


Public Attitudes Project 2015

Changing Public Attitudes on the Value of Canada's Water System Infrastructure

CWWA ACEPU
Canadian Water and Wastewater Association canadienne des eaux potables et usées

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Introduction

What Is This Report About?

Every community across Canada is facing significant challenges to maintain and renew its municipal infrastructure, which includes water and wastewater systems—critical services that, too often, seem to be forgotten in the shadow of the others.

This report is about how we get water and wastewater infrastructure seen as priorities in communities so they might receive an appropriate share of government funding. While the formal decision for how public funds are expended rests at a political level, those decisions must be supported, or at least understood, by the general public.

Frighteningly, according to the RBC Canadian Water Attitudes Study, barely half of Canadians know where their water comes from, how it is treated, or what happens to their waste. Even fewer have any concept of the condition of their municipal systems or the need for investment. Even those who do recognize water as a priority and support investment in water systems do not grasp the magnitude of the challenges.

The general philosophy behind this report is that, to build public support, we need to better educate the public so they understand how their water systems work, what needs to be done, and what will happen if we don't act soon.

The Value of Water

For those of us in the water community, it can be difficult to stand up and say that water is more important than other municipal services, but water is life.

Water is also the most crucial element of our economy. You would be hard pressed to name an industry that is not reliant on water in some way. The health and economy of every community relies upon reliable sources of clean water. All municipal services are important, but without water, a community cannot exist.

Designing the Project

CWWA looked to a wider community of water leaders and thinkers, as well as the business community and the health sector, for examples of successes in changing attitudes.

This report is about how we get water and wastewater infrastructure seen as priorities in communities so they might receive an appropriate share of government funding.

To focus the discussion, we framed it around a few simple questions: What is the attitude that we want the public to have? Who are our target audiences? What are some of the messages we might use for each audience? And how might we best convey those messages?

What Do We Do With This Report Now?

This is certainly not a final communications plan, but rather the first step. We hope this can be a framework for developing a communications plan in your community, or the start of a cooperative national effort.

We hope it starts to answer the four questions we posed above and provides great ideas from the water leaders and communications experts we gathered from across Canada.

Robert Haller, Executive Director, CWWA

Public Attitudes and the Infrastructure Challenge

The Challenge

We recognize that there are many facets to our industry: water treatment, water distribution, wastewater collection, and wastewater treatment, as well as source protection and stormwater management. While each can be seen as a unique process on its own, they are united as part of one complete cycle. The physical elements of that cycle form water infrastructure.

As we consider the many issues facing each phase of that cycle, we recognize that almost all relate to infrastructure challenges in one way or another. Aging treatment plants and pipes, adaptation for climate change and severe weather, community growth, security concerns, new technologies, and new government regulations all pose infrastructure challenges.

Other than building for new growth, the last major investments in water infrastructure in Canada were 50 to 100 years ago or longer. Since then, a lack of adequate planning, deferred maintenance or replacement, and the political tax distribution systems in Canada have led to a massive funding 'gap' between what is required and what is currently budgeted.

Estimates are in the hundreds of billions of dollars to address our municipal infrastructure challenges in Canada. According to the Federation of Canadian Municipalities (FCM) 2012 Canadian Infrastructure Report Card, at least $80 billion is needed to upgrade or replace current water and wastewater systems. FCM and CWWA estimate more than $20 billion will be required to meet the new Wastewater Systems Effluent Regulations.

The Cost of Doing Nothing

The general public takes these systems for granted and they place incredible trust in their local utilities. But these systems do fail—especially when neglected or pushed beyond their capacity. The signs of deteriorating infrastructure are everywhere: from increasing watermain breaks and sinkholes to major equipment failures.

"The option of 'doing nothing' is akin to gambling with the community's money," said CWWA Executive Director Robert Haller. "You might get lucky a few times and avoid a cost, but when a system does fail, the losses are far greater than the earlier savings." There are hundreds of case studies to prove the point that the cost of failure is far greater than the cost of planned maintenance and replacement.

