



Water Conservation Strategy

Final Comprehensive Engagement Report
April 25, 2022



Engagement Summary

The City of Saskatoon is developing a long-term Water Conservation Strategy (Strategy) that will focus on all water uses and users including residential; the industrial, commercial, and institutional sectors; the City itself; and water used indoors and outdoors. The Strategy aims to develop best practices, generate, and gain approval for initiatives that could lead to incentive programs for residents and businesses, develop educational materials, and create the potential for changes to policies/regulations. From February 2020 – June 2021, Administration engaged stakeholders on relevant components of a Water Conservation Strategy. Based on what we heard from stakeholders, in addition to best practise research and internal (City) considerations, City Administration has developed a comprehensive strategy that will be presented to City Council in 2022.

City Administration engaged stakeholders on relevant components of the Strategy through three phases:

Phase 1: Options Identification

- Identify potential program options to be incorporated in the Strategy
- Identify benefits and barriers to water conservation initiatives in Saskatoon
- Of the potential initiatives, identify opportunities to enhance benefits and mitigate barriers

Phase 2: Prioritization

- Determine support for the proposed initiatives with wider stakeholder base
- Identify public preference for initiatives to help inform the prioritization of initiatives
- Select preferred initiatives to prioritize in the Strategy

Phase 3: Close the Loop

- Share relevant components of the Strategy to validate our findings, determine overall support and identify any final red flags

This engagement summary includes the activities and results that informed the engagement goals for the project. A total of 985 participants took part in the engagement activities, including various stakeholder meetings, surveys, and a youth workshop. Engagement goals, intended audience, activities, dates, participation rates and detailed engagement results are provided in the Water Conservation Strategy Comprehensive Engagement Report that follows this summary. Engagement results from all activities that informed each goal are summarized below.

Opportunities and Barriers

Industry and the public participants strongly believe (79% and 66% respectively) water conservation is important within their home or business. Out of the proposed barriers that prevent them from improving their water efficiency, participants identified the following ranking as important:



1. I don't know if I currently use too much water
2. Upgrades are too costly
3. I have already made my home/business water efficient
4. I don't know what to do and there are not enough resources
5. There are few funding programs and opportunities that help me

Further analysis of the comments identified that many participants believe the installation of water efficiency projects is very costly, especially when combined with other retrofit projects. Participants also expressed their concern for the costs associated with implementing and managing the initiatives within the Strategy, calling for the costs for the City to administer the programs to not be passed onto taxpayers. Participants were also concerned for the potential increase in household water rates if water use decreased due to the success of the initiatives within the Strategy, thereby providing little incentive for the community.

Participants identified numerous opportunities to combat the identified barriers, including providing reliable sources of information on what products improve efficiencies, providing daily usage records, aggressively targeting large consumers, and maintaining transparency in water billing and administration costs. Suggestions for increasing participation in the recommended programs included using plain language information in the monthly water bills, providing information specific to new homeowners and renters, and having support staff to assist with the program and support participants directly.

Education and Incentives

Many respondents believe education and awareness initiatives to be one of the most effective actions the City could take to encourage water conservation within the community. Respondents suggested that there is a lack of awareness for what opportunities currently exist to improve water efficiency; therefore, residents being able to measure and monitor individual water usage is vital for the success of the Strategy. A first step would be to make City water bills more readable and easier to understand, such as expressing water use in units common to their water meters (\$/litre).

Respondents identified the following proposed messages as being the most important for future education programs and resources:

- 
1. How to conserve water in your home
 2. How to conserve water in your yard
 3. How to save money on your water bill
 4. How to find leaks in your home, yard and business
 5. How does water use relate to climate change and our environmental footprint

Numerous respondents expressed their support for incentive programs (i.e., rebate, give-aways, etc.) for making it easier to make upgrades to their home, especially for those that are unable to afford the initial costs. When asked what types of incentives would increase their likelihood of making water efficiency improvements, participants provided the following ranking:

- 
1. Education on water saving improvements
 2. Rebates provided at the till when purchasing from local suppliers
 3. City providing fixtures at no-cost
 4. Rebates provided through an application process
 5. Providing home and business audits to identify water saving opportunities
 6. Rebates provided to installers and distributors

Indoor Residential Programs

Both industry and public participants supported all of the proposed initiatives (>60% of all participants). Out of the proposed indoor residential programs, both industry and public participants provided the following ranking:



1. Water-use education program
2. Toilet rebate
3. Showerhead rebate and give-away
4. Water audit and coaching program

Industry professionals identified the largest opportunities for indoor water conservation to be updating to modern fixtures and toilets, using flow-through humidifiers, and installing grey water systems.

Outdoor Residential Programs

Industry and public participants supported all of the proposed initiatives (>50% of all participants). Out of the proposed outdoor residential programs, participants identified their support for the following programs:



1. Rain barrel rebates
2. Low-water landscaping program
3. Irrigation community-based education program
4. Irrigation system upgrade rebates program
5. Outdoor watering restrictions
6. Community gardens water-reduction support program

Industry professionals identified that there is a significant potential for outdoor water conservation for homes that have in-ground sprinkler systems. A variety of opportunities to significantly reduce water use were identified by subject matter experts, which included installing better designed systems with more modern equipment, incentives for water system tune-ups, xeriscaping, and promoting better water use through education and public awareness.

Civic Programs

Industry and public respondents strongly supported all the proposed initiatives (>88% of all participants). Out of the proposed Civic Programs, participants identified their support for the following programs in order:



1. Maximize watering efficiency in parks
2. Maximize efficiency of facilities and operations
2. Develop a grey-water strategy
3. Maximize water efficiency of spray pads, paddling pools and pools
4. Increase naturalized areas in parks

Numerous participants identified the need for the Civic programs to be a priority considering the greater amount of water consumed compared to residential neighbourhoods.

Industrial, Commercial and Institutional Programs

Industry participants strongly support all of the proposed initiatives (≥80% of industry participants). Out of the proposed programs industry participants provided the following ranking in order of their support for the individual programs:



1. Irrigation system assessments, training, and accreditation
2. Audit and fixture incentive program
2. Irrigation system upgrade rebate program
2. Once-through cooling replacement incentive program
3. Outdoor watering restrictions
4. Capacity buyback program

Respondents identified several benefits for businesses to conserve water, including cost saving options for businesses to implement more sustainable practises.

Top Programs

Participants were asked to identify the top three programs they feel the City should prioritize. A summary of the results from industry and public participants is as follows:

Table 1: Summary of Top Programs

Top Programs - Public		Top Programs - Industry	
Maximize watering efficiency in parks	1	Residential toilet rebate	
Residential toilet rebate	2	Maximize watering efficiency in parks	
Develop a grey-water strategy	3	Maximize efficiency of spray parks/paddling pools/pools	
Increase naturalized areas in parks	4	Maximize efficiency of City facilities and operations	
Maximize efficiency of City facilities/operations	5	Residential low-water landscaping program	

Common Themes

Overarching comments provided by participants throughout the engagement activities included the following themes:

Costs: many respondents identified that costs for water and living in Saskatoon are already high and that any added costs should be minimal or entirely removed; unexplained taxes and fees are a major concern for numerous respondents who called for greater transparency from the City

Equal participation: participants suggested that all residents, businesses, and industries should participate in the program equally for everyone to do their part for conserving water in Saskatoon

Equity and low-income considerations: often do not have an opportunity to participate and implement changes; provide support and incentives for low-income participants

Renters: there is little incentive for renters to participate in the recommended programs since the benefits stay with the property; water use needs to be monitored for each individual rental unit rather than the building or else changes cannot be tracked and benefits cannot be realised

Support: many respondents expressed their support for the recommended programs and for the City in taking on this initiative

Consideration of Results

Results from all engagement activities were considered, alongside internal considerations and best practice research, in the development of the Strategy. Residents stated they were more willing (76%) to participate in the recommended programs within the Strategy considering the changes that were implemented throughout the engagement process. Results from the prioritization of programs were incorporated into the Strategy and will be considered in future implementation. Specific examples of how the results shaped the design of the Strategy include:

Leading by Example

We heard that the City should be a model for the community to follow for water conservation in Saskatoon by saving water and improving efficiencies internally first. Therefore, the Strategy outlines and prioritizes numerous initiatives for the City to improve efficiencies, including at civic facilities, improving watering efficiency in City parks, and increasing naturalized areas in parks.

