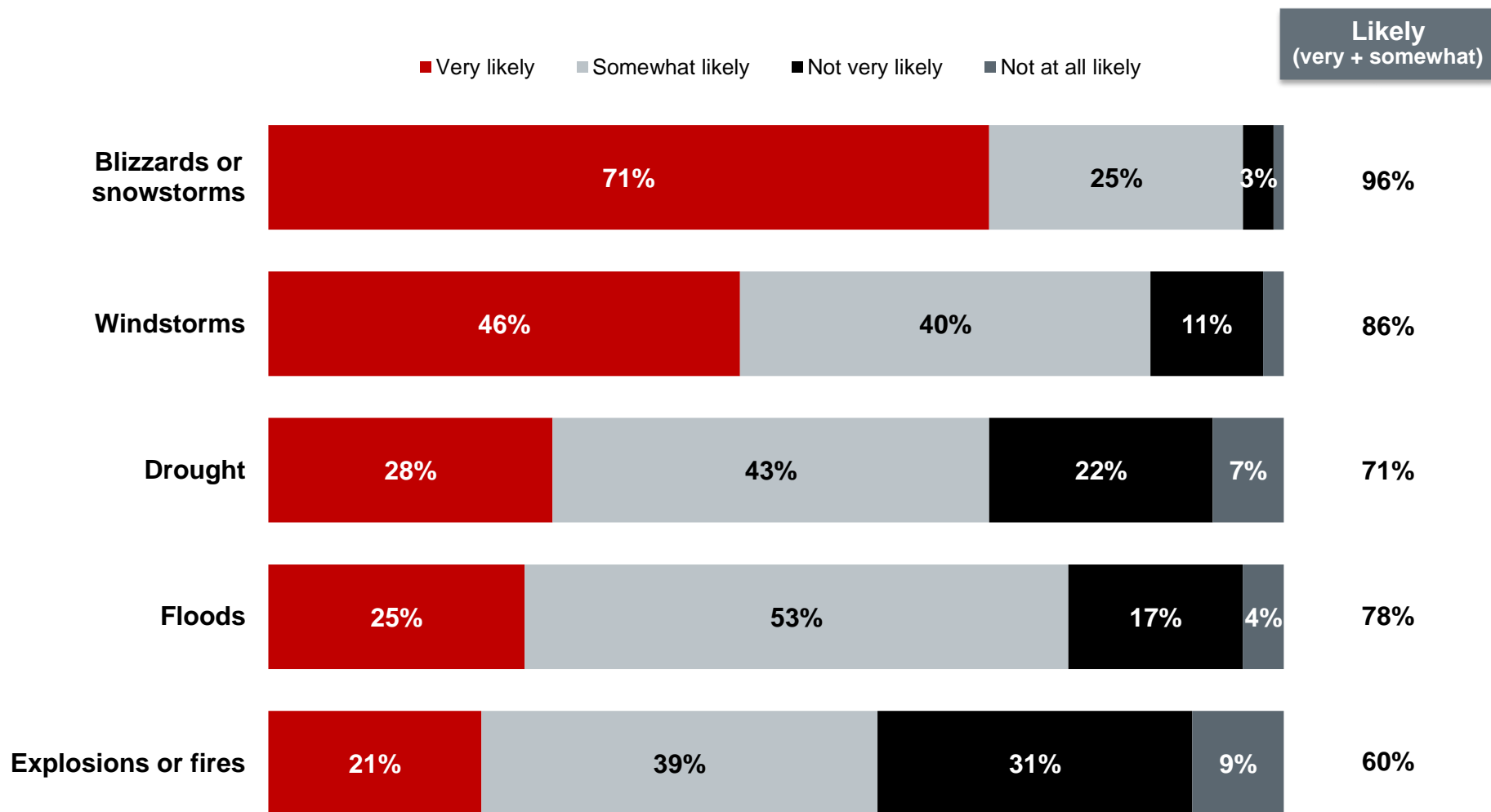




Detailed Findings



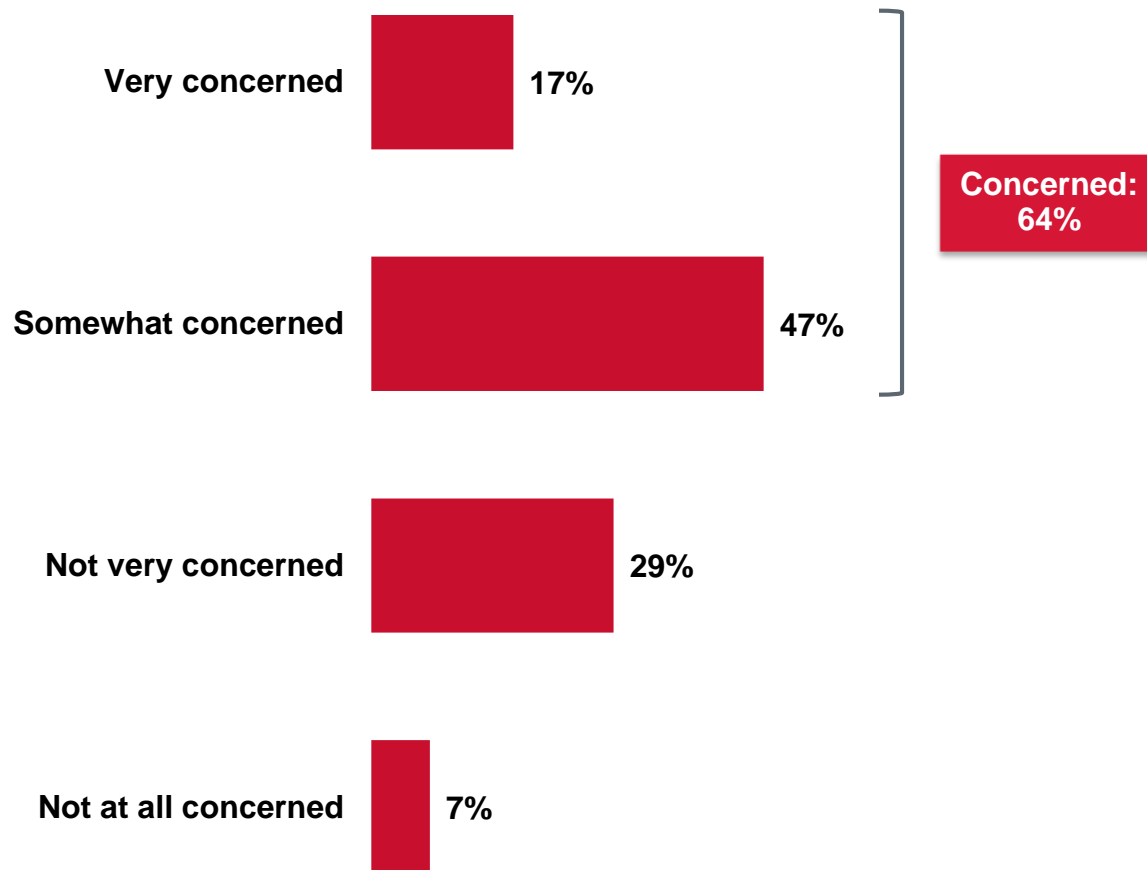
Perceived Likelihood of Severe Weather Events



How likely do you think Calgary is to face the following natural disasters within the next five years?

Base: Valid respondents (n=959)

Level of Concern About Drought in Calgary



How concerned are you about potential droughts (a shortage of water caused by extended periods of hot, dry weather) in Calgary over the next five years?
Base: Valid respondents (n=959)

Household Water Use

Aware of Amount of Water Used by Household

Yes



40%

No



58%

Respondent or Someone in Household Pays the Water bill

Yes



85%

No



14%

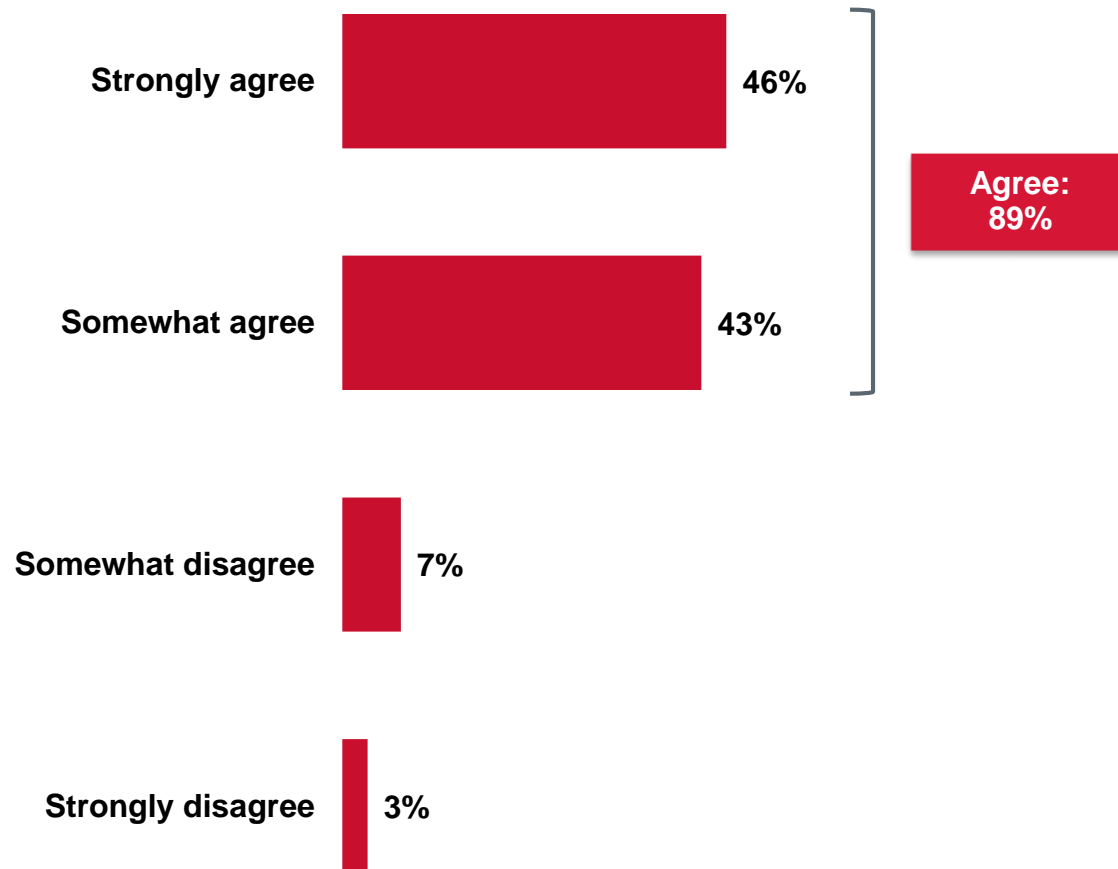
Do you know how much water your household uses per day or month?

