



2014 RBC Canadian Water Attitudes Webinar:

Focus on Extreme Weather

April 2, 2014

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RBC Canadian
Water Attitudes
Study



RBC
Blue Water
Project™

Speakers

Introductions by:

Lynn Patterson

Director, Corporate Responsibility, RBC



Presented by:

Chris Coulter

CEO, GlobeScan



and

Bob Sandford

EPCOR Chair

Canadian Partnership Initiative

United Nations Water for Life Decade



Agenda

- **Introduction**
- **Methodology & Topics**
- **Views of Water Experts**
- **Public Views of Extreme Weather & Flooding**
- **Preparing for the Future**
- **Q & A**

Methodology

- Annual public opinion survey of Canadians on water issues since 2008
- An online survey of 2,074 Canadians (January 24 – February 12, 2014)
- This year's poll was informed by a survey of Canadian water experts: 134 stakeholders from government, business, NGOs and academia



Topics

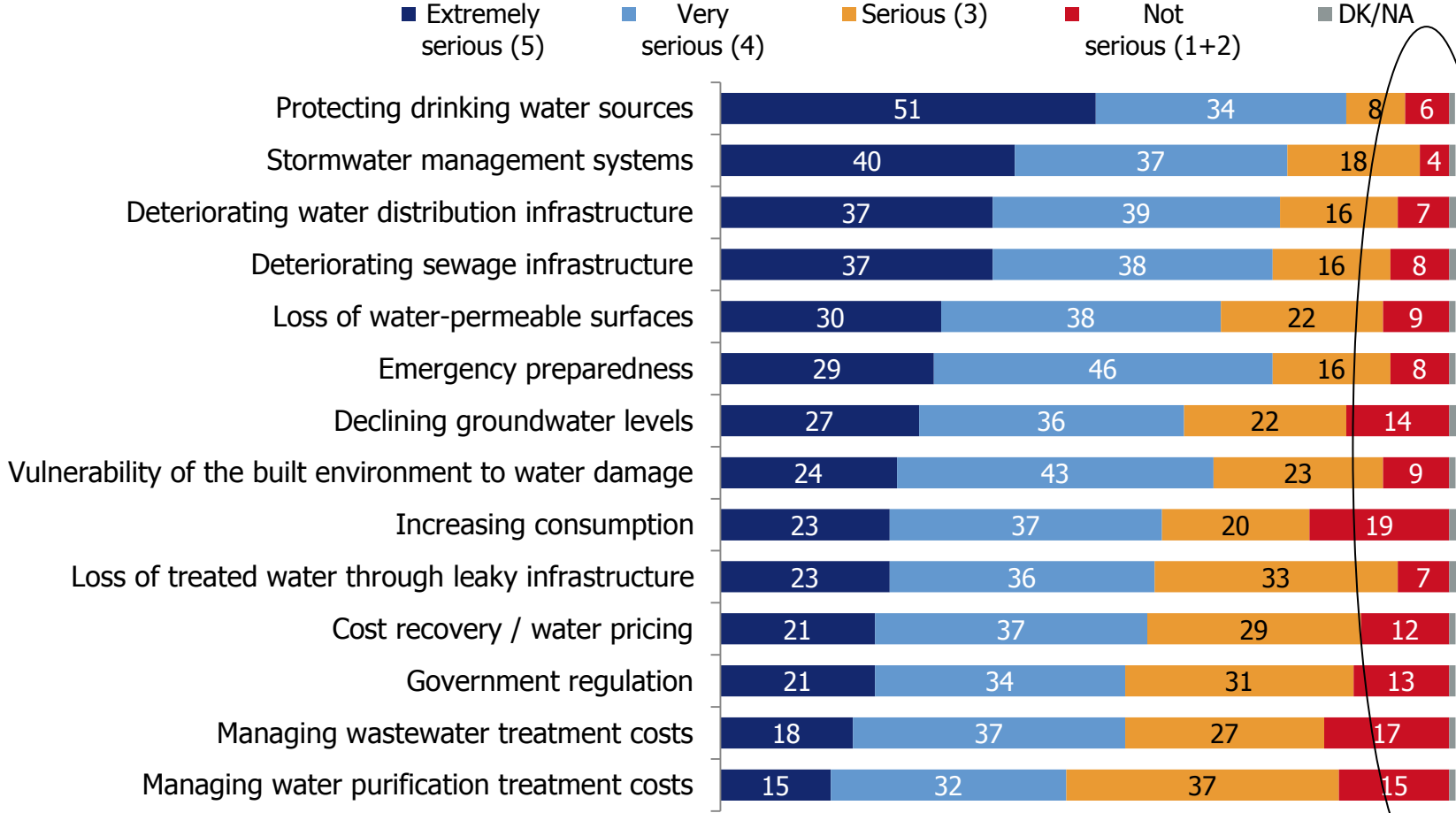
- Issues Context
- Concerns about Water
- Extreme Weather Concerns
- Extreme Weather Preparedness at Home
- How my Town or City Manages Water Issues
- Fun Facts