Why We Need to Change Attitudes

Water and wastewater services are not the only services provided by local governments. Rather, utilities must compete with other infrastructure—policing, fire, recreation, culture, and social programs—for limited public funds.

In such a competitive environment, our industry can be at a significant disadvantage with unseen infrastructure that is buried or out of town. Replacement is usually costly and disruptive to communities, while the improvements from such investments are rarely perceptible to the average citizen.

In 2013, the federal government, through its Long Term Infrastructure Plan and the Building Canada Fund, dedicated $53 billion toward infrastructure renewal over 10 years. For the most part, these funds are to be matched by provincial and local funds. However, these federal funds are for 'all' infrastructure with no funds specifically earmarked for water. The decision on how to use these funds then moves to the provincial and local level to establish priorities.

> **"The option of 'doing nothing' is akin to gambling with the community's money."**
>
> Robert Haller

Those elected to make these decisions are answerable to their electors. In order for elected councils and boards to make water infrastructure a priority, they need to know they will have the support of the public. If the community is not aware of the threats to their water systems or the inevitable costs of doing nothing, how can they be expected to support the decisions that need to be made?

According to the 2014 RBC Water Attitudes Survey, there is minimal public understanding of our water infrastructure challenges. To build that public support for investing in critical water infrastructure, we need to build an appreciation of the value of water, and what this value brings to each individual and their community.

The Public Attitudes Project

In Spring 2013, representatives from CWWA, BCWWA, and Actual Media Inc. met at the Canadian Water Summit in Calgary, just days after the flooding had begun to subside, to discuss collaborating on a project.

In discussing the infrastructure challenges of the country, we recognized the tremendous role public attitudes would play. Building public support would be key to influencing decision-makers to set water systems as a priority for funding.

To approach such a communications initiative, we also recognized that we would need to look beyond our own membership for expertise and direction. We called on water leaders from across Canada and from a variety of backgrounds, including industry, utilities, business, health, First Nations, and municipal and provincial governments.

(A full listing of the survey respondents and roundtable participants can be found at the end of this report.)

"Canadians need to participate in the governance of their communities, their province, and their country. Be proactive and engaged in the policy decisions that affect our natural resources, for they are the wealth of our nation and our future."

Lisa Marie Fox

The Survey

In Fall 2013, Actual Media conducted a survey with a select group of water leaders. The goal was to get an initial feel for what these experts believed to be the most pressing issues in the Canadian water space and some thoughts on public awareness campaigns.

It was a fairly simple survey with only five questions:

1. Broadly, what are your top three concerns about the current state of water management in Canada?
2. More specifically, what does the public most need to know about water management?
3. What things could an individual do that would make the biggest positive differences to how we currently manage water in Canada?
4. What elements make a successful public awareness campaign?
5. Have you participated in, or heard about, any especially successful campaigns or efforts to encourage the public to act on a particular water issue?

Not surprisingly, one of the top issues was public awareness and education, especially in regard to changing public attitudes about the value of water and the systems in place to deliver and treat water and wastewater. The survey respondents identified two key recommendations for the general Canadian public: become educated on how water and wastewater are treated and voice your opinions.

The Round Table

Armed with the results of the survey, we then facilitated a round table of many leading Canadian water experts. The round table was held in June 2014 to coincide with the Canadian Water Summit in Toronto.

We gathered a very diverse team for this round table. In addition to utility leaders, there were academics, business leaders, and public health experts. The group was also diverse in terms of age, gender, and geography.

To keep the session focused, we framed the discussion around four simple questions:

1. What is the attitude that we want the public to have?
2. Who is our target audience or audiences?
3. What are some of the messages we might use for each audience?
4. How might we best convey those messages?

We acknowledged from the outset that this project was not a final communications strategy, but that it would provide a framework for users to develop a public awareness campaign themselves. What are the major points to keep in mind and what are some suggestions one might consider?

"People don't understand how water connects to everything in their community: their public health, their businesses, their recreation, the environment." Warren Wishart

The Report

From analyzing the issues to brainstorming effective imagery and messages, we worked with some of the most water-smart people in the country to come up with plans and ideas for a communications framework.