Base: Valid respondents (n=959)

Do you, or does someone in your household, pay the water bill?

Base: Valid respondents (n=959)

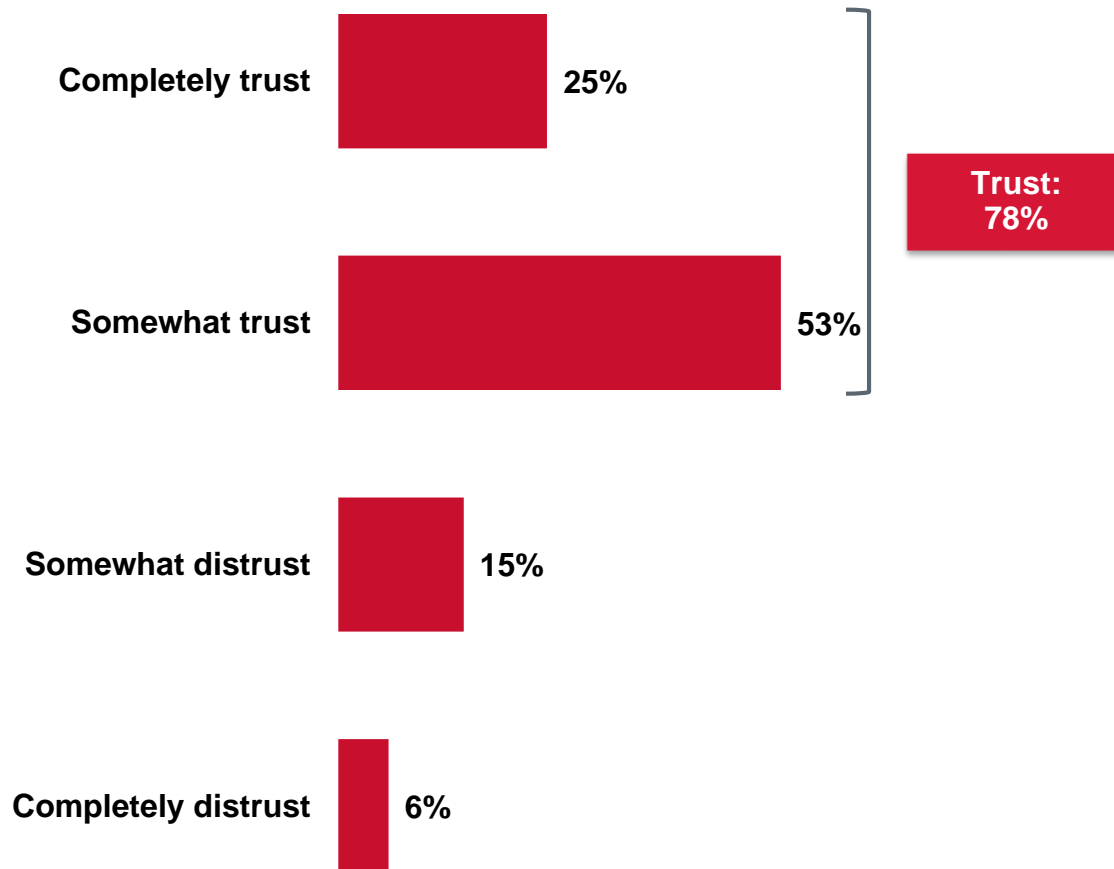
Belief That Individual Water Conservation Actions Will Make a Difference



To what extent do you agree or disagree that your water conservation actions can make a positive difference to protect Calgary's water supplies during times of drought?

Base: Valid respondents (n=959)

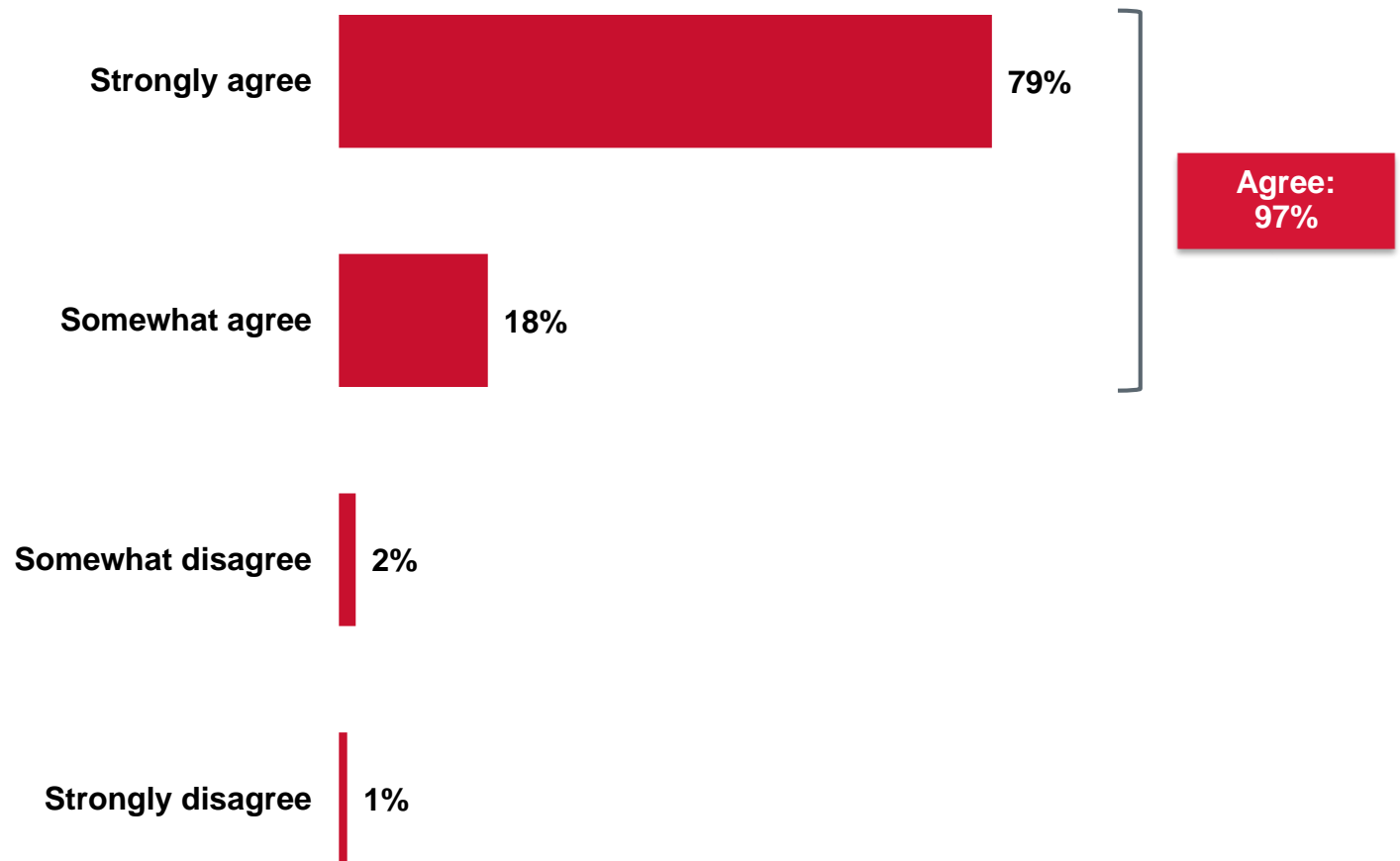
Trust in The City to Manage Water Supplies During Times of Water Shortage



To what extent do you trust or distrust The City of Calgary to manage water supplies during times of water shortage?

