

# Irrigation Water Workshop Summary Report

December 4, 2023

External Report



Water Security Agency  
Agriculture Services and Economic Development

February 14, 2024



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## Workshop Overview

The Water Security Agency (WSA) collaborated with Irrigation Saskatchewan and the Ministry of Agriculture to host an Irrigation Water Workshop on December 4, 2023, during the Saskatchewan Irrigation Project Association (SIPA) Conference in Saskatoon. This workshop aimed to facilitate collaboration among irrigators, producers interested in irrigation, industry representatives and government officials. It served as a platform to update participants on the current state of irrigation water use, monitoring, reporting and compliance tools, and to gauge interest in offering flexibility in allocation. A total of 79 participants attended the Irrigation Water Workshop, representing a total of 30,061 acres of developed irrigation in Saskatchewan.

At the beginning of this workshop, participants received an overview of WSA's current water monitoring and reporting methods, compliance tools and the allocation process for irrigation in Saskatchewan.

## Monitoring/Reporting

Participants were given a series of questions for discussion relating to irrigation water monitoring and reporting. Discussions were based on what forms of monitoring were being used, if any, and the benefits and challenges of increasing monitoring and reporting requirements in the future. Some of the main take aways from this discussion include:

- Overall, most participants agreed on the importance of monitoring water usage for the sustainability of industry and recommended improvements to current methods (e.g., implementing individual flow meters).
- Most of the irrigators at the workshop indicated that they currently engage in some kind of water use monitoring, while a few indicated they do not monitor at all.
- Those who monitor use different methods including software, tracking of pivot laps or time the system is running, and irrigation districts track water usage based on when pivots are applying water.
- Most irrigators, including district irrigators, report water usage to WSA annually.
- Participants highlighted challenges to more frequent water use monitoring including maintenance, producer experience, limited data access, and the associated time and financial costs of increased reporting.
- While annual reporting is considered the easiest, there is an understanding of the value and importance of monthly monitoring.
- Participants suggested solutions, including automatic and electronic reporting systems for data transfer, standardizing monitoring/reporting for all users, and alternatives to the paper reporting form, such as emailing or using an app.
- There was a suggestion for the government to provide a grant for installing new monitoring equipment.
- Participants requested that WSA provide training and guidance for new monitoring/reporting measures.

## Compliance

Participants were asked questions and provided scenarios promoting discussion on how compliance for lack of monitoring/reporting and over use of water should be handled. Some of the main takeaways from this discussion include:

- Participants emphasized that effective monitoring and reporting needs to be in place for compliance to be successful.
- If water supply does not allow for full allocation for a growing season, participants suggested there be notification from WSA in February to allow time to adjust crop planning.
- Compliance tools suggested by participants included fines, cutting off power to systems, decrease water supply, temporary suspensions of Water Rights License, WSA disabling pumps, restricting watering to nights and peer-to peer driven compliance when overuse is affecting other water users.
- Participants mentioned that voluntary compliance would not be universally accepted, and compliance should be consistent for all users.
- When shortages occur during the growing season, there was a suggestion for compensation for producers to be provided to cover input/crop loss.
- A suggestion was made that priority of allocation should be given to higher value crops (potatoes, fruits and vegetables).
- Participants would like more communication from WSA on forecasting water availability by monitoring snowpack levels to allow for advance notice of shortages.

## Flexible Allocation

Industry has requested WSA to consider adopting flexibility of allocation water for irrigation development, especially in areas with restricted water supply. Under this concept, the volume of allocation would be set at a diversion point, allowing a producer to spread this out over more irrigated acres. This deviates from the current standard method of providing a fixed 12-inch/acre duty for irrigation. Participants were asked how much water per acre is necessary for a profitable and sustainable irrigation project and given a scenario where they could choose to either develop fewer acres with a 12-in/acre duty or spread out the same volume to develop more acres. Some of the main takeaways from this discussion include:

- There were mixed responses from participants when given the choice to develop more irrigated acres with a flexible lower allocation compared to the standard 12-inch/acre duty.
- Concerns about spreading out allocation included factors like return on investment, funding eligibility, crop type, farm input decisions and soil type. Additionally, there was uncertainty about whether financial institutions would provide loans to projects with an overall lower allocation across a larger number of acres.
- Government funding for water efficiency tools such as moisture probes would help support this form of allocation.
- Participants discussed opportunities to use new technology, including subsurface irrigation, for increasing water use efficiency. They also requested resources, training and extension services to support flexible allocation, involving new technologies and collaborative research with the Irrigation Crop Diversification Corporation.
- Some participants stated that a 4-inch duty would be suitable for some years, while others emphasized the importance of maintaining a 12-inch duty; however, irrigation districts were reluctant to consider less than a 12-inch duty for their water users.
- It was suggested that a different license could be issued for higher value crops that require more water.

- From the overall feedback on this topic, flexible allocation would be beneficial for some on a case-by-case basis but should not be universally applied.

## Conclusion

The Water Security Agency, Ministry of Agriculture and Irrigation Saskatchewan would like to thank all participants at this workshop. The feedback received is valuable and will help inform government decisions on implementing new policies and programs. For additional information on the topics covered during this workshop, please reach out to the Water Security Agency at [irrigation.development@wsask.ca](mailto:irrigation.development@wsask.ca).

## Funding Resources

### Irrigation Efficiency Program

The Irrigation Efficiency Program supports improved energy and water efficiencies in irrigation systems. Eligible applicants can receive up to 30 per cent of eligible costs, to a maximum program payment of \$50,000 over the five-year program term of the Sustainable Canadian Agricultural Partnership (Sustainable CAP)

Through Sustainable-CAP there is funding for water monitoring technology:

- Installing flow monitors, water metres or equipment that will measure water usage. [Irrigation Efficiency Program | Irrigation Program | Government of Saskatchewan](#)
- Soil and plant moisture monitoring equipment (e.g., soil and leaf moisture sensors). [Irrigation Efficiency Program | Irrigation Program | Government of Saskatchewan](#)

### Irrigation Development Program

The Irrigation Development Program supports infrastructure development to increase irrigation capacity by creating a secure water supply to irrigable land parcels. Eligible applicants who complete projects for Irrigation Development can receive the lesser of 67 per cent of eligible costs or \$1,675 per irrigable acre developed to a maximum program payment of \$500,000 over the five-year program term of the Sustainable CAP.

Eligible expenses include:

- Pumps, pump stations, turnouts, pipelines, drains, power installation and consulting services. [Irrigation Development Program | Irrigation Program | Government of Saskatchewan](#)