Views of Water Experts

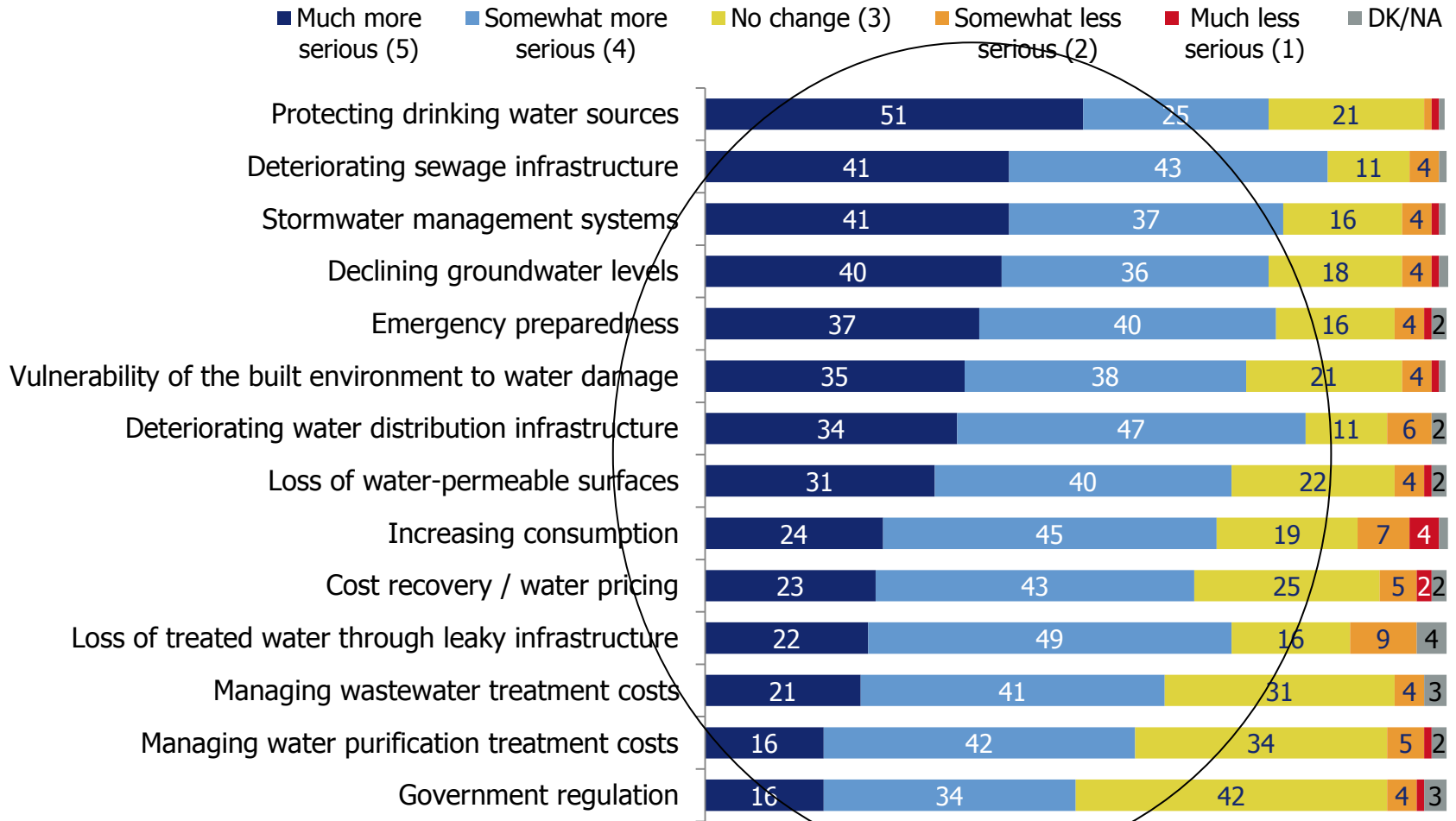


Strong majorities of water experts rate all water challenges as serious, especially protecting drinking water sources, storm water management and water infrastructure



Q. How serious do you think each of the following issues is today in the urban community or communities that are in your region or in regions that are the focus of your work?

Water experts strongly predict that challenges will become more serious in the next decade



Q. Ten years from now, do you think that each of these same issues facing urban communities and municipalities will have become less serious or more serious?

Water experts point to a range of critical issues facing Canadian cities and communities

Issue	Verbatim quotes
1. Aging Infrastructure	<ul style="list-style-type: none"> • “Aging and outmoded infrastructure” (Academic) • “Infrastructure renewal costs” (Water utility) • “Costly upgrades to water infrastructure to meet growing population and water demand” (Government)
2. Ensuring Adequate Supply / Conservation	<ul style="list-style-type: none"> • “Limited fresh water availability” (Government) • “Growing population/demand” (Government) • “Supply issues—quality and quantity of source water” (Private sector)
3. Stormwater Management	<ul style="list-style-type: none"> • “Poor stormwater control” (Private sector) • “Stormwater runoff (contamination and erosion)” (NGO/Non-profit) • “Urban runoff control” (Academic)
4. Climate Change	<ul style="list-style-type: none"> • “Extreme events (flooding/droughts) and their impacts on food, energy, and infrastructure” (NGO/Non-profit) • “Flooding (climate change)” (NGO/Non-profit) • “Water quantity related to climate change” (Academic)
5. Water Pollution / Quality	<ul style="list-style-type: none"> • “The toxic products we put in our water (via cosmetics, etc.)” (NGO/Non-profit) • “Cleaning up legacy pollution” (Academic) • “Blue green algae” (NGO/Non-profit)

Q. What do you think are the most urgent water-related issues facing Canadian urban communities and municipalities, including your own, over the next five years?