Base: Valid respondents (n=959)

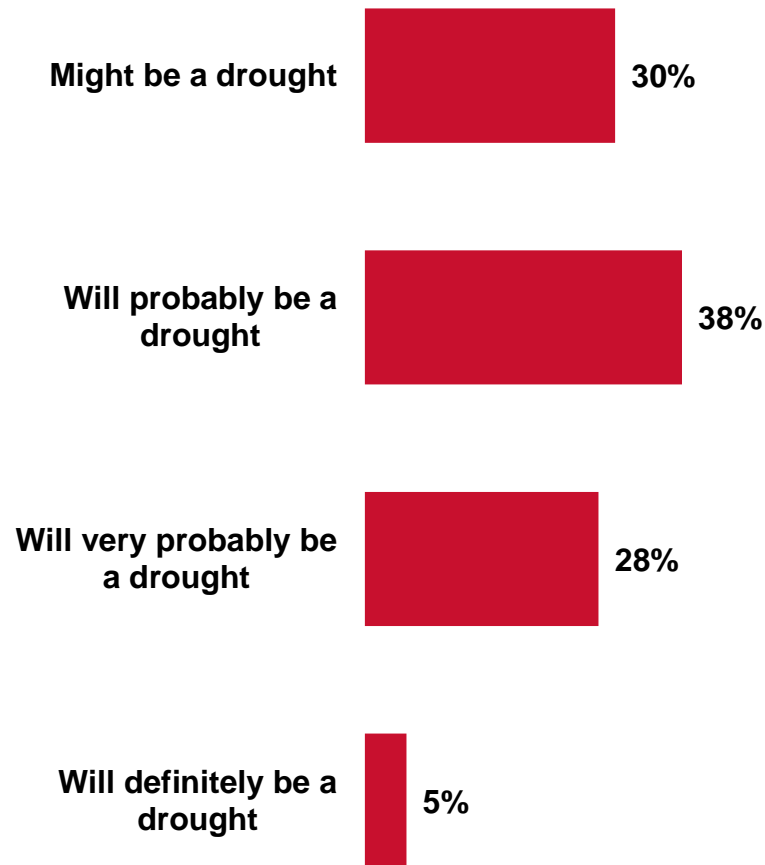
Agreement That The City Should Communicate With Citizens About the Likelihood of Drought



The City of Calgary's water utility regularly monitors water levels in our region and can tell when a drought is likely to develop. To what extent do you agree or disagree that The City should communicate with citizens about the likelihood of drought?

Base: Valid respondents (n=959)

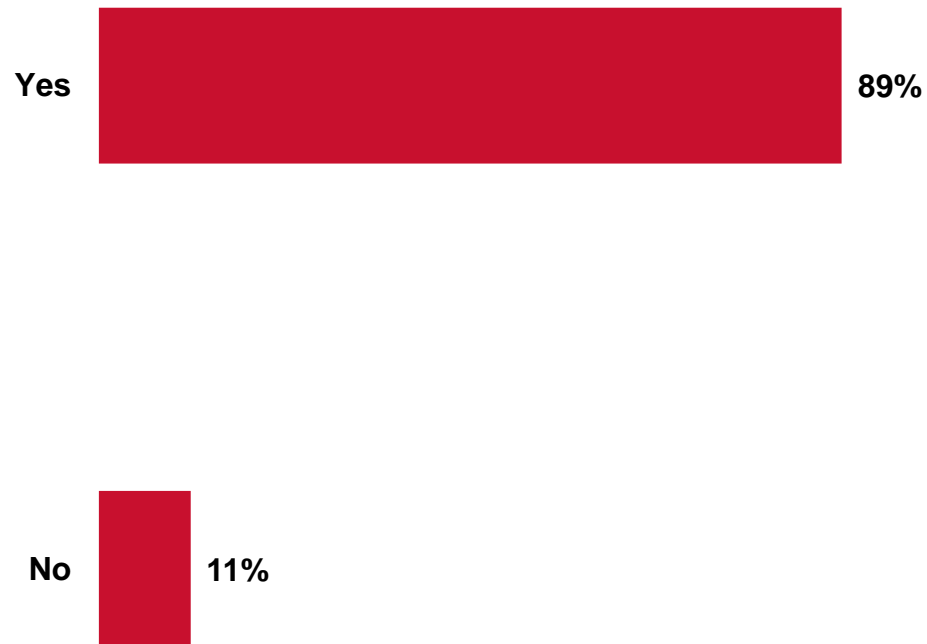
Point at Which The City Should Communicate With Citizens About the Likelihood of Drought



In your opinion, when should the City first communicate with citizens about the likelihood of drought? Should they let citizens know when there...

Base: Valid respondents who strongly or somewhat agree that The City should communicate with citizens about the likelihood of a drought (n=931)

Aware of The City's Water Utility Bylaw

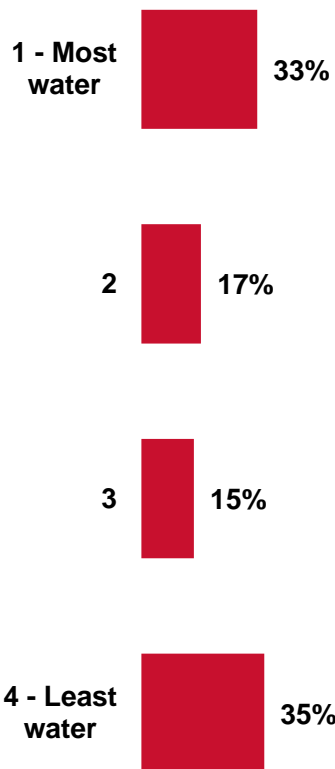


Before now, were you aware that there is a Water Utility Bylaw that allows The City of Calgary to place mandatory water restrictions on outdoor water use in times of water shortage?

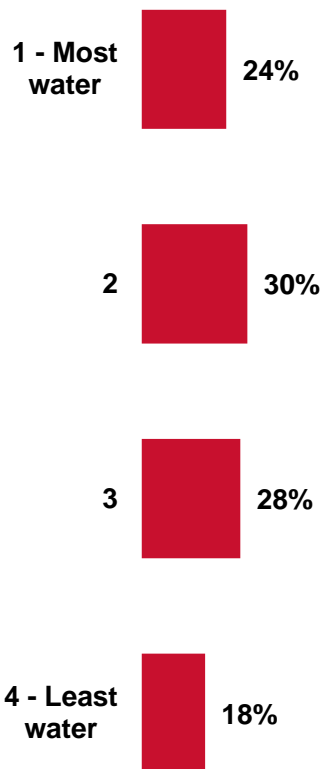
Base: Valid respondents (n=959)