Affordability

The community expressed concern over water rates increasing if Saskatoon's overall water use is reduced. Respondents also expressed their concern for the impacts this could have on low-income residents and renters who could pay higher water fees relative to their household income. The following options were proposed to alleviate some of these concerns:

- Explore incentives for owners of affordable and rental housing to improve their water efficiency
- Implement programs to educate renters and property managers about the ways they can save water (e.g., finding and fixing leaks) and reduce their costs
- Increasing the amount of funding available to non-profit, charitable, and community organizations for water conservation opportunities
- Committing to future public engagement as programs are developed

Better Understanding Water Use

We heard that it is difficult for the community to reduce their water use when residents do not know if they are currently using too much. This is primarily due to water bills being difficult to understand and not providing enough information to track water use. To address these concerns, the following program elements will be implemented:

- Education campaigns on how to read your water bill and how water is currently billed
- Explore options to make water bills easier to understand
- Using a new water metering system called [Advanced Metering Infrastructure](#) (AMI) to more accurately and reliably understand water use

Communications and education campaigns will be explored following approval of the Strategy by City Council to ensure all residents are aware of the opportunities for water conservation within Saskatoon.

Contents

Engagement Summary	2
Contents	7
List of Tables	8
List of Figures	8
1 Background.....	9
1.1 Strategic Goals	9
1.2 City Project Team	9
1.3 Spokesperson(s).....	10
1.4 Summary of Engagement Strategy	10
1.5 Stakeholder Groups	11
1.5.1 Low Emissions Community Plan Stakeholders	11
1.5.2 Subject Matter Experts.....	11
1.5.3 Impacted Groups	12
1.5.4 Water Users.....	12
2 Engagement Activities.....	14
2.1 Stakeholder Meetings	14
2.1.1 Audience.....	14
2.1.2 Marketing Techniques.....	15
2.1.3 Analysis	15
2.1.4 What We Heard	15
2.2 Industry Survey.....	18
2.2.1 Audience.....	18
2.2.2 Marketing Techniques.....	18
2.2.3 Analysis	18
2.2.4 What We Heard	19
2.3 Public Survey.....	19
2.3.1 Audience.....	19
2.3.2 Marketing Techniques.....	19
2.3.3 Analysis	19
2.3.4 What We Heard	20
2.4 Close the Loop Survey.....	26
2.4.1 Audience.....	26

2.4.2	Marketing Techniques.....	26
2.4.3	Analysis	26
2.4.4	What We Heard	26
2.5	Close the Loop Stakeholder Meetings.....	29
2.5.1	Audience.....	29
2.5.2	Marketing Techniques.....	29
2.5.3	Analysis	29
2.5.4	What We Heard	29
2.6	Youth Workshop	30
2.6.1	Intended Audience	30
2.6.2	Marketing Techniques.....	30
2.6.3	Analysis	30
2.6.4	What We Heard	30
3	Evaluation of Engagement	32
3.1	Survey Evaluation	32
3.2	Informal Feedback	32
3.3	Data Limitations	33
3.4	Opportunities for Improvement.....	33
4	Next Steps	34

List of Tables

Table 1: Summary of Top Programs	5
Table 2: Summary of Engagement Strategy.....	10
Table 3: Summary of Engagement Activities.....	11
Table 4: Detailed Summary of Top Programs	24

List of Figures

Figure 1: Evaluation of Public Survey.....	32
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1 Background

The City of Saskatoon (City) is developing a long-term Water Conservation Strategy (Strategy) that will focus on all water uses and users including residential; the industrial, commercial, and institutional sector; the City itself; and water used indoors and outdoors. Though there are many reasons to conserve water in Saskatoon, four stand out:

1. The pressing need to reduce greenhouse gas emissions. Water and wastewater treatment accounted for a third of total municipal government emissions in 2019, an increase by 8.3% from the 2014 baseline. The [Low Emissions Community Plan](#) re-affirms City Council's commitments to reduce emissions from the municipal government by 40% (relative to 2014) by 2023, and by 80% by 2050.
2. Help manage water demand—especially during summer peak periods. This will ease strains on our capacity-limited water systems and create opportunities to better manage and schedule our capital expenditures and potentially defer or reduce spending.
3. Increase system resilience and maximize capacities to deal with intensifying outcomes of climate change.
4. Help all households and businesses better moderate their water use. This can relieve the utility burden to those most impacted by cost increases by placing equity and opportunity at the forefront of water conservation, making programs accessible for all residents.

The Strategy aims to develop and gain approval for initiatives that could lead to incentive programs for residents and businesses, develop best practices and educational materials, and create the potential for changes to policies/regulations. Strategy outcomes include identifying the benefits and impacts of water conservation initiatives, developing a prioritized list of recommended water conservation initiatives, and determining how they should be implemented. The Strategy supports numerous sustainability initiatives within the City and is included in the [Low Emission Community Plan](#).

From February 2020 – June 2021, City Administration engaged the community and various stakeholders on relevant components of the Strategy. Based on what we heard, in addition to further research and internal considerations, City Administration has developed a comprehensive strategy that will be presented to City Council in 2022.

1.1 Strategic Goals

This project supports the Strategic Goals of Environmental Leadership and Sustainable Growth, contributing to reducing our consumption of water and energy.

1.2 City Project Team

- Jeanna South, Director, Sustainability
- Russ Munro, Director, Saskatoon Water
- Pam Hamoline, Interim Director, Saskatoon Water
- Amber Weckworth, Manager, Climate, Strategy, and Data, Sustainability
- Genevieve Russell, Special Project Manager, Sustainability
- Bibian Rajakumar, Energy Manager, Saskatoon Water
- Gabriella James, Accounting Coordinator, Finance
- Megan Quintal, Marketing Consultant, Communications & Public Engagement
- Kenton Lysak, Engagement Consultant, Communications & Public Engagement

1.3 Spokesperson(s)

- Jeanna South, Director, Sustainability
- Amber Weckworth, Manager Climate, Strategy, and Data, Sustainability

1.4 Summary of Engagement Strategy

Internal and external stakeholders were provided the opportunity to inform the following engagement goals:

Phase 0: Involvement of Low Emission Community Plan Stakeholders

- Determine the level of interest of past Low Emission Community Plan stakeholders

Phase 1: Options Identification

- Identify potential program options to be incorporated in the Strategy
- Identify benefits and barriers to water conservation initiatives in Saskatoon
- Of the potential initiatives, identify opportunities to enhance benefits and mitigate barriers

Phase 2: Prioritization

- Determine support for the proposed initiatives with wider stakeholder base
- Identify public preference for proposed initiatives to help inform their prioritization
- Select preferred initiatives to prioritize in the Strategy

Phase 3: Close the Loop

- Share relevant components of the Strategy to validate our findings, determine overall support and identify any final red flags

A summary of stakeholders, level of influence, engagement objectives, engagement goals and engagement activities completed are provided below.