The following pages present the findings and recommendations from the survey and the round table session. We have done our best to consolidate and organize their suggestions and tips. This guidance from our panel of experts is not a complete communications plan, but suggested tips to support the development of local, regional, or even national campaigns.

The three main goals of a communications plan should be to:

1. Raise public awareness and encourage commitment to the state of water infrastructure;
2. Promote the need and benefits of infrastructure improvement and replacement to target audiences; and
3. Maintain consistent and positive messages at all times.

New Attitudes

Where Are We Now?

For a clear sense of what public attitudes are like now, we recommend you start with the wealth of information compiled by the RBC Blue Water Project over the past eight years. (Details of the questions, the findings, and the analysis can be found online.)

The RBC survey results confirm that the public has tremendous confidence in the quality and safety of their drinking water (although different age brackets have varying levels of confidence), but these survey results also confirm that the majority of Canadians have very little understanding of where their water comes from, how it is treated, or what happens to their waste. Even fewer are aware of the condition of the infrastructure they rely upon or the need for renewed investment.

These results are broken down by gender, age, and region, and sometimes even by city. This is valuable information when designing your message and identifying your audience.

Only 1 in 10
Canadians think **water treatment, water delivery, and stormwater systems** in their community **require major investment**, according to the 2015 RBC Canadian Water Attitudes Study

What Attitudes Do We Want?

If we want to change public attitudes, we need to have a clear concept of what attitudes we want them to have.

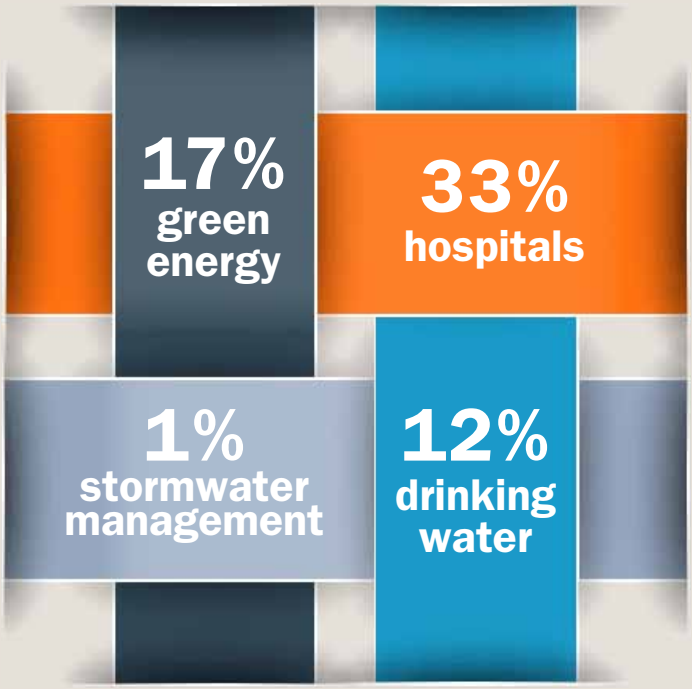
The focus of this project is NOT about conservation or reducing personal consumption rates but about building support for major infrastructure investment. There has been a lot of positive focus on water efficiency programs over the years, and such programs have yielded great results. These efficiency programs do produce savings, and most importantly to this project, they also give people a sense of the value of water.

But now we need to create public support, or at least acceptance, of the decisions that need to be made by locally elected officials.

These decisions could include:

- Investing in water infrastructure over other projects;
- Disrupting communities to implement improvements; and
- Raising water prices.