Knowledge of Amount of Water Used by Various Groups

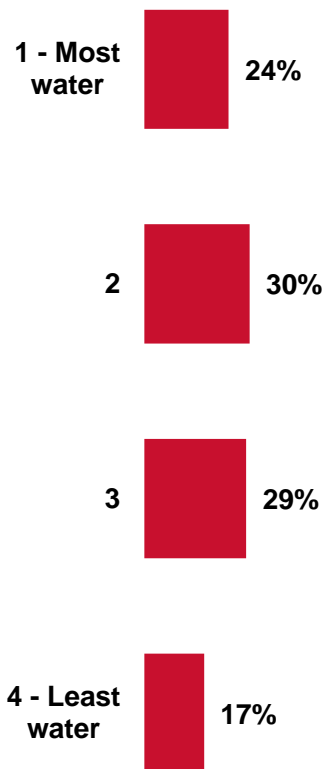
Residents



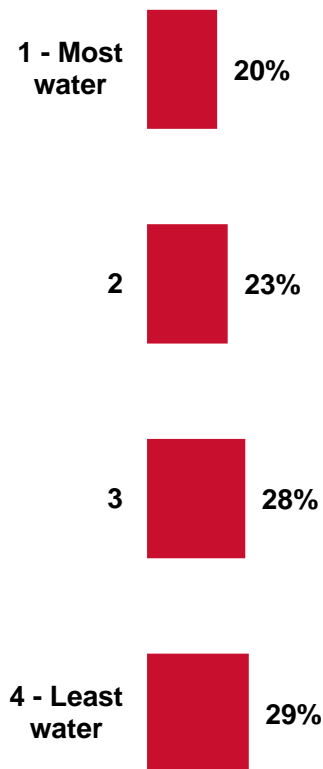
Businesses



Schools, hospitals, other institutions



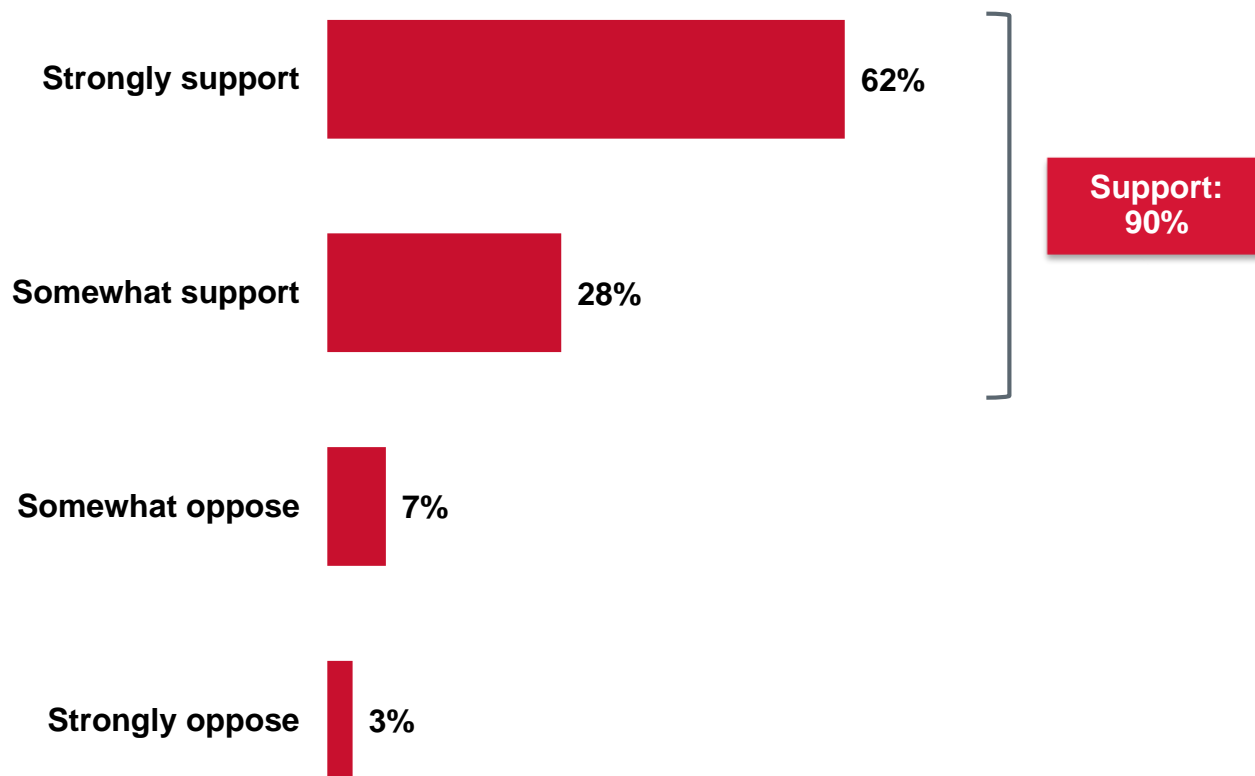
The City of Calgary



Please rank the groups based on how much water they use, where 1 is the group that uses the most water in Calgary.

Base: Valid respondents (n=959)

Support for Voluntary Water Reductions



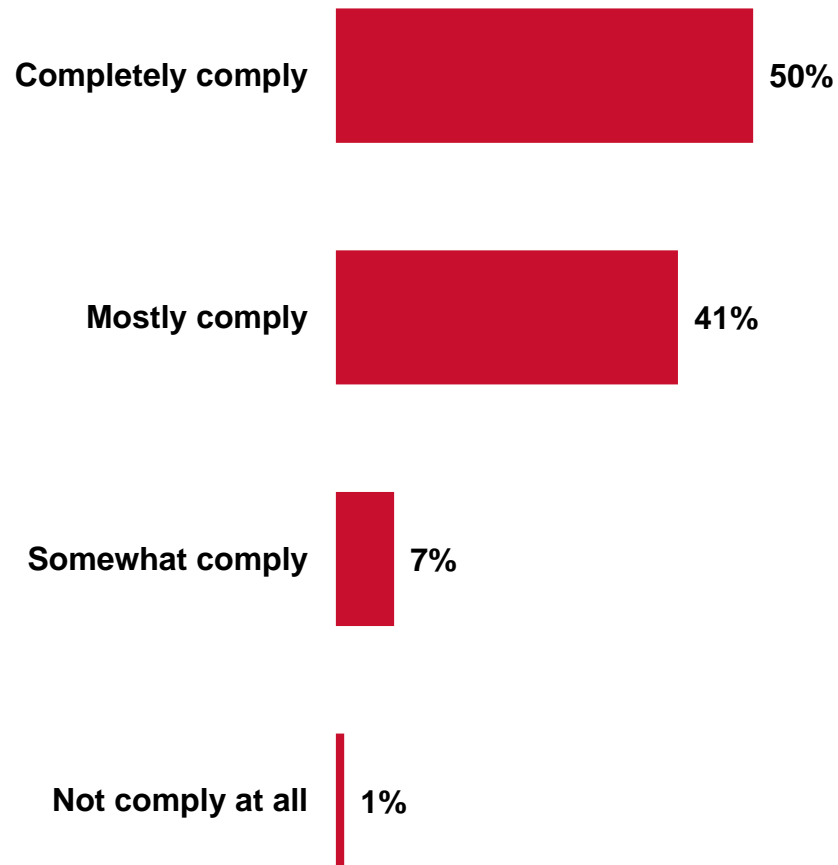
In some cities, water customers are encouraged to voluntarily reduce the amount of water they use during extended periods of dry and hot weather. Voluntary water reductions may help to avoid mandatory water restrictions if citywide water consumption is sufficiently reduced.

Voluntary water reductions are typically flexible, and citizens can choose the water-conservation actions that best suit their lifestyles.

To what extent do you support or oppose the idea of voluntary water reductions in Calgary during extended periods of dry and hot weather?

Base: Valid respondents (n=959)

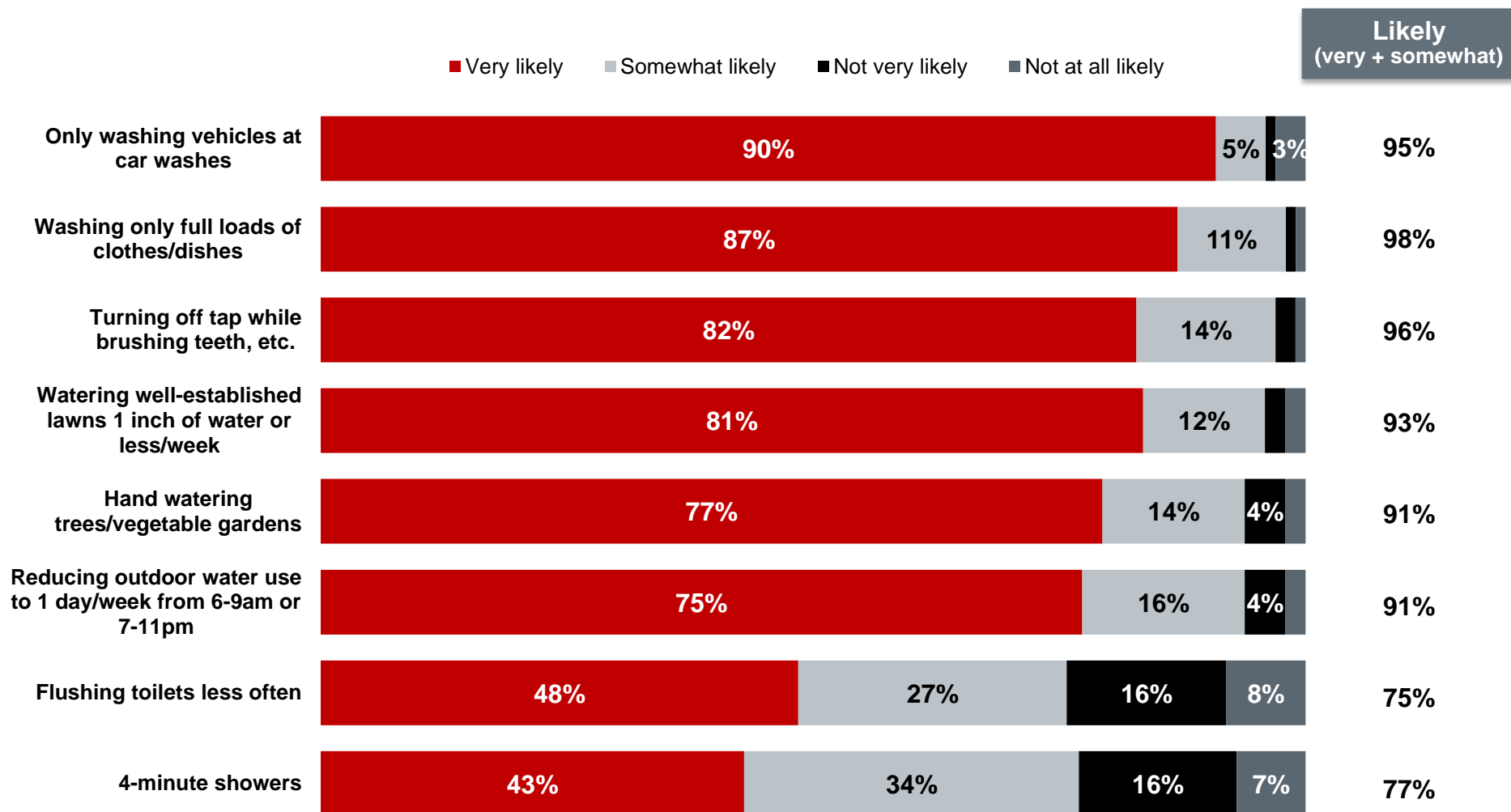
Intentions to Comply with Voluntary Water Reductions



If voluntary water reductions were in place in Calgary, to what extent would you and other members of your household comply?