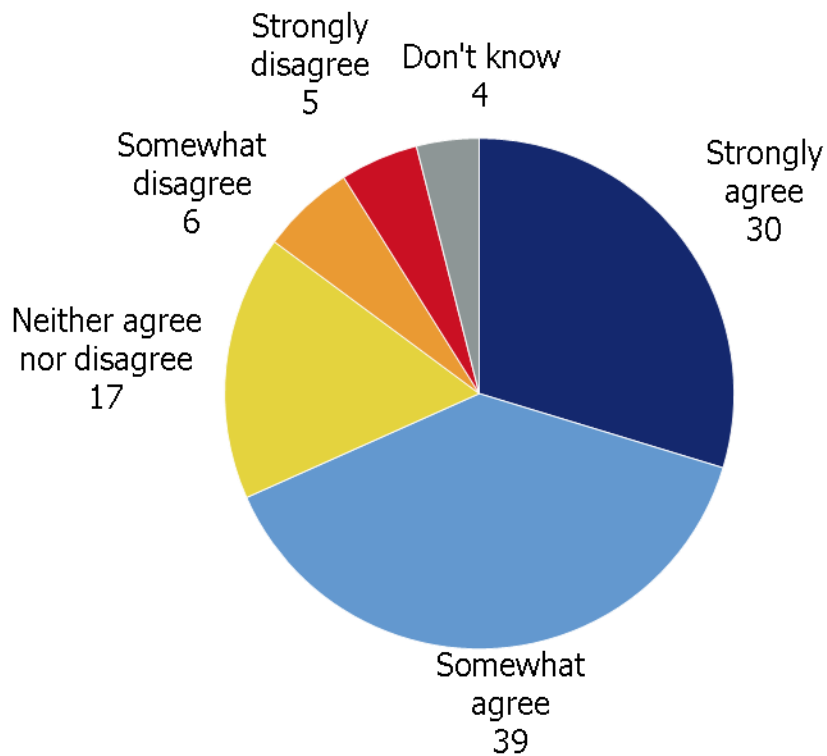


Public Views of Extreme Weather & Flooding



Most Canadians agree that climate change is causing more extreme weather...

Climate change has resulted in an increase in extreme weather events in Canada

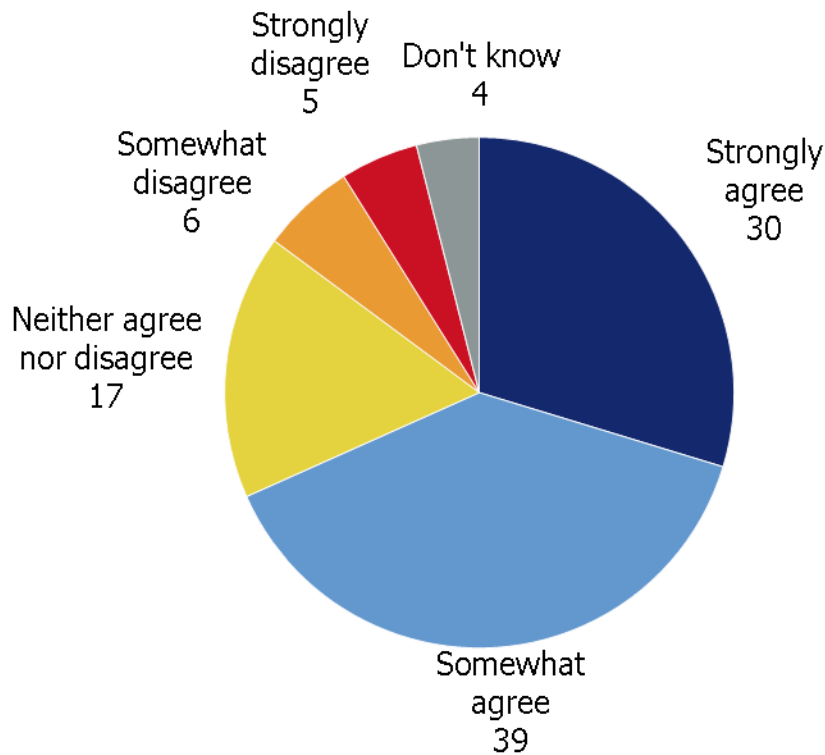


2014 $n=2,074$

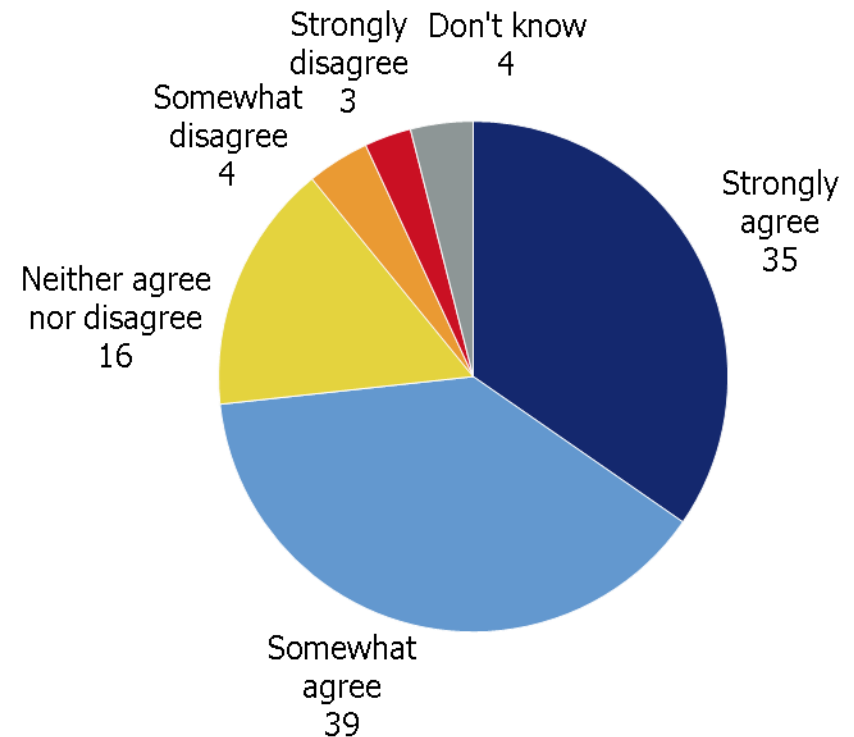
To what extent do you agree or disagree with each of the following statements?

...and three in four expect extreme weather to increase in Canada.