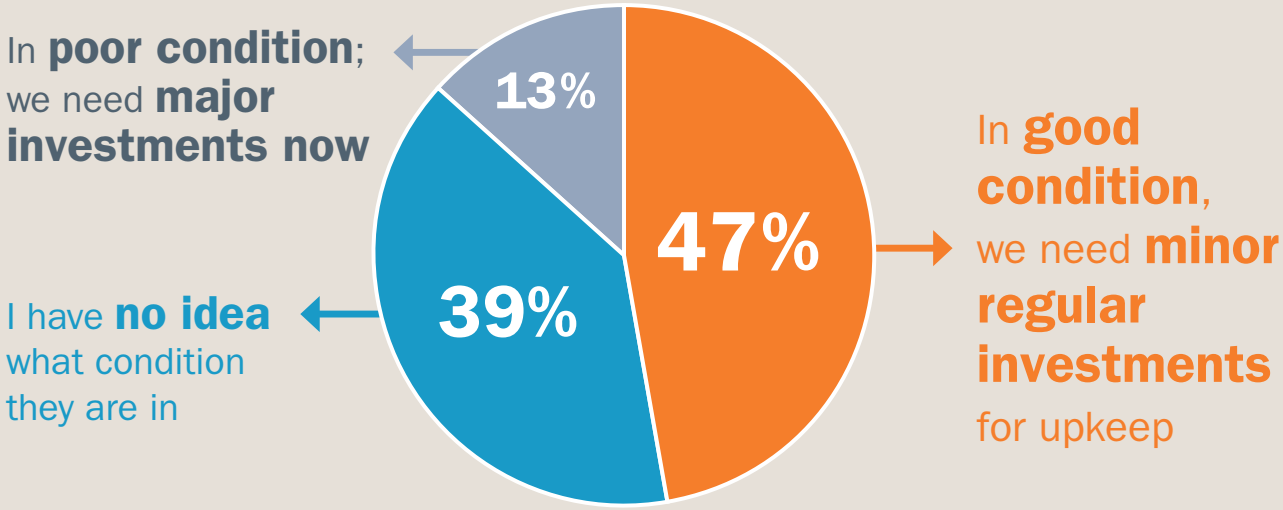
It is only by building public awareness that citizens can begin to support these decisions, get concerned about inaction, and even begin to lobby for proactive solutions.



Which **infrastructure areas** did Canadians say should be the highest priority for **government funding** in Canada?

Just 1 in 5 members of the general public believes that **major investments** in **stormwater management** are necessary

What **condition** do Canadians say their community **water treatment and delivery systems** are in?



Source: 2014 RBC Canadian Water Attitudes Study

Target Audiences

Your message, the imagery you use, and the methods you use to deliver your message will all depend on your target audiences. You may choose a blanket message directed to anyone and everyone or you may choose to target specific, identifiable audiences. You could run simultaneous campaigns to multiple audiences, but to be effective, each audience must have a specific message designed for them.

"Most people will accept that you have to fix a leaky pipe. Most people will accept that you have to repair things regularly. Your car can't go without maintenance and water systems are no different."

Warren Wishart

"Oftentimes, people refer to these old campaigns about turning off the taps because they have those tangible calls for action. A lot of people in my experience aren't all that interested in leaky infrastructure. They just want to know how they can contribute, so we need to give them things they can do."

Ramona Doyle

Target Audiences

Our participants identified the following target audiences:

AUDIENCE	MESSAGE DELIVERY CONSIDERATIONS
All Taxpayers	■ Since just about everyone pays local taxes (directly or indirectly), this audience group is the general public as a whole. ■ This would require widespread messaging designed to reach all adult ages, education levels, and interest levels.
Influencers	■ This narrows down your audience to those in your community that might have the greatest influence on decision makers. Each community will be different. ■ Not everyone votes, so perhaps you can identify and target the audience that will influence council with their votes. This may be determined with the use of demographic information. ■ Other influencers may be business organizations, community associations, and active social and services groups. Grassroots environmental networks that can better convey your message to the broader public may also be identified as influencers.
Councillors	■ This is not a target group in the public, but councillors do need to be specifically identified in any campaign. It is critical to inform councillors in advance of any upcoming campaign, its content, and its purpose. You may wish to provide coucillors with more detailed support information so they may be able to speak to the messages.
Children & Youth	■ This is seen as a two-step effort or a longer term approach. ■ Children and youth are more open to learning and more accepting of environmental messages. ■ We have repeatedly seen that if you teach the children, they will train the adults. We have seen this two-step concept work in efforts related to anti-smoking, seatbelts, conservation, recycling, and more. ■ In the longer term, we hope that these youths will hold on to these supportive attitudes when they become voting adults.
Media	■ You may need to deal with the news media to get your message to the target audiences noted above, but keep in mind that journalists are an audience of their own. When speaking to reporters, it is important to speak in plain English and to avoid industry jargon. Make sure you highlight the newsworthiness of your message to increase the chances of the media outlet picking up the story.