Table 2: Summary of Engagement Strategy

Phase	Stakeholders	Level of Influence	Engagement Objective	Engagement Goal	Engagement Activities
0	Low Emission Community Plan Stakeholders	Involve	Determine the level of interest of past Low Emission Community Plan stakeholders	Involvement	Correspondence Meetings
1	Impacted Groups Subject Matter Experts	Collaborate	Identify potential program options and opportunities that enhance benefits and mitigate barriers	Options Identification	Correspondence Meetings
2	Impacted Groups Subject Matter Experts Water Users	Involve	Determine public preference for the initiatives to prioritize them within the Strategy	Prioritization	Correspondence Meetings Surveys
3	Impacted Groups Subject Matter Experts Water Users	Consult	Validate findings, determine overall support and identify final red flags	Close the Loop	Correspondence Meetings Survey

* Correspondence refers to emails, phone calls, and virtual meetings with stakeholders

A summary of engagement activities, activity dates, stakeholders, and number of participants engaged for each engagement phase is provided in the table below.

Table 3: Summary of Engagement Activities

Phase	Stakeholders	Activity	Date(s)	Participants
0	Low Emission Community Plan Stakeholders	Correspondence	February 2020	12
	Subtotal:			12
1	Impacted Groups and Subject Matter Experts	Meetings	February to March 2020	48
	Subtotal:			48
2	Impacted Groups and Water Users	Public Survey	December 2020	527
	Subject Matter Experts	Industry Survey	December 2020	28
	Subtotal:			555
3	All Stakeholders	Survey	March to April 2021	356
	Renters of Saskatoon and Area	Meeting	April 2021	1
	Saskatoon Open Door Society	Youth Workshop	April 2021	10
	Saskatoon Tribal Council Cress Housing	Meeting	February to June 2021	3
	Subtotal:			370
Total participation from February 2020 to June 2021:				985

Engagement activities, stakeholders, marketing techniques, analysis methods and results are described in this report followed by a summary of evaluation feedback and data limitations.

1.5 Stakeholder Groups

A total of five stakeholder groups were identified with the potential to be impacted by the outcomes of the Strategy. These groups included:

1.5.1 Low Emissions Community Plan Stakeholders

Organizations engaged during the development of the Low Emissions Community Plan were invited to be engaged on future Low Emissions Community Plan initiatives, including the Strategy. If the identified stakeholders showed interest in engaging, they were assigned to the most relevant stakeholder group described below. Low Emissions Community Plan stakeholders included:

- Business Improvement Districts
- Greater Saskatoon Chamber of Commerce
- North Saskatoon Business Association
- Saskatoon & Region Homebuilders Association
- Federated Cooperatives Limited
- Nutrien
- University of Saskatchewan

1.5.2 Subject Matter Experts

Internal and external stakeholders with experience or knowledge related to water conservation, retrofits, water costing, and indoor/outdoor water usage. These included:

- Academic institutions:
 - Global Institute for Water Security
 - Global Water Futures
 - University of Saskatchewan
 - School of Environment and Sustainability

- Sustainability Division
- City administration
 - Saskatoon Water
 - Water and Waste Operations
- Community organizations
 - Meewasin
 - Partners For the Saskatchewan River Basin
 - Safe Drinking Water Foundation
 - Saskatchewan Environmental Society
 - Saskatchewan Environmental & Industry Managers Association
 - Saskatoon Food Bank and Learning Center
- Individuals recognized for innovation in water conservation technologies or programming
- Industry professionals:
 - Building operators
 - Energy Management Task Force
 - General contractors
 - Irrigation installers
 - Plumbers and plumbing equipment suppliers
 - United Association of Plumbers and Pipefitters Local 179
 - Refrigeration professionals
 - Saskatoon and Region Home Builders Association
- SaskWater
- Water managers from other jurisdictions or the industrial, commercial, and institutional sector

1.5.3 Impacted Groups

Those who may be disproportionately impacted by the implementation of water conservation initiatives, including:

- Indigenous organizations
 - City of Saskatoon Indigenous Technical Advisory Committee
 - Saskatoon Indigenous Community Action Plan
 - Saskatoon Tribal Council
- Low-income residents and organizations
- Renters of Saskatoon and Area
- Structurally excluded and equity-deserving residents

1.5.4 Water Users

The community and stakeholders who use water and have the potential to participate in water conservation initiatives once implemented, including:

- CHEP Good Food and Community Garden Leaders
- City Administration
 - Facilities
 - Parks
 - Recreation and Community Development
 - Saskatoon Light and Power
- Community Associations

- Developers
- Golf Courses
- Industrial, commercial, and institutional sector (i.e., businesses and organizations)
 - Breweries
 - Business Improvement Districts
 - Greater Saskatoon Chamber of Commerce
 - North Saskatoon Business Association
 - Federated Cooperatives Limited
 - Maple Leaf Foods
 - Nutrien
- Property managers
- Residents
- Saskatchewan Landlords' Association
- Saskatoon Food Bank and Learning Center

Engagement with stakeholders aimed to be inclusive in terms of neighbourhood, age, gender, marital status, family size, culture, citizenship, income, etc.

2 Engagement Activities

Stakeholders provided their feedback through a series of surveys, stakeholder meetings, a youth workshop, or by contacting the project team directly, which are described below.

2.1 Stakeholder Meetings

Numerous stakeholder meetings were held from February to March 2020 to identify potential program options and opportunities that enhance benefits and mitigate barriers.

2.1.1 Audience

Consultations were held with various Impacted Groups and Subject Matter Experts. A total of 48 attendees from 29 organizations and businesses participated, including representatives from:

- 9 Mile Brewery
- AMRE Supply
- Business Improvement Districts
- Chris Irrigation
- Cimco Refrigeration
- City of Saskatoon
 - Facilities
 - Parks
 - Recreation and Community Development
- EMCO
- Energy Management Task Force
- Excel Refrigeration
- Federated Cooperatives Limited
- Global Institute for Water Security
- Janzen Earthscaping
- Maple Leaf Foods
- Mechanical Contractors Association of Saskatchewan
- Meewasin
- Q-Jay Irrigation
- Rainforest Irrigation
- Sprinklers Work
- Partners For the Saskatchewan River Basin
- Polar Refrigeration
- Safe Drinking Water Foundation
- Saskatchewan Environmental Society
- Saskatoon and Region Home Builders Association
- Saskatoon Light and Power
- SiteOne
- South Saskatchewan River Watershed Stewards
- University of Saskatchewan

2.1.2 Marketing Techniques

Select Impacted Groups and Subject Matter Experts were invited to participate via email or phone; therefore, no marketing techniques were employed.

2.1.3 Analysis

The results were analyzed using qualitative methods, including the thematic analysis and the open coding of responses.

2.1.4 What We Heard

Businesses, Business Organizations and Industry Associations

Respondents identified several benefits for businesses to conserve water, including cost saving options to implement more sustainable initiatives. Many businesses are combining environmental savings with fiscal savings to be more environmentally minded while also improving cost efficiencies. Numerous barriers to water conservation in the business community were provided, including the costs associated with making upgrades, lack of awareness on the opportunities that are available, and the compounding improvements needed for business in older buildings. Numerous businesses are actively taking steps to conserve water and could be encouraged to share their success stories to facilitate greater uptake within the business community.

Participants were hesitant in identifying the top programs for businesses due to business needs and preferences varying; however, participants supported assessments and fixture incentives, capacity buybacks, and once-through cooling systems location and replacement programs. Education was identified as a critical component for any of the proposed programs and participants provided numerous suggestions for opportunities including, creating incentive programs that are easy to access, slowly phasing-in initiatives through pilot programs, showing savings through engaging formats, and working with suppliers to share messaging.

Environmental Organizations

Numerous organizations provided information regarding their water conservation efforts and the current threats to water conservation within Saskatoon, including climate change, drought/flooding, and pollution/contaminants. Respondents suggested that the City could save approximately 5-10% through water conservation initiatives; however, this amount was commonly viewed as being too low to contribute to the amount of change needed. It was recommended that the City introduces gradual targets that are flexible in nature to support forming habits and combat individuals viewing targets as unattainable goals.