Climate change has resulted in an increase in extreme weather events in Canada



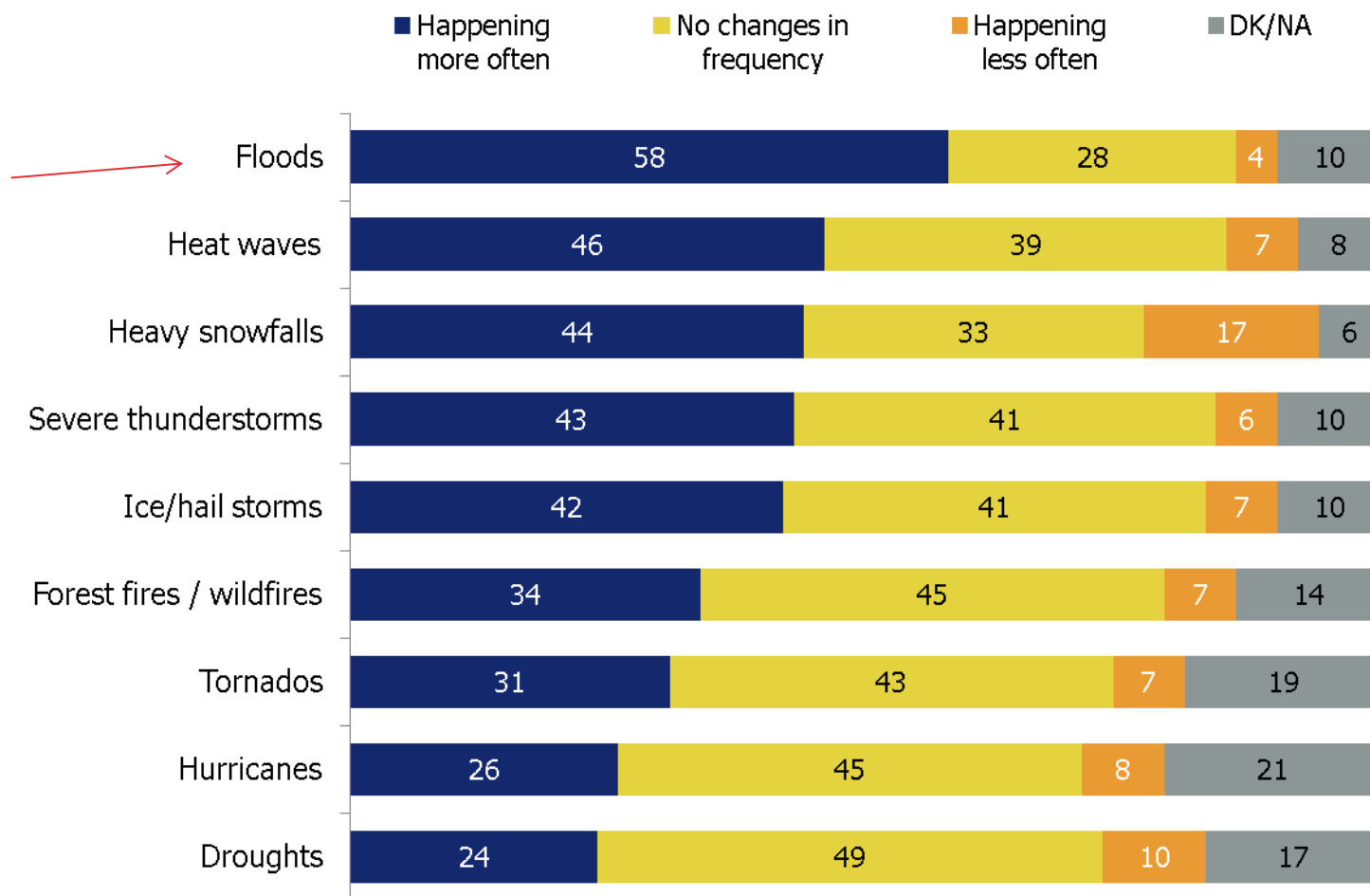
Extreme weather events in Canada will become more commonplace in the future



2014 n=2,074

To what extent do you agree or disagree with each of the following statements?

More than any other type of weather event, Canadians think the number of floods are increasing.



2014 n=2,074

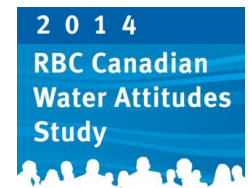
Compared to 10 years ago, do you feel that the following events have been happening any more or less often in Canada?

People in Calgary are the most likely to say they have seen an increase in flooding over the past decade, as are women.

	REGION						CITY						AGE			GENDER		COMMUNITY SIZE		
	British Columbia	Alberta	Prairies	Ontario	Quebec	Atlantic	Vancouver	Calgary	Winnipeg	Toronto	Montreal	Halifax	18 to 34 years	35 to 55 years	>55 years	Male	Female	Urban (>100,000)	Mid-size towns/cities	Rural (<1000)
Floods	55	68	59	56	56	60	53	75	63	57	54	55	51	63	59	52	64	58	55	61

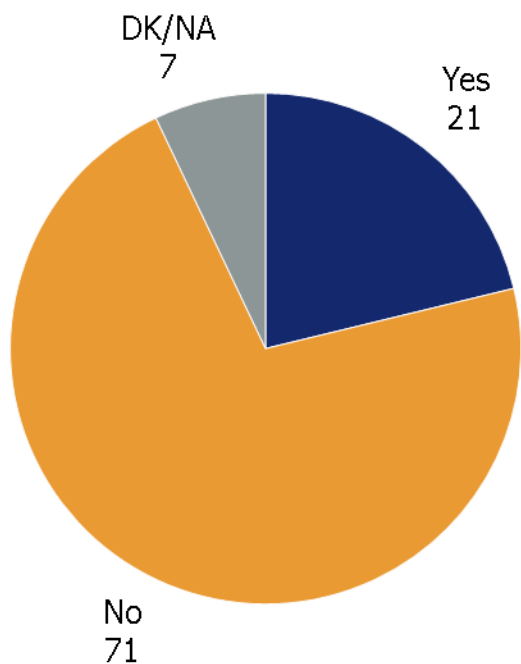
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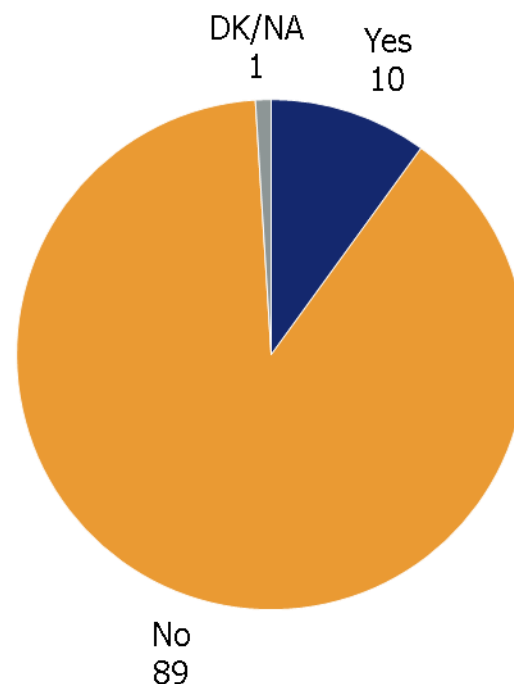