Drinking Water

Grade: Good, Adequate for Now

15.4% of the drinking water systems surveyed were rated “fair” to “very poor” for the condition of their pipes; **14.4%** were rated “fair” to “very poor” for the condition of their plants, reservoirs, and pumping stations.

Wastewater Collection and Treatment

Grade: Good, Adequate for Now

40.3% of wastewater plants, pumping stations, and storage tanks rated “fair” to “very poor”; **30.1%** of pipes rated “fair” to “very poor.”

Stormwater Management

Grade: Very Good, Fit for the Future

12.5% of stormwater facilities rated as being in less than “good” condition; **23.4%** of stormwater pipes were found to be in less than “good” condition.

How much will it cost to **repair or replace** our water and wastewater infrastructure?

Stormwater
$15.8 billion

Drinking Water
$25.9 billion

Wastewater
$39 billion

Source: The Canadian Infrastructure Report Card 2012. Data based on survey responses from 123 Canadian municipalities in 2009-2010.

You can't just go out there and say, "Vote for Higher Water Rates!" You could try, but we think the public needs to be coaxed along to that point. Surveys have shown that the public is not automatically opposed to tax or rate increases if they feel they are receiving a valuable service and they are confident their funds are being spent wisely. These are the emotions we can work toward. We identified three core messages in our survey and round table: the value of water, understanding water systems, and the cost of doing nothing.

1 THE VALUE OF WATER

As most Canadians have always had abundant supplies of clean water, they tend to take this service for granted. We need to remind them of just how important water and wastewater systems are.

LIFE: Water is integral to almost every aspect of life.

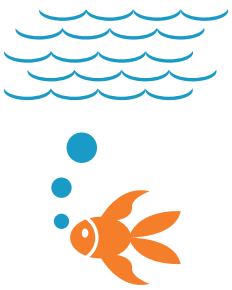
- Water is central to almost every part of our day: drinking, food preparation, washing, toilets, fire protection, recreation (pools/ice rinks), and more.

HEALTH: Water is the most important element in maintaining a community's health.

- The introduction of treated water systems has saved more lives than any other medical advancement.
- Local health units can support this message.

ECONOMY: Water is critical to the economy of every community and region.

- Water is required for most industries, manufacturing, food production, food processing, hospitality, and more.
- Local chambers of commerce and business associations can attest to this.



ENVIRONMENT: Communities create a LOT of waste!

- Without proper collection and treatment of that wastewater, we threaten our regional environment, our use of lakes and rivers, and our own drinking water supply.

Core Messages

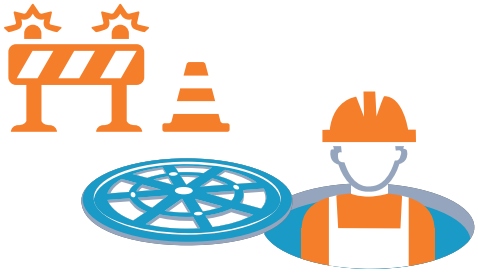
The Value of Water: Strategies and Images

How can we provide messages dealing with the value of water?

- Create media that shows a person trying to get through a daily routine without water:
  - No showers, toilets, laundry, or clean dishes;
  - No accessible drinking water;
  - No recreation (swimming or skating); and
  - No fire protection.
- Work with your local health unit on messaging:
  - Importance of clean water to your health
  - Cleanliness and disease
  - Images of doctors prepping for surgery with tap water
- Educate local business owners on why they need clean water:
  - Produce stats on how many jobs these businesses create and the financial impact on the community, and then indicate what would happen if they lost access to water.
- Create media and infographics about the water service and its cost to share on social media:
  - Comparing cost to other services (e.g., internet, cable TV, phone, etc.)
  - Comparing cost of tap water to bottled water