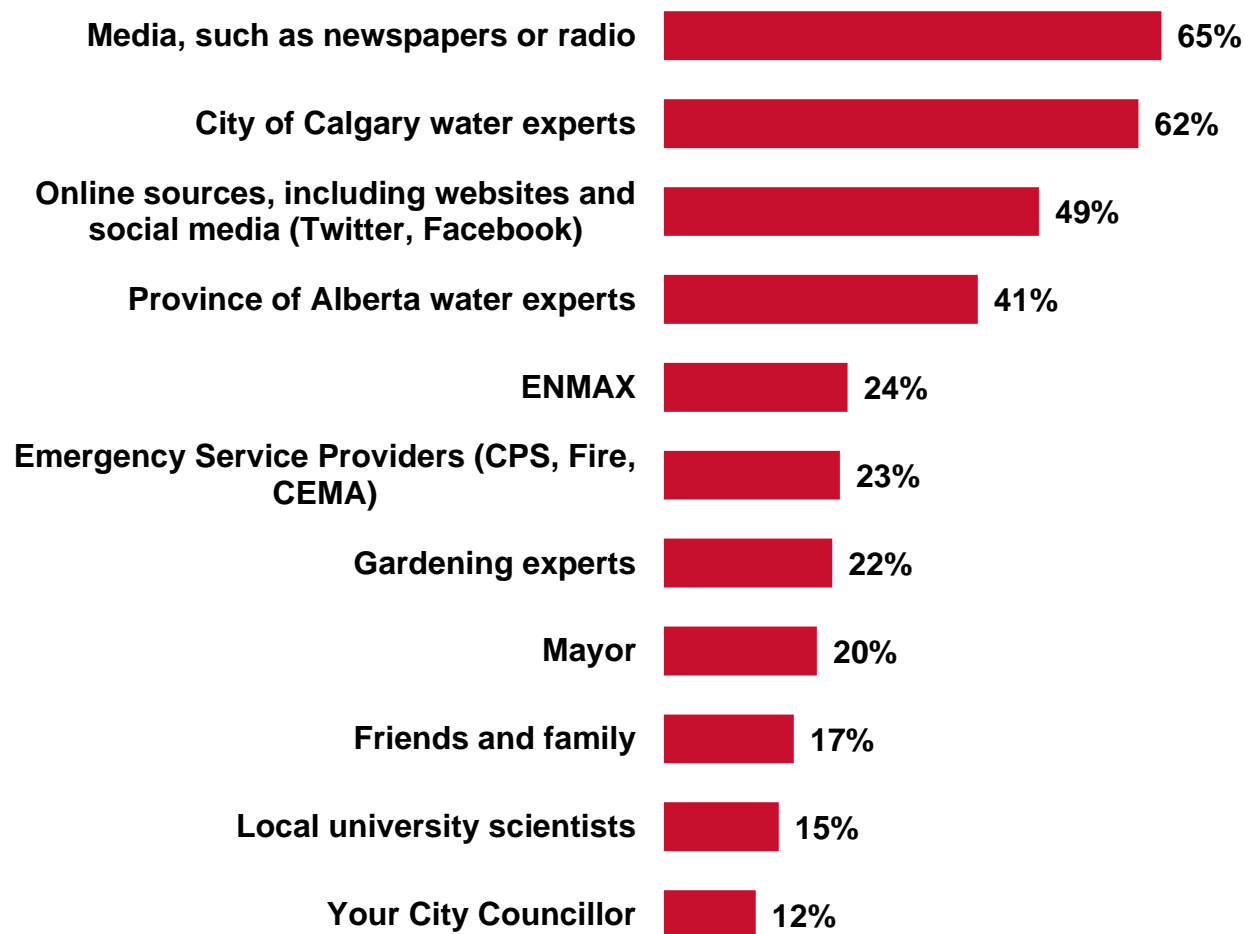
Base: Valid respondents (n=959)

Likelihood of Taking Specific Voluntary Water Reduction Actions



In the event of voluntary water reductions, how likely would you and other members of your household be to take each of the following actions?
 Base: Valid respondents (n=959)

Sources for Information About Voluntary Water Reduction Actions



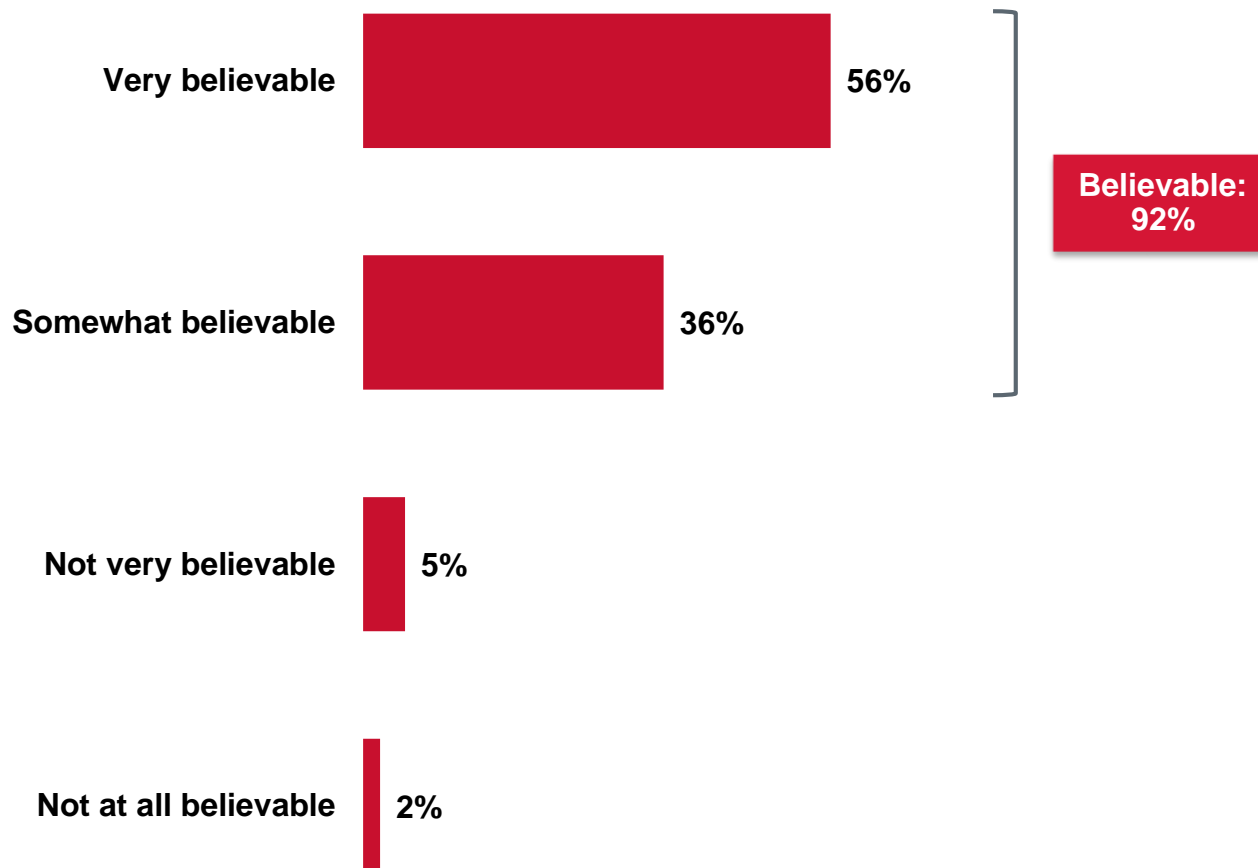
If The City were to encourage citizens to take voluntary water reduction actions, which of the following sources would you turn to for information?

Base: Valid respondents (n=959)

Message Believability

Message:

Our region is prone to drought, which means we often have long periods of dry weather and high temperatures. The City of Calgary regularly monitors water levels in our region to know when a drought is likely to develop – and once begun – how severe it is likely to become.



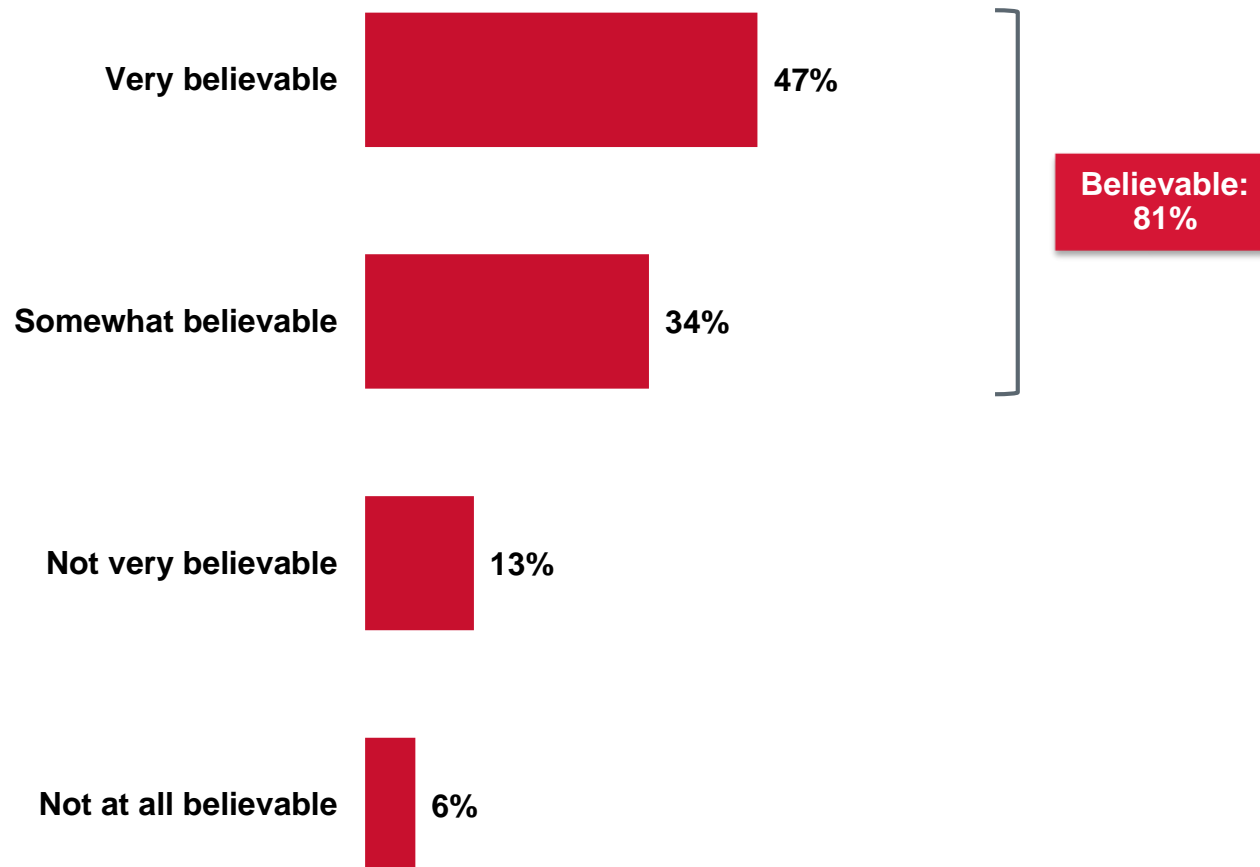
Do you think that this message is...