In 2013, 10% of Canadians were personally affected by flooding; 20% think they live in a flood-prone area.

Live in an area that you think is vulnerable to flooding?



Personally affected by flooding in last 12 months?



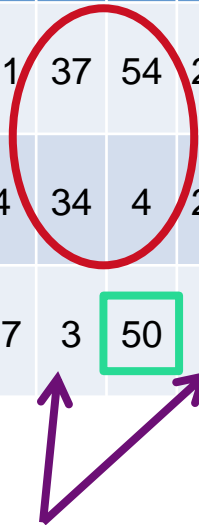
2014 n=2,074

Do you currently live in an area that you think is vulnerable to flooding?

Several Canadian cities, towns and communities experienced some kind of flooding in 2013. Have you personally been affected by flooding in the last 12 months?

Large gaps between feeling vulnerable and being affected by flooding in BC, the Prairies and especially Winnipeg.

	REGION						CITY						AGE			GENDER		COMMUNITY SIZE		
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Live in area vulnerable to flooding	24	29	39	22	12	16	21	37	54	23	15	12	28	20	16	22	21	22	22	19
Personally affected by flooding	4	22	10	15	4	4	4	34	4	20	6	3	14	11	6	12	9	13	7	6
GAP	20	7	29	7	8	12	17	3	50	3	9	9	14	9	10	10	12	9	15	13

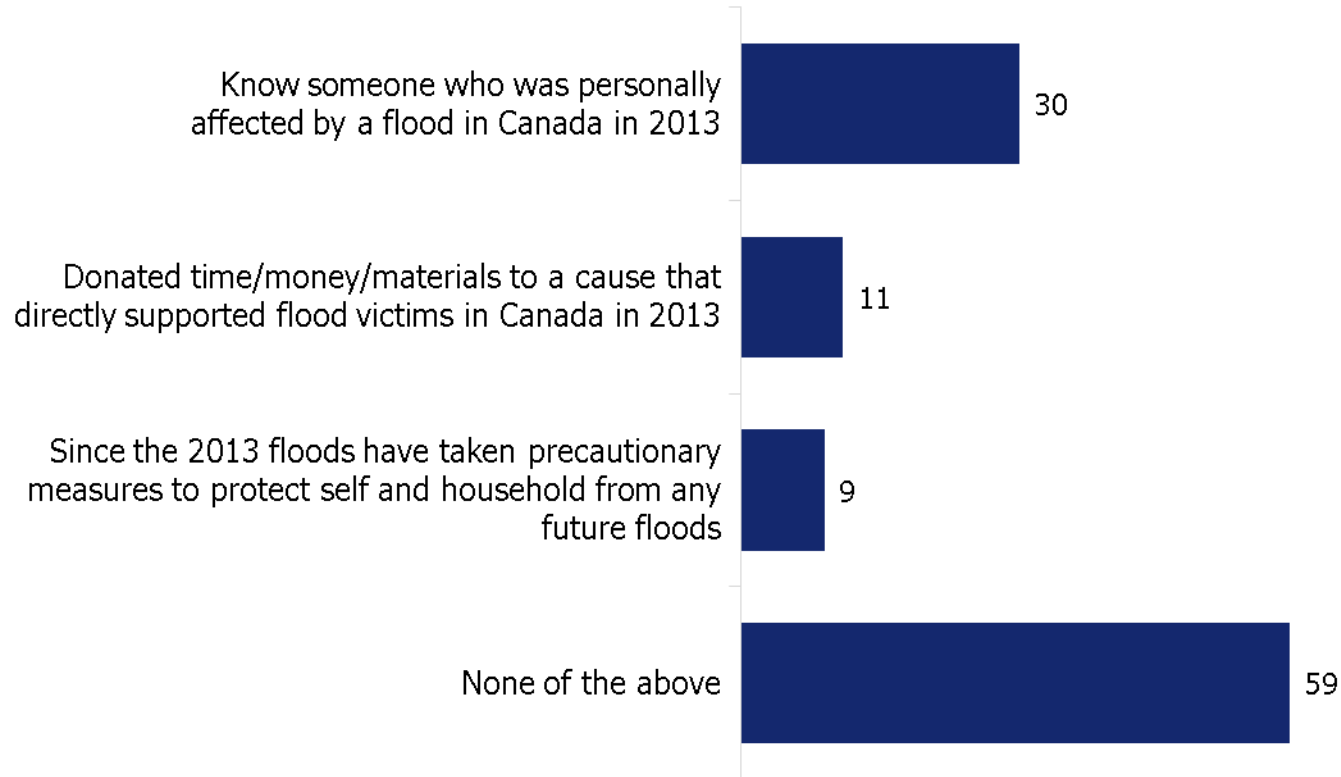


2014 n=2,074

Do you currently live in an area that you think is vulnerable to flooding?