Of the potential programs presented both outdoor and indoor residential water use were identified as priorities. Public incentive programs, programs that promote behavioural changes, and irrigation systems for the industrial, commercial, and institutional sectors were received the most support. Suggestions to increase up-take were provided, including creating an accessible resource repository (i.e., website), formatting water bills to show potential savings, and creating neighbourhood competitions to improve efficiencies.

Irrigation Professionals

Participants identified that between 25% to 60% of Saskatoon homes that have in-ground sprinkler systems could significantly improve their watering efficiency by installing better designed systems with more modern equipment, incorporating xeriscaping techniques, and promoting better water use through education and public awareness. Numerous measures to achieve the largest savings were

provided, including installing rain sensors within the industrial, commercial, and institutional sector/multi-unit properties, improving criteria for commercial areas, and offering incentives. The majority of irrigation professionals agreed that incentives would help spur irrigation system tune-ups and thereby increase water savings. Participants noted system tune-ups should occur every two to three years, but more commonly occur annually for businesses/institutions and when they need repair. Annual tune-ups provide water-saving potential by reducing future repair costs.

Barriers to water conservation included shifting the importance of costs being the primary focus for consumers, users using outdated and wasteful systems/equipment, overwatering due to lack of education and manual systems (estimated to be around ~50% of homes with in-ground sprinklers), and a current lack of standards/regulations. It was suggested that many of these barriers could be eliminated by upgrading irrigation-system controllers, allowing users to save significant amounts of water by reducing overwatering, controlling irrigation times, and accounting for variations in the landscape.

Respondents were strongly in favor of the City providing training and certification focused on irrigation system design for water conservation purposes. Most respondents agreed that this form of training could lead to better systems and water savings, as well as a sense of comfort for clients. Numerous training opportunities were identified, and it was suggested that training needs to be available for professionals outside of the irrigation industry to improve the overall knowledge within the professional community. Uptake would be favorable if the cost was low, training occurred during the off-season (i.e., winter season) and training was framed as an opportunity for recognition amongst professionals.

Education was recognized as a critical component for water conservation and efficiency for all sectors; however, it needs to align with best practises in the industry and be freely accessible to all users. Numerous suggestions on what to educate users on were provided, including costs and your water bill, how an efficient irrigation system works, and how to adjust the system to improve efficiency.

Plumbing Professionals

Respondents recognized the potential for water conservation in Saskatoon and identified the largest opportunities for homes and businesses as updating to modern fixtures and toilets, using flow-through humidifiers, installing grey water systems, and improving irrigation systems. It was recognized that manufacturers are leading the curve in water conservation technologies, causing clients to be unaware of the differences in functionality between water efficient and non-efficient fixtures. Barriers to water conservation that were identified included education, associated costs, and changing technologies that discourage changes in habits.

The majority of respondents agreed that upgrades to toilets and showerheads would save significant amounts of water. Respondents identified that a clear movement towards installing these forms of upgrades has been seen within the industry, especially within hospitality and property industries. Respondents estimated that up to 50% of toilets and showerheads in older neighborhoods and buildings could need such upgrades. However, respondents viewed replacement incentives with mixed opinions since customers often look for the most aesthetically pleasing or least expensive option. Numerous suggestions were provided to increase uptake, including educating users on the potential cost savings through engaging formats, mandating all new houses to install water efficient fixtures, and accounting for pushback from large water users.

Current educational gaps within the residential indoor water include identifying the amount of water wasted per individual, what steps the average resident can take to improve their water efficiency, and what new technologies exist.

Respondents were in favor of assessments and fixture incentive programs for the industrial, commercial, and institutional sectors. It was suggested that programs need to emphasize, in simple terms, the potential for water savings to improve up-take and ensure the process is collaborative (i.e., head of maintenance, building manager, and owner). Respondents felt that the greatest potential for water savings was the toilet and showerhead replacement program; however, commercial industries (ex. cleaning/sanitizing industries), gyms, and buildings cooled by water-cooled condensing units were also identified as being important. To increase uptake within the industrial, commercial, and institutional sector respondents suggested providing incentives (minimum 10%), encouraging the use of reliable equipment, using assessments to promote positive changes. A capacity buyback program could also encourage building owners to invest in toilet replacements or reclaimed water systems.

Once-through cooling were identified as a major hindrance to water conservation. An estimated 100-200 once-through cooling systems units are within Saskatoon and are primarily found in leased properties, manufacturing centres, stores, food industries, and laboratories. These systems are being phased out by more improved systems with a payback period of 1-2 years, but the process is slow due to the high replacement costs and current location of the units. Suggestions to increase up-take include creating incentives and advertising them through professional networks, making financing options available, and adapting to changing technologies.

Out of the provided measures respondents identified reusing water and focusing on the industrial, commercial, and institutional sector as being of greatest importance and value. Respondents believed that focussing on the installation of retrofits (i.e., toilets, showerheads, etc.) within the industrial, commercial, and institutional sector would have the most support and up-take.

Common Themes

Common themes identified throughout the Stakeholder Meetings included the following:

Better systems: using modern equipment greatly improves water savings potential; design and use systems that reduce inefficiencies

Costs: the most mentioned and considered theme for users and stakeholders; upfront costs, increasing administrative costs, and the costs associated with large or compounding retrofits are a concern for many users; home builders are installing systems based on lowest price not water conservation; residents are looking for ways to reduce their costs/bills

Education: education is one of the most effective actions the City could take to encourage water conservation; users don't realize how much water they waste and how much money they lose because of it

Incentives: making all incentive programs simple easy to access

Individual impacts: understanding consequences at different scales (i.e., global, City, and individual) is crucial for greater uptake; find engaging and interactive ways to inform users of water savings potential; measuring and monitoring individual water usage is vital

Lack of knowledge: there currently is a lack of understanding of what opportunities exist; residents don't know who to talk to; homeowners can install equipment on their own, but they need training to properly manage it

Prioritization: users are unaware of what programs will maximize their water savings; competing priorities typically causes inaction

Simplicity: all program elements should be easily understood and implemented; reduce administrative costs when possible

Targeting the already engaged: target youth that have been shown to care significantly more about water conservation; target high-volume users to generate the most up-take

2.2 Industry Survey

City Administration conducted an online survey for industry stakeholders from December 1st, 2020 to December 21st, 2020. The Industry Survey comprised a total of 46 closed- and open-ended questions to identify stakeholder preference for the potential programs. Respondents were able to write-in "other" preferences for numerous questions and provide explanations for their preferences.

The Industry Survey closely mirrored the Public Survey, with additional industry-specific questions on the industry, commercial and institutional sector programs.

2.2.1 Audience

The Industry Survey was intended for installers, general contractors, water managers, businesses, and building owners operating within Saskatoon. A total of 28 respondents participated in the survey. The largest group of respondents were involved in the environmental sector (28%), followed by real-estate or property managers (24%), and tradespeople (24%). The vast majority of participants operated in Saskatoon (92%). 27% of participants owned or managed commercial or industrial property in Saskatoon and 27% were currently a member of a Business Improvement District or business association.

2.2.2 Marketing Techniques

The following marketing techniques were employed:

1. City Website
 - a. Updates to the Engage Page were made to encourage participation in the online survey
2. E-invites
 - a. Personalized emails were sent to select stakeholders and distributed to industry members via their associations
 - b. Numerous associations included the e-invite within newsletters and internal outreach methods

2.2.3 Analysis

The participant feedback and survey data were analyzed for the following indicators:

- Most popular program combinations (count)
- Thematic analysis of reasoning offered for inclusion of certain programs over others
- Opportunities that may improve accessibility and uptake

Mixed methods were used to analyze the data. Qualitative methods included the thematic analysis and open coding of responses.

