

8 Only apply as much water as your soil can hold

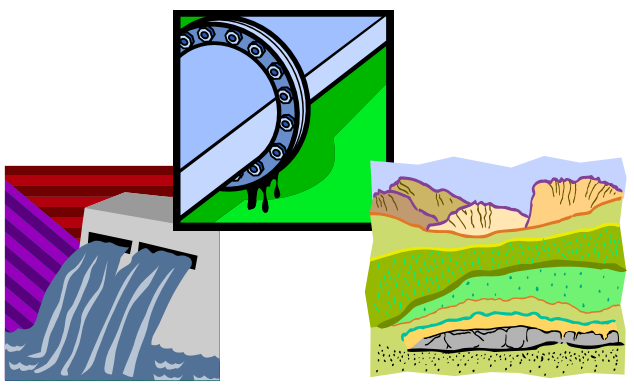
Soils can only hold a limited amount of water before the water drains below the root zone or will run off the saturated soil surface.

- 💧 Light sandy soils hold less water than heavy clay soils.
- 💧 Determine how long you can run your irrigation system to minimize water loss.

9 Use a soil moisture monitoring device or climate information to determine when to irrigate

Often when the surface of the soil is dry there are still water reserves lower in the root zone that the crop can draw upon.

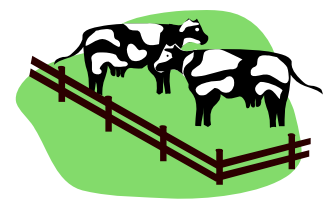
- 💧 By monitoring soil moisture within the root zone it may be possible to postpone irrigation by a few days.
- 💧 Climate information is used in scheduling irrigation
- 💧 Use the current climate and a five day forecast when scheduling irrigation.



10 Adjust watering parameters under windy conditions

When operating gun systems under windy conditions, lower the trajectory level and/or narrow the spacing to achieve the best uniformity possible

- 💧 Learn how to adjust the spacing based on wind speed.



Thank you to British Columbia Ministry of Agriculture, Food, and Fisheries for these water saving tips.

For more information visit www.farmwest.com

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Water Stewardship Committee



Think water.
Every drop counts!

10 Ways to Save Water on the Farm



10 Ways to Save Water on the Farm



1 Refrain from irrigating during hot/windy periods of the day

During the peak of the irrigation season, it may not be possible to wait to irrigate due to logistics of getting around the entire farm.

- ⦿ During the early and late part of the irrigation season there may be more flexibility in planning irrigation times.
- ⦿ Water savings can be realized in May, June, and September.

2 Know your crops' water requirements

It is possible to determine how much water your crop is using by evapo-transpiration and applying a crop coefficient.

- ⦿ Knowing how much to water your crop uses can help you determine the amount of water that is taken up from the soil
- ⦿ The next irrigation should then only be long enough to replace the moisture.

3 Repair leaks in the irrigation system

If you have a water meter installed, the irrigation system can be checked by turning off the system and monitoring the meter to see if it is still running. Also look for perpetual wet spots along the irrigation line that do not dry up between irrigations.

4 Know your livestock's water requirements

Never save water by limiting the amount of water your animals drink, but pay attention when filling containers.

- ⦿ A water tub that is accidentally left to run over while filling with a hose is responsible for the loss of 5 gallons of water a minute.
- Install floats on water tanks that will shut off the water supply when the tub is full.
- ⦿ Keep water clean so animals don't waste water

5 Select a more efficient irrigation system

Selecting systems that are not as susceptible to evaporation can increase irrigation efficiencies.

- ⦿ Using sprinklers instead of a stationary or traveling gun can reduce water use by 5-15%, especially in windy areas.
- ⦿ Using a drip system instead of a sprinkler system can save up to 20% of total water use.

6 Know How Much Water You Use

Understanding the amount of water needed on your farm is the first step in water conservation.

- ⦿ A water meter can be used to monitor water consumption by livestock, household, irrigation, and other needs.
- ⦿ Changes in consumption can indicate problems such as leaks which should immediately be fixed to prevent wasting water.
- ⦿ Metering can also be used to determine when peaks in water use occur, allowing for planning.
- ⦿ Noticing a reduction of water use by cattle can also be an indication of herd health problems.

7 Improve sprinkler irrigation efficiency

To achieve peak performance the irrigation system must be properly designed in the first place.

- ⦿ Replace old nozzles.
- ⦿ Run the system at the designed operating pressure and ensure sprinklers are properly spaced. This will improve efficiency and prevent over irrigation of some areas while trying to cover dry spots.
- ⦿ Check the pressure at the farthest and highest points of the lateral line. The acceptable pressure variation along the lateral line should be +/- 10% (no more than 20% variance).



Agriculture and livestock account for 80% of the water use in the Okanagan.