Base: Valid respondents (n=959)

Message Believability (cont'd)

Message:

Calgary's water supplies have fallen below normal levels for this time of year.



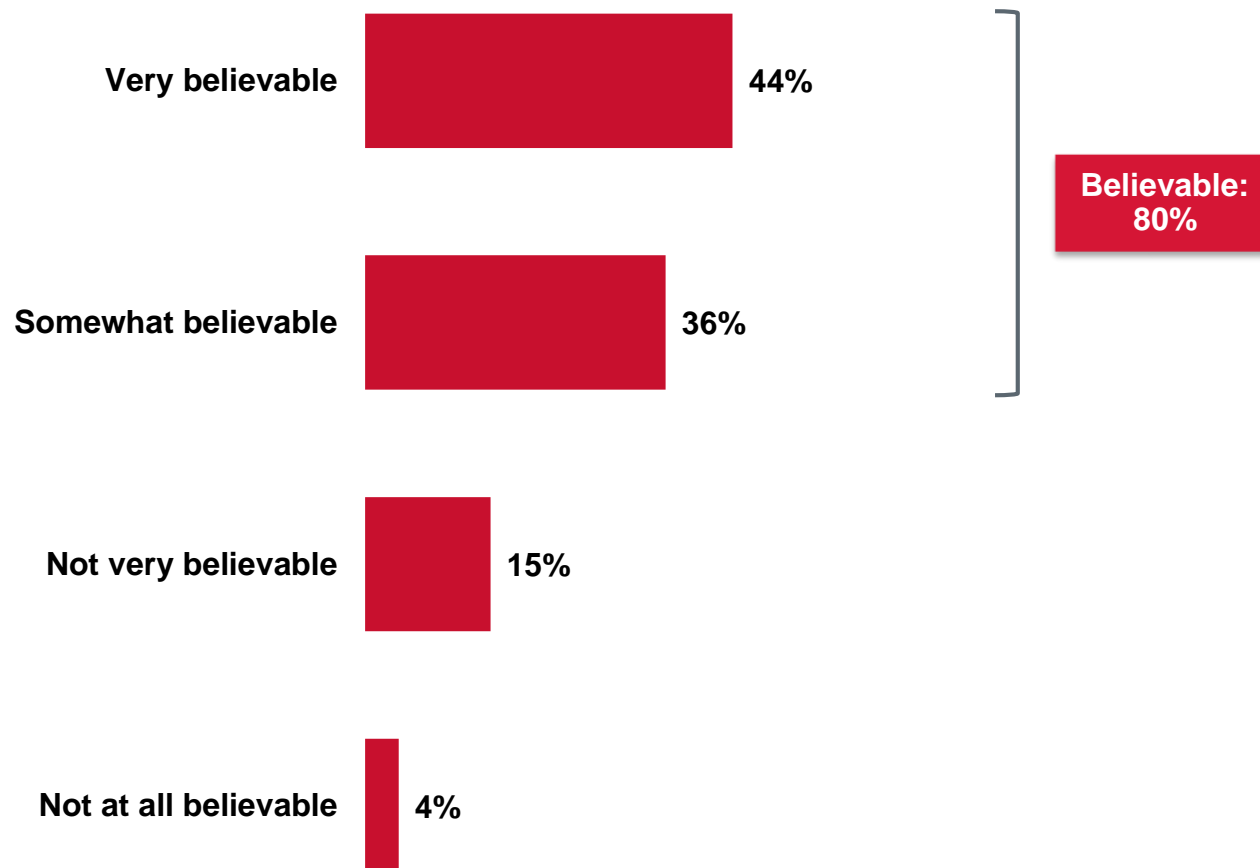
Do you think that this message is...

Base: Valid respondents (n=959)

Message Believability (cont'd)

Message:

Residential households use 53% of all of Calgary's water. The average Calgarian uses 250 litres of water per day during summer months.



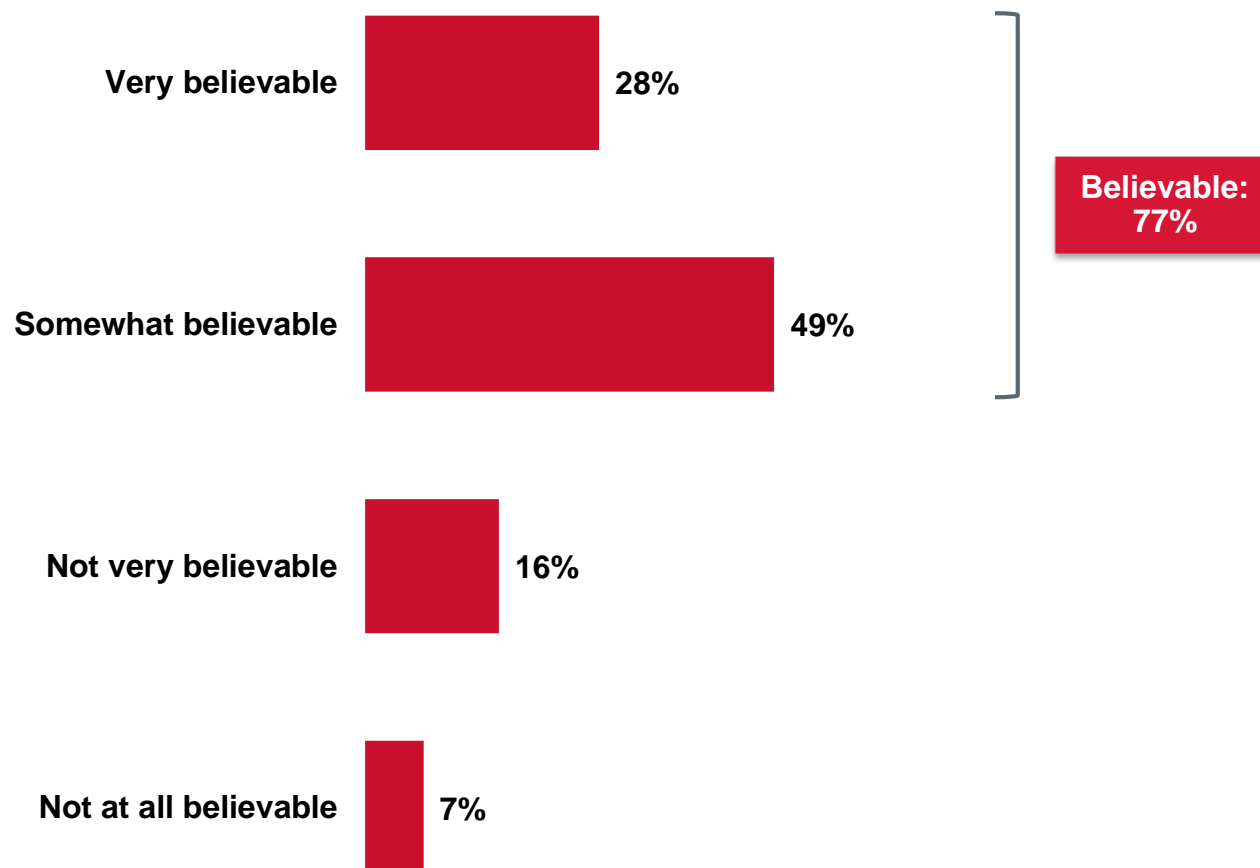
Do you think that this message is...

Base: Valid respondents (n=959)

Message Believability (cont'd)

Message:

The City has invested in its infrastructure to use water as efficiently and effectively as possible and throughout the year we work hard to save water.