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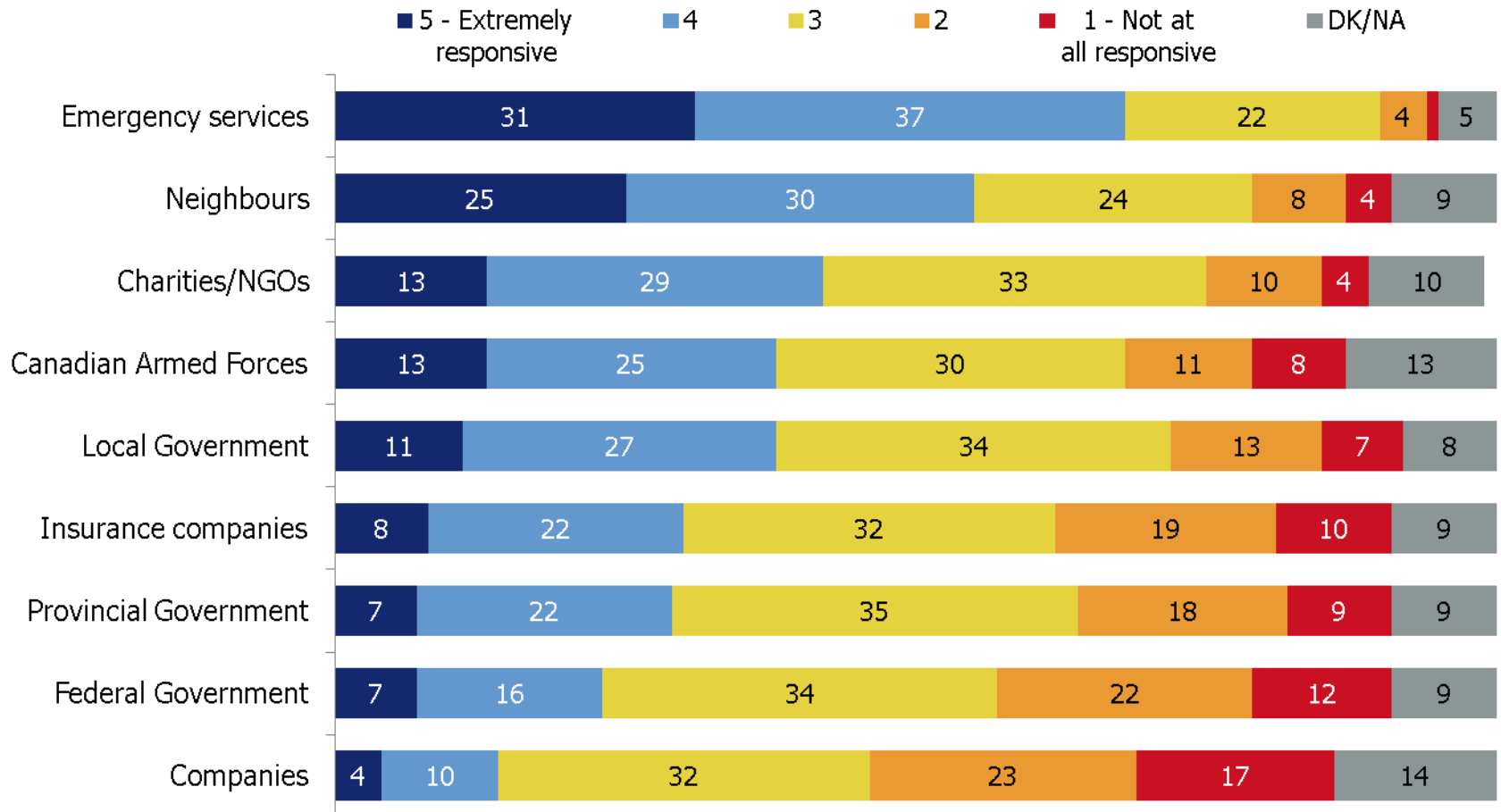
Besides the 10% of Canadians personally affected by flooding, 30% know someone affected by flooding in 2013.



2014 $n=2,074$

Which of the following, if any, apply to you in relation to the 2013 floods in some Canadian cities, towns and communities?

Canadians expect that police / fire departments and neighbours would provide the most support in an extreme weather event.