2.2.4 What We Heard

Due to the similarities between the Industry and Public Surveys and the importance in comparing results, the results of both surveys were combined and are described in the following section.

2.3 Public Survey

City Administration conducted an online community survey from December 1st to December 21st, 2020. The survey comprised a total of 33 closed- and open-ended questions to identify their preferences for potential programs and components. Respondents were able to write-in “other” preferences for numerous questions and provide explanations for their preferences.

The Public Survey closely mirrored the Industry Survey, with additional public-specific questions.

2.3.1 Audience

The Public Survey was created for Subject Matter Experts, Impacted Groups, and Water Users. A total of 527 respondents participated in the Public Survey. The largest group of respondents were residential homeowners (89%), followed by participants that rent property (10%).

2.3.2 Marketing Techniques

A variety of marketing techniques were employed to reach the intended audience.

1. City Website
 - a. Updates to the Engage Page were made to encourage participation in the online survey
 - b. An article promoting the survey was published on MyCity and the Monday eblast
2. Social Media
 - a. The social media campaign, which ran from December 1st – 21st, included Facebook and Twitter ads promoting the survey. An Instagram story with a clickable link was also used to promote the survey. All paid social media ads used location targeting
3. Digital
 - a. Online banner and display ads were also used, targeted to Saskatoon
4. Email
 - a. Personalized emails were sent to organizations and community members asking them to share the information with their members
5. Radio Ads
 - a. Radio ads ran from December 1st – 21st on local radio stations (Rawlco and Saskatoon Media Group) directing listeners to the Engage Page and public survey
6. Print Ads
 - a. A 1/8 colour ad was printed in the Saturday paper mid-way through the survey period

2.3.3 Analysis

The participant feedback and survey data were analyzed for the following indicators:

- Most popular program combinations (count)
- Thematic analysis of reasoning offered for inclusion of certain programs over others
- Opportunities that may improve accessibility and uptake

Mixed methods were used to analyze the data. Qualitative methods included the thematic analysis and open coding of responses.

2.3.4 What We Heard

Importance of Water Conservation

Respondents from both the industry and the public strongly support (79% and 66% respectively) water conservation as being important to their business or home. Numerous participants expressed their support for the City looking at improving water savings through conservation efforts. Although results differed slightly between industry and public participants, the top five reasons for conserving water amongst both groups were as follows:



1. Reducing unnecessary water usage
2. Caring for the environment
3. Reducing my water bill
4. Saving energy
5. Reducing greenhouse gas emissions

Awareness and Barriers

When asked whether they were aware of actions they could take to reduce their water consumption/bill, the public results were split between “somewhat” (49%) and “yes” (43%), with only 5% stating they were unaware of any actions.

Out of the proposed and suggested barriers that hold prevent users from making their homes or business more water efficient, participants identified the following as being the greatest challenges:



1. I don't know if I currently use too much water
2. Upgrades are too costly
3. I have already made my home/business water efficient
4. I don't know what to do and there are not enough resources
5. There are few funding programs and opportunities that help me

Comments provided by participants expanded on these barriers. Numerous individuals identified that as consumption decreases household water rates could increase, thereby providing no incentive for water users to conserve. Additional barriers were expressed by renters who are unable to track their water use due to the use of shared meters and stressed that it is not cost-effective for renters to install retrofits without the participation/contribution of their landlords. Other barriers included confusion with why water rates and charges are high, inability for low-income and structurally excluded residents to fully participate, and converting lead/outdated water systems.

Participants identified numerous opportunities to combat these barriers, which included providing reliable sources of information on what products work, providing daily water use records, aggressively targeting larger users (i.e., industrial sectors), and water/actual administration costs being more transparent.

Education and Incentives

When asked what types of incentives would increase their likelihood of making improvements, both industry and public participants ranked the following in order of their support:

- 
1. Education on water saving improvements
 2. Rebates provided at the till when purchasing from local suppliers
 3. City providing fixtures at no-cost
 4. Rebates provided through an application process
 5. Providing home and business audits to identify water saving opportunities
 6. Rebates provided to installers and distributors

Respondents identified the following proposed messages as being most important in future education programs and resources:

- 
1. How to conserve water in your home
 2. How to conserve water in your yard
 3. How to save money on your water bill
 4. How to find leaks in your home, yard and business
 5. How does water use relate to climate change and our environmental footprint

When asked what the best ways were to educate themselves and their families on water conservation measures, participants identified the following in order of importance:

- 
1. On their water bills
 2. Web-based tools to view your water use
 3. Online savings calculators and budgeting tools
 4. Checklists
 5. School programming and resources

Comments provided by respondents also identified that by making water bills more readable and easier to understand, such as expressing water use in units common to their water meters (\$/litre), it would provide an overall better understanding of whether users need to conserve water.

Indoor Residential Programs

Both industry and public participants supported all of the proposed initiatives (>60% of all participants). Out of the proposed indoor residential programs, both industry and public participants identified their interest in the following programs:

- 
1. Water-use education program (76%)
 2. Toilet rebate (71%)
 3. Showerhead rebate and give-away (69%)
 4. Water audit and coaching program (63%)

Respondents expressed their support for the incentive programs (i.e., rebate, give-aways, etc.) for making it easier to make upgrades to their home, especially for those that are unable to afford the upfront costs. The increased support for toilets over showerheads was further explained in the comments, with numerous respondents indicating the importance of personal preference when selecting showerheads.

Suggestions for additional indoor residential programs included home-insurance rebates, leak detection tools, installing individual meters to track water consumption for condos/multi-unit dwellings, upgrading outdated water lines (i.e., lead pipes), and implementing programs that focus on equity and low-income groups.

From the comments provided the following categories were identified:

Education: extremely important and participation will be minimal unless there is a compelling reason for why water conservation is important

Fiscal responsibility: the most commented on theme; could taxpayer dollars be better allocated and what will be the associated administration costs for the proposed programs

Information: there are gaps in information, such as what percent of homes already have low-flow showerheads or toilets and what difference does such a small reduction (ex. 2.4%) make on overall water efficiency for Saskatoon

Low-flow apprehension: this is not as simple of a solution; it was suggested that low-flow toilets are more difficult to maintain/fix; there is apprehension to switch to low-flow showerheads due to their inferior performance

Low-income considerations: the listed programs are tailored towards middle-class families and leave out low-income and structurally excluded residents within our community

Renters: there is no incentive for renters to participate since the benefits remain with the property

Outdoor Residential Programs

Industry and public participants supported all the proposed initiatives (>50% of all participants). Out of the proposed outdoor residential programs participants provided the following ranking based on their level of support:

- 
1. Rain barrel rebates (73%)
 2. Low-water landscaping program (72%)
 3. Irrigation community-based education program (67%)
 4. Irrigation system upgrade rebates program (63%)
 5. Outdoor watering restrictions (62%)
 6. Community gardens water-reduction support program (53%)

Suggestions for additional outdoor residential water conservation programs included providing educational materials on how to improve outdoor water efficiency, promoting xeriscaping, requiring new builds to follow new water efficiency standards in landscaping, and focussing on new technologies in irrigation (i.e., timers, improved controllers, drip irrigation, etc.). Participants provided their comments regarding the proposed outdoor residential programs which were summarized into the following themes:

Awareness: is crucial to increase uptake amongst all demographic groups; the City needs to build awareness that these kinds of programs exist

List of installers: the City should provide a list of certified installers for landscaping and irrigation installations/upgrades

Promoting biodiversity: discourage the traditional front yard and promote native plantings that increase biodiversity