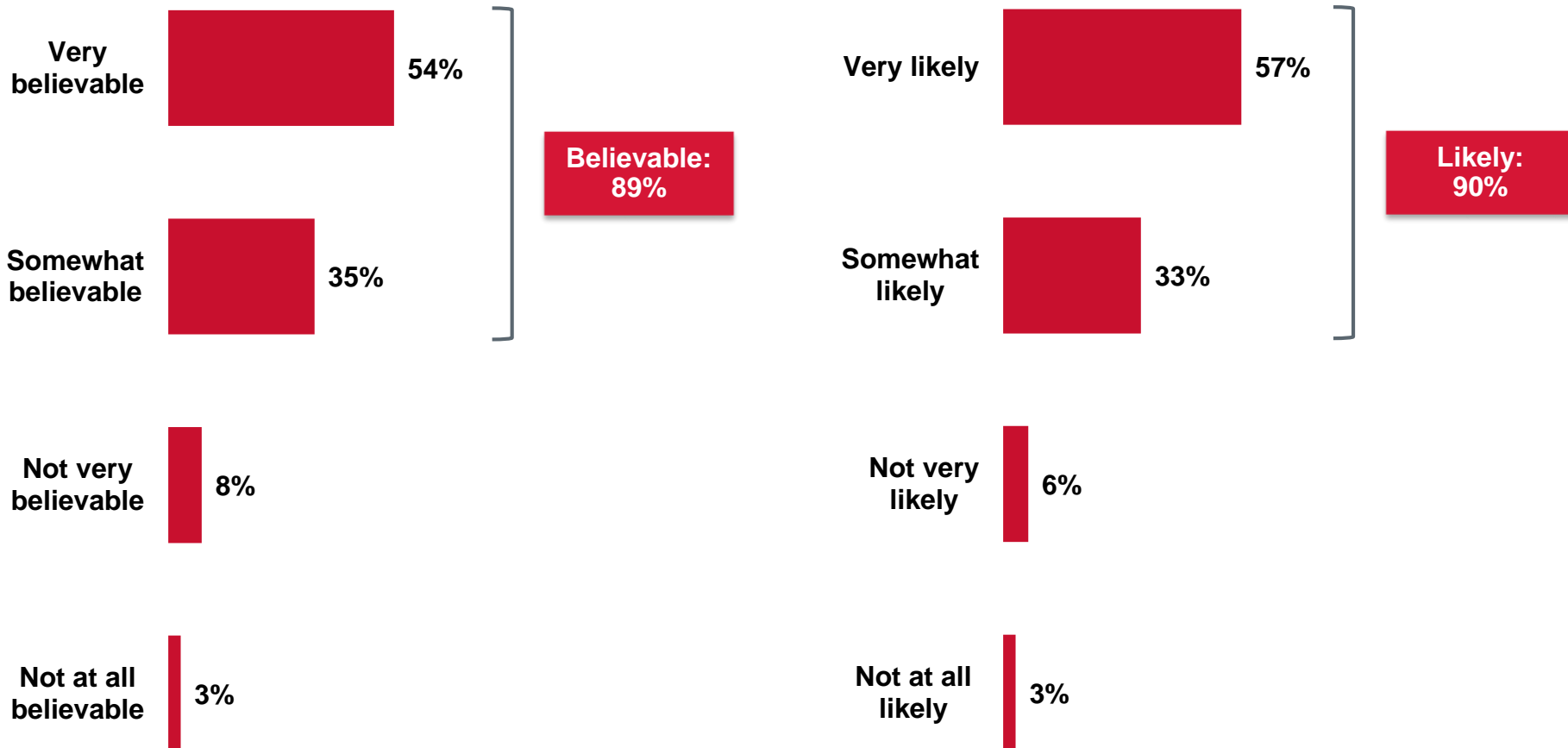
Do you think that this message is...

Base: Valid respondents (n=959)

Message Believability & Perceived Likelihood to Trigger Voluntary Water Reductions

Message:

If everyone cooperates with voluntary water reductions, we may avoid moving to mandatory water restrictions where specific water use restrictions are mandated and enforced.



Do you think that this message is...

Base: Valid respondents (n=959)

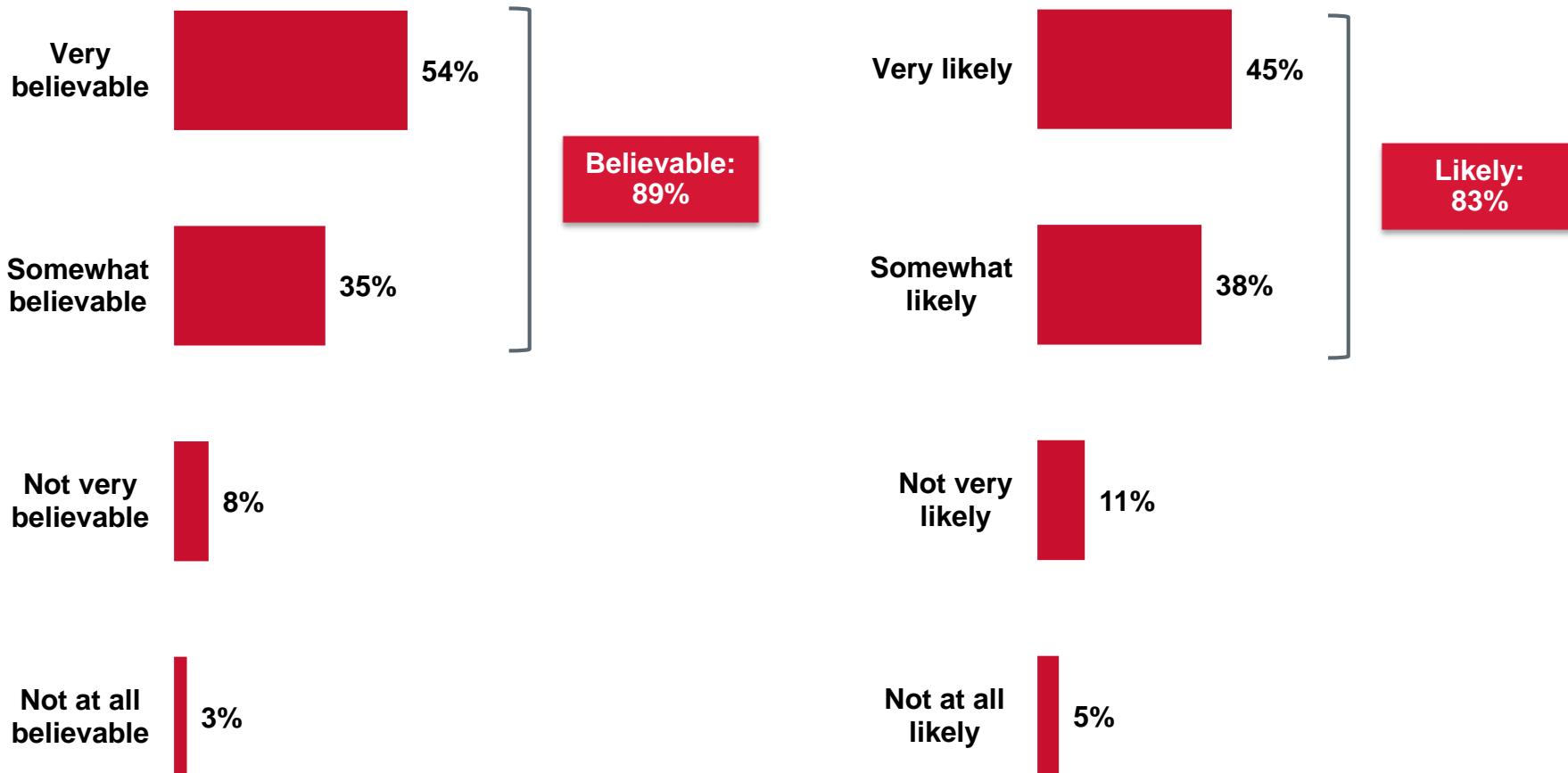
How likely would you and your household members be to reduce your water consumption after seeing this message?

Base: Valid respondents (n=959)

Message Believability & Perceived Likelihood to Trigger Voluntary Water Reductions (cont'd)

Message:

We can all do our part by shortening our showers by two minutes, flushing our toilet three times less per day or reducing outdoor watering to once per week.



Do you think that this message is...

Base: Valid respondents (n=959)