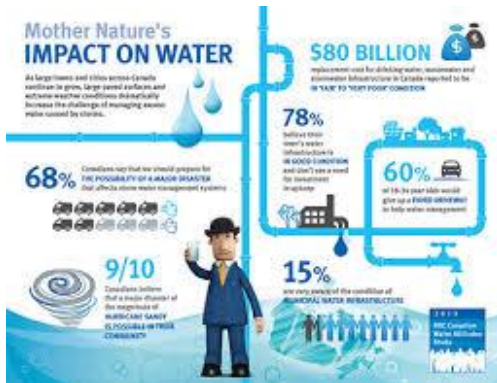


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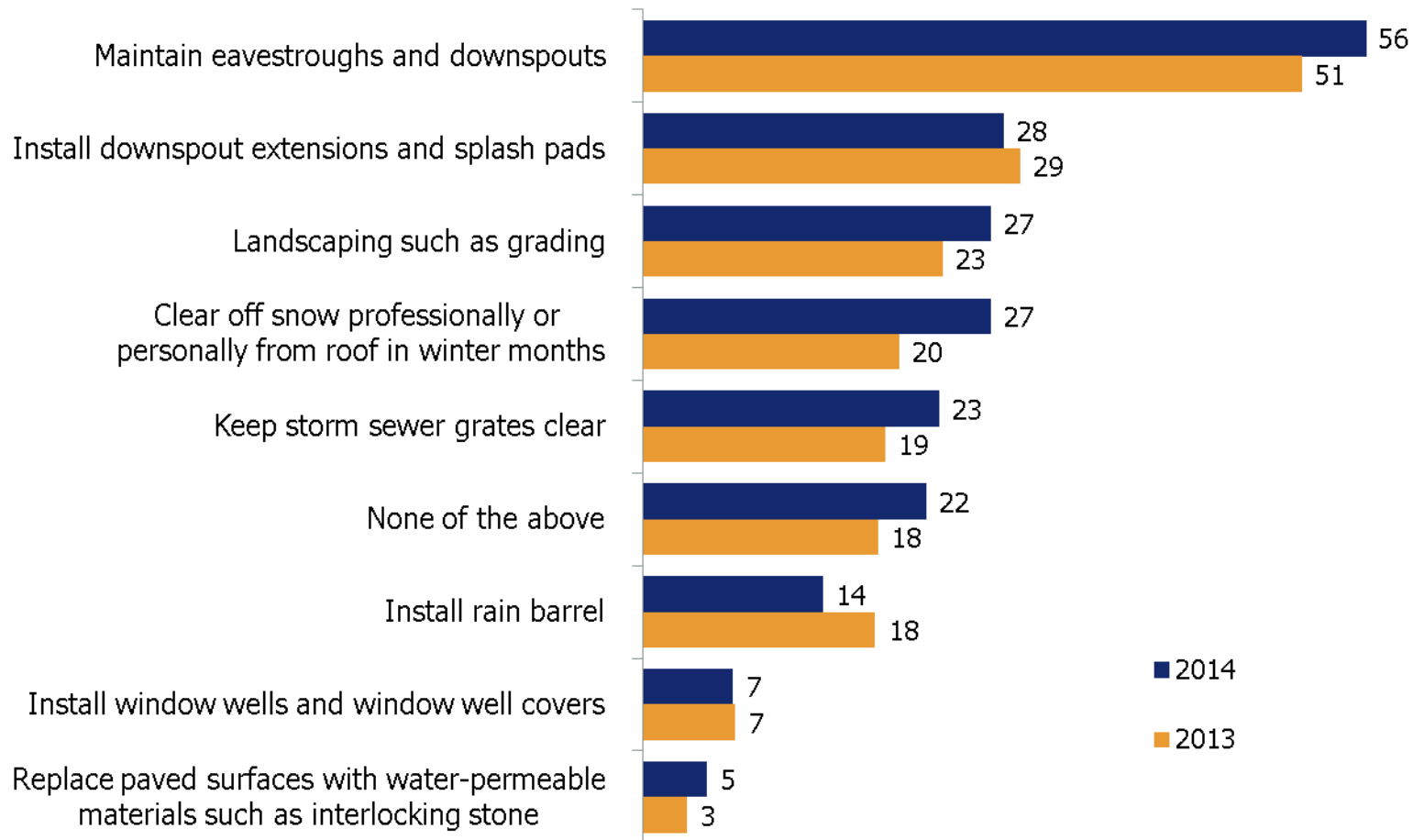
How responsive do you think each of the following types of organizations would be to you if you and/or your family were adversely affected by extreme weather events, including flooding? Please use a scale of 1 to 5, where 1 means 'not at all responsive' and 5 means 'extremely responsive.'



Preparing for the Future



The top preventative measure Canadians take to prevent water damage to their homes is once again eavestrough and downspout maintenance.