2 UNDERSTANDING WATER SYSTEMS

The RBC Canadian Water Attitudes Study shows Canadians take their water systems for granted. Many residents have no idea where their water comes from, how or why it must be treated, or what it takes to deliver clean water to their home. The same is true for the wastewater process. For many, it is magic: they turn a tap and an endless supply of water appears and they flush a toilet and their waste disappears. When improvement work is done, the public may experience a disruption of service and some inconvenience, but rarely will they be able to perceive any difference in water quality or service. Some questions and challenges we need to address are:



BECOMING VISIBLE

- We always say that municipal utility workers do their job so well that no one notices what they do.
- The pipes are underground and behind walls and the treatment plants are on the edge of town or even outside of the city limits.
- So how are people supposed care about a system that no one sees and no one talks about?

EDUCATION

We need to educate the public on how the water and wastewater cycle works.

- Where does the water come from?
- How and why is it treated?
- How does it get from the source to your home?
- How do we collect the wastewater?
- How do we treat it before it is released?
- What happens to the biosolids?

AWARENESS

We need to make the public aware of the condition of their systems.

- How old are the pipes and plants?
- What are the priority concerns?

BENEFITS

- How does investing in water benefit the consumer?
- How much water do we save, and as a result, how much energy?
- How do these savings affect the city budget and water rates?
- How will this improve the local economy?
- How do these improvements ensure better service?
- How do these improvements protect our environment?

Core Messages

Understanding Water Systems: Strategies and Images

- Open treatment plants for public tours.
- Promote these tours to target audiences.
  - Schools, service clubs, business leaders, media
- Use construction sites as educational opportunities.
  - Invite council, local residents, and associations to a road reconstruction/pipe replacement to explain what is going on.
- Prepare educational materials about how the system works.
- Make simplified reports on the condition of the system.
- Create a video that follows a camera as it travels from the river, through the treatment plant, through the pipes, and finally, out of your tap.
- Provide details on the utility budget so people understand the costs:
  - Annual cost of staff and training
  - Energy and chemicals
  - Annual maintenance
  - Long-term capital planning
- Simplify water bills to make them more educational and less confusing.

3 THE COST OF DOING NOTHING

FAILURE vs. PLANNING

- Without scaring the public, we need to be blunt in stating what is likely to happen if we do not start to upgrade or replace infrastructure. There will likely be:
  - Increased watermain breaks, sinkholes, and ensuing damages;
  - Unplanned losses of service; and
  - Greatly increased costs.
- We must also stress the need for revised stormwater control and flood planning and the threat of property damage and economic impact.

WASTE and INEFFICIENCY

- Old leaking water pipes can lead to more than 30% water loss.
- Leaking wastewater pipes lead to treating rainwater.
- Unnecessary treatment is unnecessary energy use.

ENVIRONMENT

There will be impacts on:

- Water sources and freshwater supply;
- Recreational use; and
- Fish and wildlife habitat.

Core Messages

The Cost of Doing Nothing: Strategies and Images

USE OF CASE STUDIES

- Use real-life examples of how neglect or deferred maintenance led to failure, and compare the emergency repair costs to what proactive planning may have cost. (e.g., a $1-million maintenance price tag turning into $5 million in emergency failure response.)

COMPARISONS TO WISE HOME MANAGEMENT

- Show the public that maintaining water, wastewater, and stormwater infrastructure is like taking care of your home:
  - People repair a roof before it leaks and causes internal damage to the home.
  - People save for a new car and replace it before it causes an accident or breaks down.
- This is where you can reference homeowners' personal efforts to reduce waste by installing low flow toilets, using more efficient appliances, implementing wiser lawn watering, and fixing dripping taps. Meanwhile, their town is wasting up to 30% of all treated water through leaking water pipes.
- Homeowners often turn off their lights and use energy-efficient light bulbs and appliances, but their town is using energy to treat and pump water that leaks away and then treats rainwater that seeps into the waste stream.

