

# Water Source Testing Instructions for Irrigation Certification

## What Happens To Your Water Sample?

The objective of collecting a water sample or samples is to estimate the water quality of the irrigation source during a typical growing/irrigation season.

- Water samples from prospective irrigation water sources can be submitted to the Ministry of Agriculture for analysis at no cost.
- In certain situations, multiple samples may be required:
  - Acquiring samples in the spring, summer and fall provides a better understanding of how water quality may vary over the course of the growing season; and
  - Samples collected through ice are not ideal.
- Samples will be submitted to the lab for detailed salinity analysis to determine the following parameters: electrical conductivity (EC), bicarbonate, hydroxide, carbonate, total alkalinity, chloride, hardness, calcium, potassium, magnesium, sodium, sulfur, sodium adsorption ratio (SAR) and pH.
- An irrigation agronomist will follow up with the client to review the water quality data and discuss its suitability for the proposed project.
- Samples should be submitted as soon as possible after they are taken.

NOTE: The ministry does not monitor irrigation water sources for clients following irrigation development. Ongoing monitoring of water quality is recommended and is the responsibility of the irrigator.

### Sample Bottles:

Sample bottles are available for pick-up at the Ministry of Agriculture – Crops and Irrigation branch office located at **410 Saskatchewan Avenue, Outlook, SK**.

Alternatively, a clean, plastic bottle, such as a 591 mL or larger pop bottle, can also be used. A minimum sample of 500 mL is required to perform the analysis.

### Sampling Protocol:

The sample should be taken as close to or near the deepest portion of the water source and as far away from the water source shoreline as possible. If the pump location is known, the sample should be collected from this area.

- Flush out the sampling container at least three times with the water that you are sampling.
- Reach out as far as possible to avoid muddy, murky or stagnant water on the edge of the water source.
  - If necessary, attach a small container to a three-four foot pole in order to reach out further into the water source.
  - Collect the sample from below the water surface to avoid contamination from floating debris (algae, plant material, etc.).
- Completely fill the sample bottle and cap it immediately.
  - Label accordingly with a sharpie or a pen – **Water Source Name** (Echo Lake, Dugout, etc.), **Land Location** (legal land description and/or GPS coordinate), **Client Name, Date** and **Time**.
- If taking the sample from a stream, collect below the water surface and from mid-stream to avoid contamination from debris.
  - If wading in, approach the site from downstream and stand facing upstream. Plunge the bottle below the water surface and turn it into the current.

Mailing Instructions:

Mail, courier or drop off the sample to the following location:

Ministry of Agriculture

Box 609

410 Saskatchewan Avenue

Outlook SK S0L 2N0

Phone: (306) 867-5500

**\*Ensure the bottle cap or sampling container lid is snug and tape the seam of the bottle lid to prevent leakage.**

Please contact an irrigation technologist at the Ministry of Agriculture's Outlook regional office at 306-867-5500.