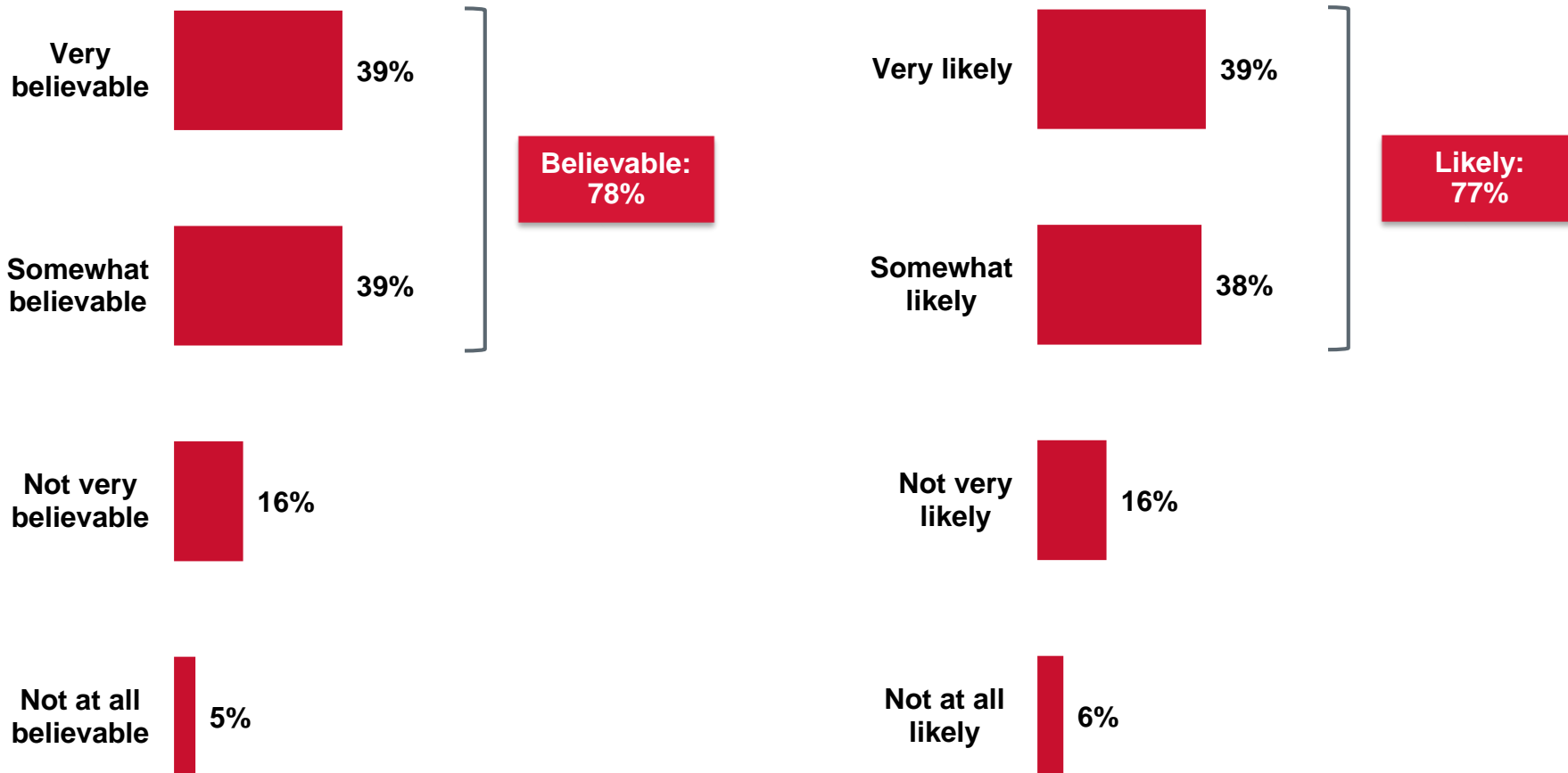
How likely would you and your household members be to reduce your water consumption after seeing this message?

Base: Valid respondents (n=959)

Message Believability & Perceived Likelihood to Trigger Voluntary Water Reductions (cont'd)

Message:

Collectively, we need to reduce overall water consumption in Calgary by 10 per cent. This means each Calgarian should use 20 litres less per day.



Do you think that this message is...

Base: Valid respondents (n=959)

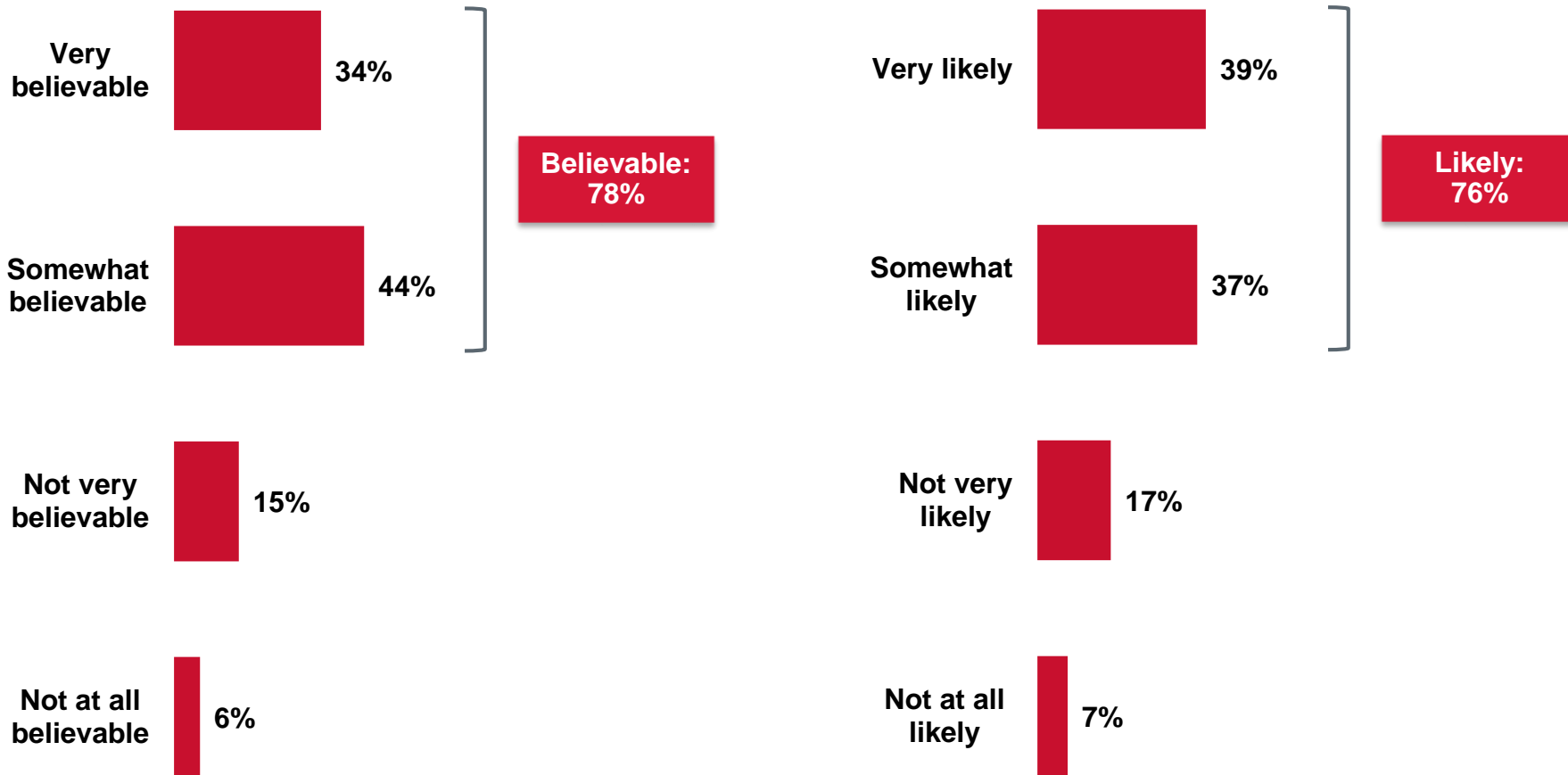
How likely would you and your household members be to reduce your water consumption after seeing this message?

Base: Valid respondents (n=959)

Message Believability & Perceived Likelihood to Trigger Voluntary Water Reductions (cont'd)

Message:

You can help solve the problem. We are asking customers to voluntarily reduce their water use to less than 210 litres per day. If everyone targets 210 per day we can save billions of litres of water.



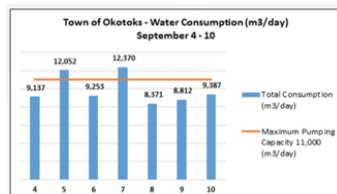
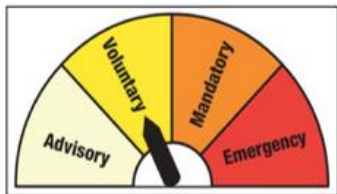
Do you think that this message is...

Base: Valid respondents (n=959)

How likely would you and your household members be to reduce your water consumption after seeing this message?

Base: Valid respondents (n=959)

Perceived Likelihood of Image to Trigger Voluntary Water Reductions



1 - Most likely 52%

1 - Most likely 5%

1 - Most likely 9%

1 - Most likely 34%

2 25%

2 11%

2 32%

2 33%

3 15%

3 22%

3 40%

3 23%

4 - Least likely 7%

4 - Least likely 63%

4 - Least likely 19%

4 - Least likely 11%

Please rank the images based on how likely they are to encourage you to voluntarily take action to reduce your household water use, where 1 is the most likely.

Base: Valid respondents (n=959)



Demographics



Gender



45%
Male



52%
Female

(Prefer not to answer 3%)

Education



6%



73%



20%

Age

18 – 34

10%

35 – 54

36%

55+

52%

Income



<\$60k

21%



\$60–
<\$90k

17%



\$90–
<\$150k

24%

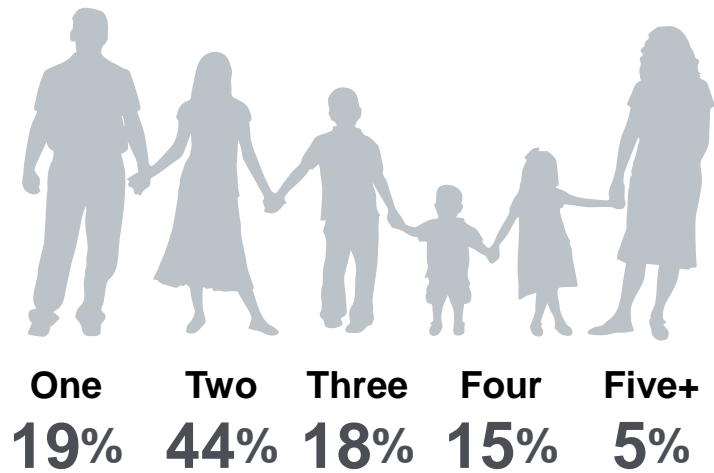


\$150k+

18%

(Prefer not to answer 19%)

Household Size



Own
84%

Rent
13%

Other
2%

Prefer not
to answer
1%