GOVERNMENT ACCOUNTABILITY

Images of a council gambling with public funds to see if they can get away with an extra year before addressing a problem

DISASTER RESPONSE

- In a respectful way, use disasters and system failures—locally and from around the world—as examples and learning opportunities:
  - What can we learn from those examples?
  - How can we reduce the risk of that happening to us?
- Use examples of closed beaches following a rain event.

NEVER SCARE OR CREATE FEAR

This was probably one of the strongest warnings from our round table and survey participants. We have to keep the messaging positive.

THERE IS A THREAT TO SERVICE, NOT TO QUALITY OR SAFETY

- Failure of systems means a loss of water or wastewater service.
- This cannot be framed as a threat to water quality or the safety of their drinking water.
- We do not want to shake confidence in the safety of tap water or encourage a move toward bottled water.

WE CAN DEAL WITH THIS ISSUE

Infrastructure investment is important and the dollar numbers are big, but we cannot create a sense that the problem is too big to handle.

- Asset management helps to set priorities.
- New methods can prolong service life and avoid full street reconstruction.
- New technologies can be more affordable to purchase and more economical to operate in the longer term.

Suggested Tips

APPEAL TO EMOTIONS AND MAKE PEOPLE CARE

In a speech to the Canadian Water Network, CBC's Terry O'Reilly suggested that, in order to motivate people, you have to "tell a story" to engage the listener. All of our survey and round table contributors spoke to the use of emotions to make people care.

You can't just throw facts at people. Rather, you have to involve them somehow and make it relevant to them.

People are motivated by:

- Money and savings;
- The frustrations of waste and inefficiency;
- Jobs and the local economy;
- Concern for health; and
- Concern for the environment.

USE HUMOUR

Humour can capture the listener while still conveying a serious message. A well-made campaign that strikes the funny bone has a better chance of being shared and going viral.

USE DEMOGRAPHICS

There is a lot of very detailed information out there that can help you to better pinpoint your target audience. Demographic information can help you isolate your influencers or where you may get the best response.

REACH CHILDREN AND YOUTH

This approach can have two benefits: we hope to develop habits and attitudes in these children that they will carry into adulthood, but we also hope they will motivate their own parents now.

- Approach the schools to arrange classroom visits.
- Coordinate school visits to the treatment plants.
- Work with the local school board to develop curriculum for a learning module about water and wastewater systems.
- Approach service clubs like Scouts, Girl Guides, Cadets, and Boys & Girls Clubs and organize visits to treatment plants or help them develop their own water awareness programs.

WORK WITH THE MEDIA

There is no guarantee that your carefully produced educational materials will reach your target audiences. In those instances, working with and through the news media may be your best bet. While you ultimately have to give up total control of your message, you will have access to a greater audience.

- Identify your local news media and the most appropriate contacts at each.
- Develop a relationship before any urgent or emergency events occur.
- Provide reporters with advance notice of campaigns, fully explaining the concepts and goals.
- Use local pipe failures or other issues as learning opportunities, ensuring the media are given the fullest information on the situation like possible causes and how the problem could be avoided in the future.
- Be prepared to comment on disasters affecting other communities and provide insight on the risks that each situation could pose to your community and how your community might reduce that risk.

SUGGESTED COMMUNICATION ACTIVITIES

ACTIVITY	DESCRIPTION
Engage in local events	Participation in community events is recommended. Kiosks can be erected at local events as a means to educate those in the community. Regional public works, partner organizations, and local/regional businesses can cooperate in these initiatives to promote and distribute educational literature on water infrastructure and discuss the issues with people face to face.
Create public seminars/facility tour programs	Develop a series of seminars designed to be enacted in any jurisdiction. These can possibly be in partnership with an established regional or national association that may already have seminar programs. The programs should be customizable to effectively communicate issues affecting different regions, but still must be consistent with the overall message. Open house tours of water facilities as a means to generate awareness of where it "all begins" are also encouraged. This could be an effective way to target younger generations as part of a school field trip program.
Development of specific communication circulars (billing statement messaging, buckslips, etc.)	A regular series of 'buckslip' and envelope stuffers can help raise public awareness. This can also be produced electronically for e-billing accounts and e-communications. It's an effective method to reach the community.
Identify 2-3 short story segments for video production	Videos should be short (max. 90 seconds each). With smart phones and increased access to home editing software, it is easier than ever to develop videos that can be shared online and through social media networks.
Reach out to journalists/ mainstream media	Write a well-crafted press release designed to engage journalists. Industry and association experts should also be identified and made available for discussion for any media representative wishing to pursue a story. Note: It has to be mainstream media outlets, not industry publications. Messages should educate and create a sense of urgency without causing panic.

