

## Engagement Summary

The City of Saskatoon (City) is developing methods to protect groundwater and groundwater users within its jurisdiction, since the installation and operation of private groundwater wells for domestic purposes is not addressed by current bylaws. Therefore, City Administration is putting forward a proposal to regulate or prohibit private groundwater wells for domestic purposes within City limits. This would be conducted through the development of a new bylaw and methods to encourage or require the decommissioning of monitoring and non-active groundwater wells on City and private properties within City limits.

The Administration engaged stakeholders on relevant components of the Options for Groundwater Protection through two phases:

### Phase 1: Options Identification

- The engagement goals for this phase were to develop options based on stakeholder feedback and ensure concerns/priorities were understood.

### Phase 2: Close the Loop

- This phase included sharing considerations for the options with stakeholders to obtain feedback and provide the opportunity to identify red flags.

This engagement summary includes the activities and results that informed the engagement goals for the project. A total of 85 participants took part in the engagement activities, including stakeholder meetings and surveys, from August 2021 – October 2021.

Engagement goals, intended audience, activities, dates, participation rates and detailed engagement results are provided in the Options for Groundwater Protection Comprehensive Engagement Report that follows this summary, as well as the [Phase 1 What We Heard Report](#) on the project [Engage Page](#).

Engagement results from all activities that informed each goal are summarized below.

### Importance of Groundwater Protection

When asked how important it is for the City to protect groundwater quality in Saskatoon, most participants felt it was either important (37%) or very important (54%). Similar results were found for protecting groundwater from depletion in Saskatoon, which most participants felt was either important (24%) or strongly important (54%). The following themes emerged from the comments that were provided by participants:

**Contamination:** is a major concern for many participants; contamination has the potential to limit the use of local aquifers by a variety of users and not protecting it now could greatly impact its future potability.

*Importance:* many respondents feel water security and scarcity will become larger issues in the near future, therefore protecting groundwater reserves is vitally important.

*Jurisdictional responsibility:* some respondents identified that regulating/protecting groundwater is the responsibility of the Water Security Agency and the City should not be involved.

*Safety:* centrally treated, regulated, and distributed source water is significantly safer than unregulated supplies which require homeowners to protect and maintain the source, as well as monitor and treat the water to ensure safety standards are met.

## **Ranking Options for Groundwater Protection**

In the first stakeholder survey, most respondents supported prohibiting domestic wells (50%), with some respondents supporting regulating domestic wells (37%) or implementing no changes (13%). When asked for their level of support with the inclusion of domestic wells for irrigation-only as a fourth option, prohibiting new domestic-purpose pumping wells received the strongest support (65%) by participants. Allowing new domestic purpose pumping wells for irrigation-only received an equal amount of support and opposition, while allowing new domestic-purpose pumping wells for all domestic users and not regulating domestic-purpose pumping wells were not supported overall.

Out of the comments provided by respondents for their reasoning, the following themes emerged:

*Costs and funding:* how will the regulation and enforcement of wells be resourced and funded.

*Health risks:* centrally treated, regulated, and distributed source water is significantly safer than unregulated supplies that require the homeowner to maintain the source and monitor/treat the water to ensure safe drinking conditions.

*Monitoring needed:* it was suggested that water wells, their installation, and water withdrawal should be regulated and monitored if domestic wells are to be allowed; there should be sound rules to follow, or else domestic-use wells should not be allowed.

*Source water protection:* proper source water protection, maintenance, monitoring, and treatment is a large responsibility to place on the average private well owner; ineffective well management can result in numerous risks to human health and the potential for groundwater contamination.

*Using groundwater for irrigation:* many respondents indicated that water quality from Saskatchewan aquifers is rarely good for irrigation purposes.

When asked whether prohibiting or regulating domestic wells within Saskatoon would impact their work, most respondents stated it would not (51%), followed by those stating it would (36%). Furthermore, 32% felt it would positively or somewhat positively effect their work, while 24% stated it would negatively or somewhat negatively effect their work.

## Decommissioning of Non-Active Groundwater Wells

The majority of participants either supported or strongly supported the proposed actions for decommissioning non-active groundwater wells on City properties (83%), on private properties for large-scale development (78%), and on single property lots (75%). Participants were asked to rank the proposed options for well maintenance and decommissioning, which resulted in the following ranking:



1. Create an administrative policy for monitoring wells on City land.
2. Create a bylaw with a city-wide standard applicable to all monitoring wells.
3. Amend the development standards for large-scale development.
4. Promote voluntary use of the guidelines for wells on private land.

Many respondents provided suggestions for the proper decommissioning and maintenance of groundwater wells, including:

- Using pre-treated water for all drilling purposes.
- Following more modern standards and best practises for decommissioning.
- Decommissioning being completed by a registered driller with the Water Security Agency or Saskatchewan Ground Water Association.

## Final Thoughts and Common Themes

When asked what other options the City should consider to protect groundwater in Saskatoon, respondents suggested:

- Mapping and assessing the vulnerability of aquifers within City limits.
- Considering what changes in land-use could take place in areas of greater risk to aquifers.
- Establishing an awareness program that demonstrates safe maintenance of wells and responsible use of groundwater.

Common themes shared throughout the engagement activities included the following themes:

*Education is important:* knowledge and education about groundwater is the first step towards better protection.

*Enforcement and monitoring:* are critical for not only the success of the project, but also the protection of local groundwater resources.

*Limited information:* many respondents identified that currently there is little information on the viability of groundwater resources, as well as groundwater quality and quantity in Saskatoon.

*Support:* many respondents extended their support for the initiatives being described and for the City in being proactive in the protection of groundwater resources within Saskatoon.

*Updates to legislation:* stakeholders expressed the need for provincial legislation and regulations surrounding groundwater protection to be updated.

## **Consideration of Results**

Results from all engagement activities were considered alongside internal (City) stakeholders' feedback and best practice research to develop the options for groundwater protection in Saskatoon. Further topics that were explored can be found [in this resource](#) that was provided to stakeholders and participants. Options that were supported by all participants and by best practice research were incorporated into the recommendations or will be considered in future implementation. Examples include the following:

*Aquifer protection:* we acknowledge more detailed mapping of aquifers within Saskatoon city limits may be required to fully understand their viability and vulnerability at a local scale.

*Exploring irrigation-only wells:* in response to the feedback we heard, we explored options for including irrigation-only wells.

*Importance:* it is important for the City to protect both groundwater quality and groundwater from depletion.

*Maintenance and decommissioning:* the proposed actions for maintenance and decommissioning of monitoring wells and abandoned pumping wells on City and private property were supported, including creating an administrative policy for monitoring wells on City land.

*Prohibiting domestic-purpose wells:* more participants felt that domestic-purpose pumping wells should be prohibited.

Communications and education campaigns will be explored following approval of the recommended options by City Council to ensure all residents are aware of the opportunities for groundwater protection and City expectations.