Restrictions are not effective: there is concern surrounding the political viability of imposing water restrictions; could prove to be problematic if repercussions are too punitive for pool owners and gardeners that need the additional water; generally viewed as ineffective by the public yet some participants identified their support for restrictions

Scheduled watering: many participants supported the idea of scheduled watering (ex. watering on odd or even days)

Civic Programs

Industry and public respondents strongly supported all of the proposed initiatives (>88% of all participants). Out of the proposed Civic programs, participants identified their support through the following ranking:

- 
1. Maximize watering efficiency in parks (97%)
 2. Maximize efficiency of facilities and operations (96%)
 2. Develop a grey-water strategy (96%)
 3. Maximize water efficiency of spray pads, paddling pools and pools (93%)
 4. Increase naturalized areas in parks (88%)

Suggestions for additional Civic programs included better redirection of runoff, investing in green infrastructure, restricting watering of public spaces to evenings, using timers/sensors in spray parks, and using storm/river water to irrigate parks. Participants identified the need for Civic programs to be a priority considering the greater amount of water consumed compared to residents. Many participants expressed their support for the proposed internal programs above the other program types. Additional comments were summarized into the following themes:

Costs: what are the associated costs to the taxpayer for each of these programs

Leading by example: numerous participants identified the need for City areas (i.e., parks, golf courses, City spaces, etc.) to be a model for residents to follow

Naturalized parks: there is strong support for more naturalized parks consisting of native plants; more nature is always better; should focus on new parks rather than pre-existing; still provide areas for families to use freely; parks should not get weedy though

Overwatering parks: many respondents brought forward examples of parks being watered during rainy periods or being overwatered; participants called for timed/smart water sensors/controllers to be installed; there is a lot of public concern surrounding this issue

Industrial, Commercial and Institutional Programs

Industry participants strongly support all the proposed initiatives (≥80% of industry participants). Out of the proposed programs industry participants provided the following ranking in order of their support:

- 
1. Irrigation system assessments, training, and accreditation (92%)
 2. Audit and fixture incentive program (88%)
 2. Irrigation system upgrade rebate program (88%)
 2. Once-through cooling replacement incentive program (88%)
 3. Outdoor watering restrictions (81%)
 4. Capacity buyback program (80%)

Industry participants identified numerous issues with outdoor watering restrictions including their difficulty to enforce and communicate to the public. Numerous respondents called for equal participation from the industry so that measures being taken by the City and industry are consistent.

Top Programs

Participants were asked to identify their top three programs they felt the City should prioritize. The following is a summary of the results:

Table 4: Detailed Summary of Top Programs

Program	Public (%)	Industry (%)
Maximize watering efficiency in parks	38	33
Residential toilet rebate	35	37
Develop a grey-water strategy	33	19
Increase naturalized areas in parks	28	11
Maximize efficiency of City facilities and operations	22	26
Residential water-use education program	21	19
Outdoor watering restrictions	17	11
Residential showerhead rebate and give-away	17	11
Residential water audit and coaching program	17	4
Residential rain barrels	17	n/a
Residential low-water landscaping program	16	22
Residential irrigation system upgrade rebates program	15	11
Maximize water efficiency of spray parks, paddling pools and pools	14	30
Residential irrigation community-based education program	5	0
Community gardens water-reduction support program	2	4
ICI Audit and fixture incentive program	n/a	19
ICI Capacity buyback program	n/a	7
ICI Irrigation systems assessments, training, and accreditation	n/a	7
ICI Irrigation system upgrade rebate program	n/a	15
ICI Once-through cooling replacement incentive program	n/a	7

*n/a refers to the option not being included within either the Public or Industry Survey

Final Considerations and Common Themes

When asked whether they were more likely/willing to conserve water in their home or business considering the information and program options identified in this survey, the majority of participants indicated “yes they were more likely” (73% and 54% respectively).

Overarching themes from the comments provided by participants are summarized below:

Balancing conflicting needs: programs will need to be flexible enough to balance the needs of various abilities, income classifications, demographics, human health, and sustainability (ex. the need to rinse recyclable containers)

Billing: many participants believe the current billing system is counter productive and ineffective

Conflicting views on grass: many participants felt community values should shift away from valuing green grass considering their associated water demands; however, some respondents value green lawns and would like to continue their watering regime; this remains as a controversial subject

Costs: homeowners already face higher taxes and increasing utility bill costs; it was suggested that many residents do not see the value in spending more money upfront to conserve water over a period of time; the City should advertise costs as investments that will result in future savings; especially difficult for larger families with greater water demands

Education: some respondents questioned whether education programs only work for the people who are already engaged; how do these programs address those that are unmotivated to change their behaviours; approach school systems and children to start teaching at a young age

Equal: improvements in water efficiency by residents should also equate to efficiency improvements for industry and businesses as well; for the Strategy to succeed there needs to be participation from all sectors, not just residents

Food Security: there is concern that the costs for gardeners and food producers could increase due to their greater watering needs

Frustration with rate increases: unless water prices also decrease when water use decreases, there is little incentive to save water

Funding: many participants expressed that taxes should not increase to fund the proposed programs; participants also recognized that to achieve the water conservation targets the City will need to fund all proposed initiatives sufficiently

Grey water strategy: there is an interest in reviewing current policies/laws/standards to allow for the installation of residential grey water systems

Lead by example: the City should lead by example by saving water internally first; the City should be a model for residents to follow

Low-income households: these residents often do not have an opportunity to participate and implement changes; support and incentivize low-income participants whenever possible

Renters and landlords: landlords control water use and are not tracking individual use; there is no incentive for renters to participate since the benefits stay with the property; the program must work for both parties to promote greater incentives for the rental community as a whole

2.4 Close the Loop Survey

City Administration conducted an online survey from March 19th to April 1st, 2021. The survey comprised a total of 7 closed- and open-ended questions to validate key findings and identify any concerns with the recommended programs. Respondents were able to write-in “other” preferences for numerous questions and provide explanations for their preferences.

2.4.1 Audience

The survey was created for Impacted Groups, Subject Matter Experts, and Water Users. A total of 356 respondents participated in the survey. The largest group of respondents were residential homeowners (93%), followed by participants who rent properties (6%).

2.4.2 Marketing Techniques

A variety of marketing techniques were employed to reach the intended audience.

1. City Website
 - a. Updates to the Engage Page were made to encourage participation in the online survey
2. Social Media
 - a. The social media campaign, which ran from March 19th – April 1st, included Facebook and Twitter ads promoting the survey. An Instagram story with a clickable link was also used to promote the survey. All paid social media ads used location targeting
3. Digital
 - a. Online banner and display ads were also used, targeted to Saskatoon
4. Email
 - a. Personalized e-invites were sent to organizations and community members

2.4.3 Analysis

The feedback provided was analyzed for the following indicators:

- Support for program components and options (count)
- Thematic analysis of reasoning offered for supporting certain program components
- Identify suggestions that might improve accessibility and uptake

Mixed methods were used to analyze the data. Qualitative methods included the thematic analysis and open coding of responses.

2.4.4 What We Heard

Better Understanding Water Use

Respondents from previous engagement activities identified that one of the main challenges to reducing water within their home or businesses is that they do not know if they are currently using too much water or not. Another concern identified was that water bills are difficult to understand and currently do not provide enough information to track water use.