DO YOU HAVE A PLAN YOU CAN SHARE? LOOKING FOR EXAMPLES?

Can you share what you are doing in your community or do you know of a great program you have seen? We are looking for the examples of effective municipal campaigns and public outreach projects from across the country for our online media archive. Is your organization or municipality currently working on a public outreach project? Do you know of an effective municipal campaign? We'd like to hear from you!

Send links to your favourite outreach campaigns to **admin@cwwa.ca** and we will add these projects to our online archive.

Looking for ideas? You can find links to other municipal campaigns and resources from across Canada at **cwwa.ca/CWWApub_e.asp**

For more information on public attitudes and the state of our country's infrastructure, visit:

RBC Canadian Water Attitudes Study:

rbc.com/community-sustainability/environment/rbc-blue-water/water-attitude-study.html

The Canadian Infrastructure Report Card:

canadainfrastructure.ca/en

Value of Water Coalition:

thevalueofwater.org

Round Table Participants

Rupinder Assi is an Environmental Supervisor and Sustainability Officer with Sodexo – Mackenzie Health.

Alison Chan is a project engineer in the Water Division at Black & Veatch Canada. She is the Chair of the Water Environment Association of Ontario's Young Professionals Committee.

Heather Colquhoun is a Manager on the Corporate Citizenship team at RBC. She supports the strategy and tactical execution of the RBC Blue Water Project, RBC's 10-year, $50 million commitment to help protect fresh water.

Ramona Doyle is the Sustainability Officer with the City of Charlottetown. She began working with the City in 2010 as the Water Conservation Program Coordinator for the Water & Sewer Utility Department.

James Duff is a Marketing Manager at Keyscan Inc. with more than 13 years of tactical and managerial experience in corporate and ad agency environments.

Drew Evans is the Vice President of Business Development and Government Relations at Real Tech Inc.

Kerry Freek is the Water Technology Acceleration Project's (WaterTAP) Manager of Marketing and Communications. She is the former editor of Water Canada and recently co-authored a book with Robert Sandford called Flood Forecast.

Robert Haller is the Executive Director of the Canadian Water and Wastewater Association. He was a senior municipal manager for 20 years.

Lesley Herstein is a PhD Candidate in the Department of Civil Engineering at the University of Toronto. Her work has concentrated on innovative approaches to infrastructure planning.

Round Table Participants

Clark Kingsbury is the Assistant Editor of Water Canada and ReNew Canada.

Rachel Phan is the Editor of Water Canada. She has seven years of experience in the journalism industry.

Nick Reid is Executive Director of Strategic Partnerships for the Ontario Clean Water Agency and the former General Manager of Operations and Maintenance for the Lakeview and Lorne Park Water Treatment Plants and the G.E. Booth and Clarkson Wastewater Treatment Plants.

Robert Sandford is the EPCOR Chair of the Canadian Partnership Initiative in support of the United Nations Water for Life Decade and the author or co-author of ten books on water and water policy in Canada including *Cold Matters: The State and Fate of Canada's Fresh Water* published in 2012.

Lee Scarlett is the Association Publisher of Water Canada magazine with 16 years of experience in the environment industry.

Mike Stadnyckyj is the Embedded Marketing Executive at WaterTAP. A water-industry veteran of more than 15 years, he has worked at GEWater, Zenon Environmental, Pure Technologies, Anaergia, and Wachs Water Services.

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The entire round table proceedings are available online. Go to **cwwa.ca/CWWApub_e.asp** to read more.

Rachel Phan, Water Canada, and **Robert Haller,** CWWA

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