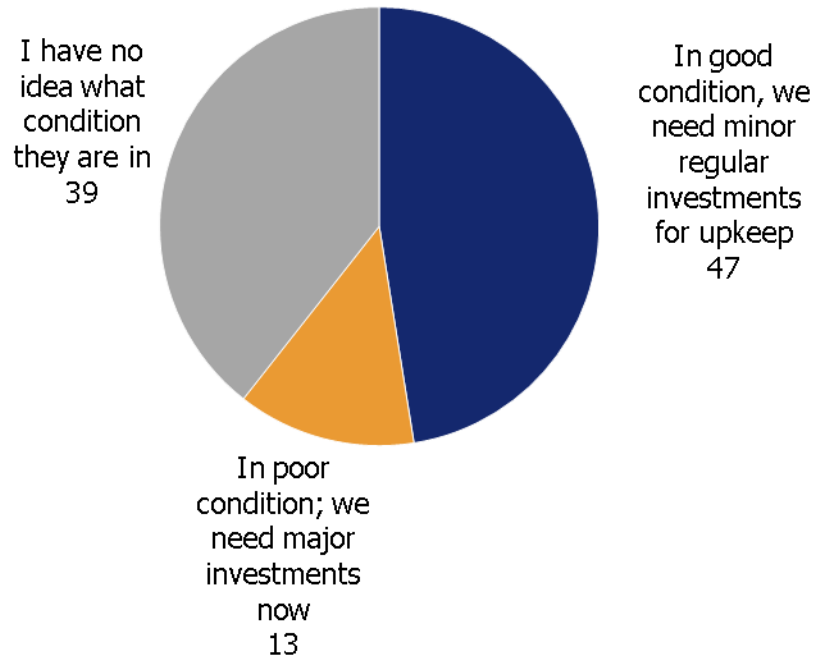


All respondents living in a house, 2014 $n=1,365$, 2013 $n=1,554$

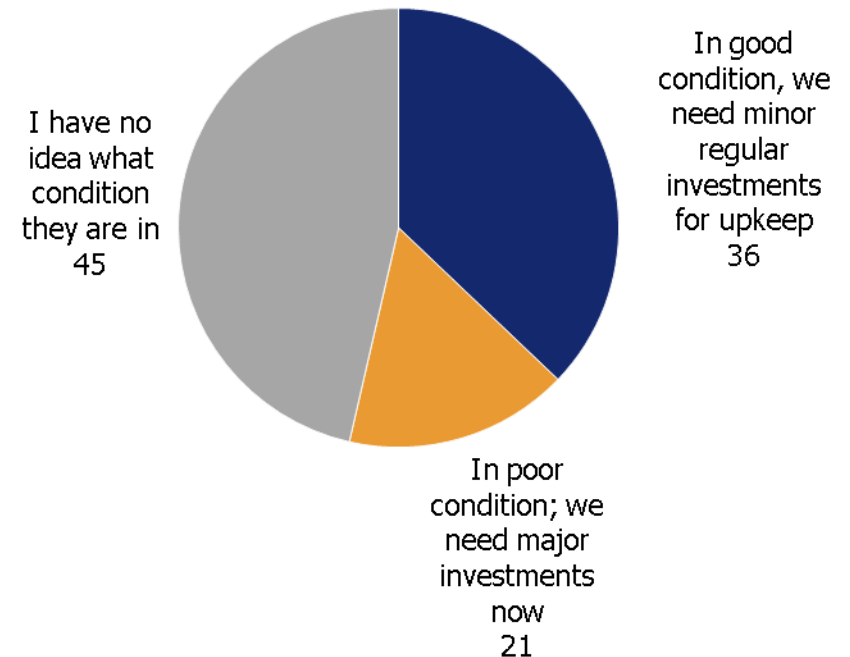
What are the top preventative measures you take or have taken to help prevent water damage OUTSIDE of your home? Please select up to three.

Few Canadians think our water systems require major investment. But, 40% admit to having no knowledge of the condition of our water systems.

The water treatment and delivery systems in your community



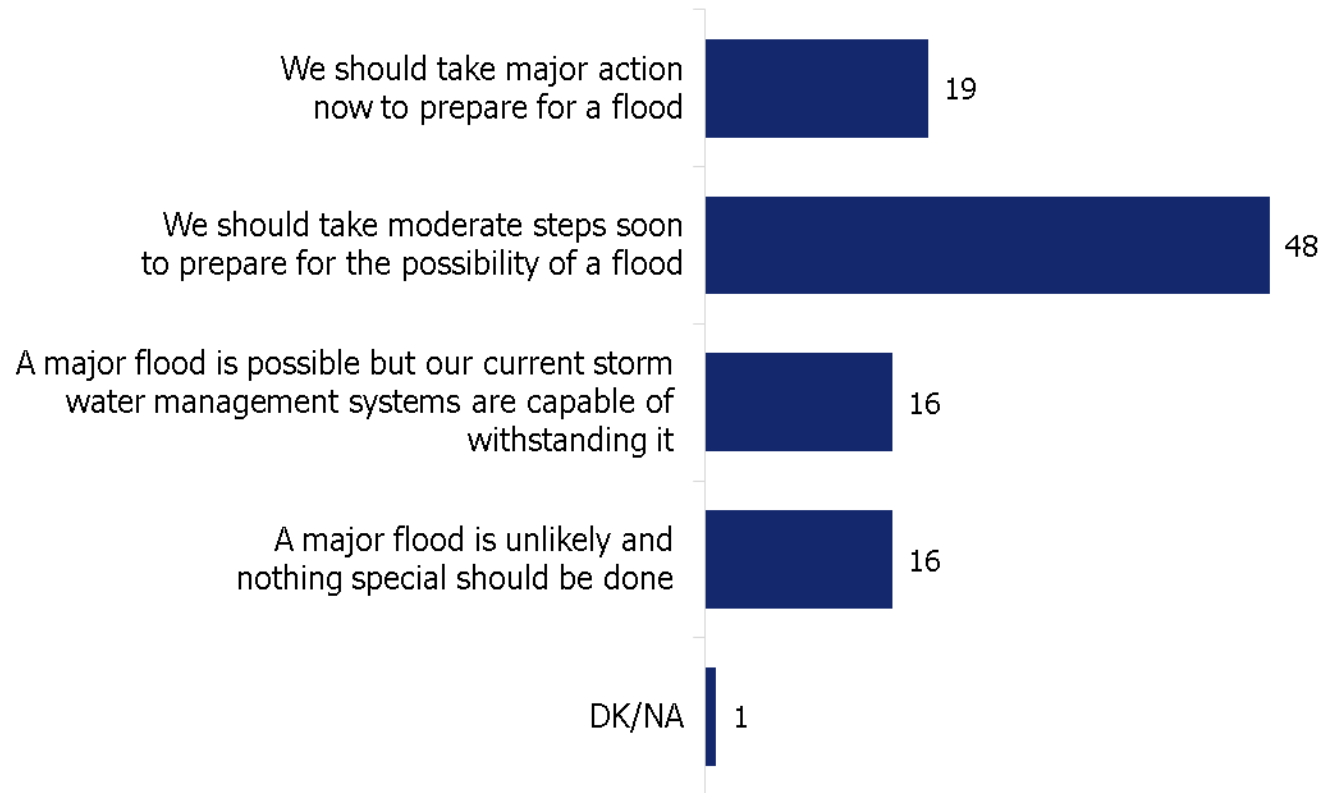
The storm water management systems in your community



Those who use municipal water supply, 2014 $n=1,869$

Which one of the following is closest to your own opinion about...

Two-thirds of Canadians think that action is needed to prepare municipal stormwater management systems for flooding.



2014 $n=2,074$

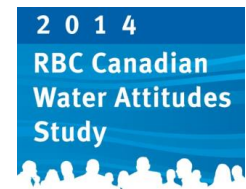
Excessive rainfall or snowmelt can cause floods such as those that overwhelmed municipal stormwater management systems in Calgary, Toronto and other regions in 2013. Which one of the following best describes the approach you think your community, town or city should take with respect to the capacity of its systems to manage excess stormwater?

Look to future of public expectations: people in Calgary much more likely than others to think we should take major action to prepare for future floods

REGION						CITY						AGE				GENDER		COMMUNITY SIZE		
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15	31	17	19	19	10	14	41	27	25	22	13	12	23	23	18	20	24	18	6	

2014 n=2,074

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In Summary

1. What will it take for Canadians to protect themselves from a flood?
2. Why are experts sounding the alarm?
3. Who will come to the rescue?

Thank You!

The thank you email you will receive following this webinar will direct you to a link to download these webinar slides, as well as the detailed report.

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