To address these concerns, the following program elements were proposed:

- Education campaign on how to read your water bill and how water is currently billed (i.e., inclined block) to Saskatoon residents and business owners

- Explore options to make water bills easier to understand
- Using a new water metering system called [Advanced Metering Infrastructure](#) (AMI) to better understand our water use with more accuracy and reliability. This would include education programs to ensure residents and businesses are aware of the benefits of AMI

When asked whether they agreed with the proposed approaches, 45% stated “yes”, followed by 34% stating they “somewhat agreed” and 13% stating they “did not agree”. Comments and suggestions for improvement provided by the respondents included the following themes:

Messaging: messaging should focus on both the benefits and cost savings associated with water efficiencies; baselines for ideal water use should be used as a basis for comparison

Monitoring: understanding how to read a water bill will not necessarily equate to less usage unless it is easier to monitor your individual use; to facilitate changes in behaviours this information must be easily accessible and actively show the progress being made

Transparency: the City must clearly describe all associated fees on water bills, such as stormwater management, flood management, and other temporary charges; there is frustration over the lack of transparency for the current charges on water bills

Participants suggested the following when asked how they would help residents take part in the recommended water conservation initiatives:

- Create a sense of ownership and responsibility through community stewardship opportunities
- Highlight the benefits to residents instead of the negatives
- Incorporate Indigenous ways of knowing into awareness materials
- Offer information and forums in the diversity of languages that are represented in Saskatoon to promote two-way communication
- Provide accurate water consumption data to residents and show them how to reduce their consumption

When asked what the best ways are to share information with residents regarding water conservation, participants suggested working with community organizations and leaders in diverse newcomer groups, creating innovative social media handles for the community to follow, and involving community associations.

Affordability

In previous engagement activities, respondents expressed concern over water rates increasing if Saskatoon’s overall water use is reduced. Respondents also expressed their concern for the impacts this could have on low-income residents and renters who could potentially pay higher water fees relative to their household income. The following options were proposed to alleviate some of these concerns:

- Explore incentives for owners of affordable and rental housing to improve their water efficiency
- Programs to educate renters and property managers about the ways they can save water (e.g., finding and fixing leaks) and reduce their costs
- Committing to future public engagement as programs are developed

When asked whether they agreed with the proposed options, 46% of respondents said they “agreed”, followed by 32% who said they “somewhat agreed” and 15% that said they “did not agree”. From the comments provided by respondents, the following themes emerged:

Individual monitoring and sub-meters: water use needs to be monitored for each individual rental unit rather than the building or else changes cannot be tracked and benefits cannot be realised; this also improves individual accountability since renters will pay for their water separately from the building

Landlords and property managers: many respondents felt that asking landlords/property managers about water conservation can be difficult and can further strain relationships; allowing landlords to have more authority over water regulation could put renters in more difficult situations, such as more frequent inspections

Savings: unless incentives are significant, there is little reason for renters and property owners to perform any efficiency upgrades

Participants identified that many tenants want to improve their water efficiency, but currently do not have the means to or are unaware of the opportunities to do so. However, many tenants do not see any direct incentives to conserving water; therefore, differences in opinions exist between tenants within a building which could delay efficiencies being made for the entire building.

Participants also expressed their hesitation over water rates increasing if the programs represented within the Strategy are effective. It was suggested that this may be a vehicle for landlords/property managers to raise the rent in a more hidden way or to provide more opportunities for landlords to enter the rental unit to make upgrades when not welcomed by tenants.

Suggestions for increasing participation in the recommended programs included using plain language information in the monthly water bills, providing information specific to new homeowners and renters, and having support staff to assist with the program and support participants directly.

General Considerations

Considerations from previous engagement activities were provided for the public to provide further feedback on including educational programming, the City leading by example, exploring grey water system opportunities, and the recommended programs and phasing. Comments were provided by respondents and summarized within the following themes:

Costs: many respondents identified that costs for water and living in Saskatoon are already high and that any added costs should be minimal or entirely removed; unexplained taxes and fees are a major concern for numerous respondents who called for greater transparency

Grey water: the most commented on theme; there is a lot of interest from respondents in grey water systems being allowed within the City

Support: many respondents expressed their support for the recommended programs and considerations; out of the initiatives listed respondents provided the greatest support for the City leading by example and the current phasing of the recommended programs

Suggestions for other programs that could be considered included exploring watering restrictions for lawn maintenance during the summer (i.e., alternating days), reusing water from City rooftops and hydrants, and promoting rainwater collectors.

Final Thoughts

When asked whether they were more willing to participate in any of the recommended programs considering the changes to the Strategy, most respondents stated “yes” (45%), followed by being “somewhat more likely” (31%) and not (13%). The largest barriers for those somewhat or not wanting to participate in the recommended programs include the costs associated with the program and increasing water rates, water conservation not being a priority, and the addition of unneeded administration by the City.

Final comments and suggestions provided by respondents included the following themes:

Education: a heavily debated topic throughout the survey with some respondents believing education to be ineffective and a waste of resources while others believe it to be essential for the future success of the Strategy

Equal treatment: some participants suggested that all residents, businesses, and industries should participate in the program equally for everyone to do their part to improve water efficiency

Support: many respondents provided their support for the Strategy and recommended programs

Water information: participants asked whether more accurate information on local water quality and quantity could be shared for the community to be more informed of any changes

Water rate increases and service charges: many respondents expressed their concern for water rates increasing if conservation initiatives are successful; there is also frustration over current service charges and the lack of information as to what people are being charged for

2.5 Close the Loop Stakeholder Meetings

Meetings with Renters of Saskatoon and Area and the Saskatoon Tribal Council Cress Housing Corporation were held on from February to June 2021.

2.5.1 Audience

The Renters of Saskatoon and Area was approached to provide feedback on the opportunities and barriers for renters. Low-income and partnership water conservation opportunities were explored with the Saskatoon Tribal Council Cress Housing Corporation.

2.5.2 Marketing Techniques

Representatives from the organizations were contacted directly.

2.5.3 Analysis

Qualitative methods were employed, which included the thematic analysis and open coding of responses.

2.5.4 What We Heard

General Concerns and Barriers for Renters

Participants identified that many tenants want to improve their water efficiency, but currently do not have the means to, are unaware of the opportunities, or do not see any direct incentives to conserving water; therefore, differences in opinions exist between tenants within a building which could delay efficiencies being made for the entire building.

Participants expressed their hesitation over water rates increasing if the programs represented within the Strategy are effective. It was suggested that this may be a vehicle for landlords/property managers to raise the rent in a more hidden way or to provide more opportunities for landlords to enter the rental unit to make upgrades when not welcomed by tenants. Historically, when social housing units replaced showerheads and toilets, the process was upsetting since the installation was performed without any consultation with the tenants. It was also suggested that many landlords are not interested in having conversations about water conservation since they tend to focus on debt recovery.

Numerous suggestions were provided to increase uptake within the renter community, including incentives for low-income renters, starting slow, and targeting non-profit landlords first especially for pilot programs

Low-Income Housing Opportunities

Numerous partnership and funding opportunities for water conservation in affordable housing projects were discussed throughout the various meetings. The City will continue to engage with the Saskatoon Tribal Council Cress Housing Corporation in the implementation of the initiatives represented within the Strategy.

2.6 Youth Workshop

A virtual workshop was conducted on April 21st, 2021 with the Saskatoon Open Door Society's Multicultural Leadership Council. A total of ten participants provided their feedback on three open-ended questions surrounding water conservation in Saskatoon.

2.6.1 Intended Audience

Representatives from the Saskatoon Open Door Society's Multicultural Leadership Council were invited to participate in the workshop.

2.6.2 Marketing Techniques

Representatives were contacted directly so no marketing techniques were used.

2.6.3 Analysis

Qualitative methods included the thematic analysis and open coding of responses.

2.6.4 What We Heard

When asked what the best ways are to share information with residents regarding water conservation initiatives, participants provided the following:

- Access opinion/community leaders in diverse newcomer groups to disseminate information
- Approach school boards
- Conduct townhall meetings and public information sessions
- Emails, texts, mail, leaflets, and telephone messaging
- Explain the benefits of engaging to encourage participation
- Information in water bills and on doors
- Involve community associations and neighbourhood organizations/leadership in grassroots communication
- Neighbourhood newsletters and radio

- Social media channels and neighbourhood social media handles for the community to follow along with

Participants suggested the following when asked how they would help residents take part in the water conservation programs:

- Be honest about the expectations and how people can participate
- Billboards and fun advertisement methods
- Continual awareness program
- Create a sense of ownership and responsibility through grassroots engagement opportunities
- Door to door engagement opportunities
- Encourage a community approach to projects where individuals feel like they can participate
- Foster community stewardship initiatives, such as “water conservation project champions”
- Highlight the benefits to residents instead of the negatives
- Incorporate Indigenous ways of knowing into awareness materials
- Offer incentives by rewarding water saving milestones with rebates
- Offer information and forums in the diversity of languages that are represented in Saskatoon to promote two-way communication
- Provide accurate water consumption data to residents and show them how to reduce their consumption
- Recognize neighbours and communities doing a good job conserving water
- Self-awareness is critical for people to get on board with the programs
- Set up pilot projects at universities and communities to encourage people to participate

Suggestions for project managers involved in water conservation included focussing on language barriers to gain access to a diversity of voices and communities, involving students in the engagement to foster greater stewardship, and to start engaging the community at the onset of the project

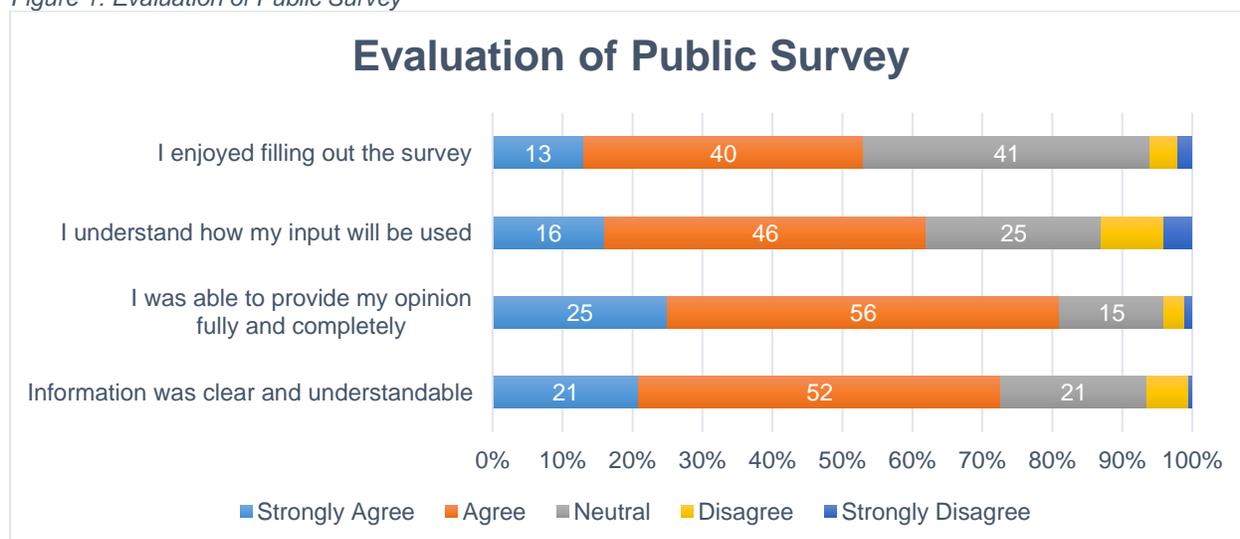
3 Evaluation of Engagement

Evaluation is discussed in terms of feedback received during engagement activities and through informal comments, data limitations and opportunities for improvement.

3.1 Survey Evaluation

Participant evaluation indicated support for both the level of engagement conducted and the opportunities provided. 73% of participants agreed or strongly agreed with the information that was provided being clear and understandable, with 79% feeling they were able to provide their opinions fully throughout the process.

Figure 1: Evaluation of Public Survey



Comments provided by participants were supportive of the process:

“Thanks for seeking community input.”

“We are very excited about topics discussed and programs being developed!”

“Keep up the good work!”

However, some respondents expressed their distrust for City engagement and the methods used:

“Seems every survey that the city puts out does not listen to participants but just does a survey to make us feel good and goes ahead and does whatever they feel like doing.”

“I don’t believe our opinion matters.”

“Surveys that the City uses often seemed biased.”

3.2 Informal Feedback

Informal feedback was received through stakeholder meetings where participants indicated that they appreciated the continued engagement throughout the COVID-19 pandemic. Many participants supported the City’s effort in developing the Strategy, stressing the importance of the proposed initiatives for the future of Saskatoon’s sustainability efforts. Numerous stakeholders commented on the City’s engagement efforts in ensuring a diversity of voices were represented within the Strategy.

3.3 Data Limitations

Due to the public health orders related to the COVID-19 pandemic, all engagement activities for this project were halted in May 2020. This resulted in Phase 1 engagement being restricted to Stakeholder Meetings, without the inclusion of workshops and community engagement. The goal of this phase was to identify a range of perspectives, needs and concerns across sectors to help inform possible program options. The sample size within the Stakeholder Meetings may not fully provide a full representation of the population under consideration; however, the results provide the best available indication of how stakeholders perceive the proposed programs in the Strategy.

The COVID-19 pandemic also shifted the priorities for many people, resulting in numerous stakeholders being unable to participate in our engagement process due to more pressing concerns. Therefore, some residents and stakeholder groups may not have been able to fully participate in the engagement activities conducted; however, the results are considered to provide the best available indication of how stakeholders perceive the Strategy at the time.

Virtual engagement has limitations, primarily by limiting accessibility for those without internet access or with limited computer literacy and by enabling greater accessibility to those who are more active online. Multiple avenues were available for the public to provide their input and mitigate the inability to conduct in-person activities; however, engagement practises and procedures were limited due to the COVID-19 pandemic, especially in conducting physical meetings with the community. Additional considerations for low-income, Indigenous and residents who are structurally excluded will need to be incorporated into future engagement opportunities.

Uncertainty related to how conservation programs may impact water rates make it difficult to assess how stakeholders who do not participate in future incentive programs could be disproportionately impacted. Gaining a better understanding of the potential impacts during the implementation of incentive programs will help the project team identify possible mitigation measures to reduce risks. Promoting inclusivity of equity and low-income stakeholders from the onset of the project and providing multiple options for input throughout the process is strongly recommended in future engagement activities.

3.4 Opportunities for Improvement

Based on participant feedback, the following opportunities for improvement will be considered for future engagement activities:

- Any written or verbal information uses plain language and easy-to-understand terms
- Considerations for engaging with low-income, Indigenous, renters and equity groups needs to be incorporated into future engagement opportunities
- Consult stakeholders prior to launching engagement activities about what is the most optimal time/season to engage with them
- Educating the community on the importance of water conservation should be a priority for future awareness campaigns
- Steps should be taken to explore virtual options for workshops, which are an important tool for engaging communities.

4 Next Steps

The next steps for development of Water Conservation Strategy are described below:

Phase 0: Involvement of Low Emission Community Plan Stakeholders

- Determine the level of interest of past Low Emission Community Plan Stakeholders

Phase 1: Options Identification

- Identify potential program options to be incorporated in the Strategy
- Identify benefits and barriers to water conservation initiatives in Saskatoon
- Of the potential initiatives, identify opportunities to enhance benefits and mitigate barriers

Phase 2: Prioritization

- Determine support for the proposed initiatives with wider stakeholder base
- Identify public preference for initiatives to help inform the prioritization of initiatives
- Select preferred initiatives to prioritize in the Strategy

Phase 3: Close the Loop

- Share relevant components of the Strategy to validate our findings, determine overall support and identify any final red flags

Report to City Council

- The Strategy and final engagement will be presented to City Council in 2022