Coming Soon:
Best Management Practices and Self-Assessment for Water and Fertilizer Use in Greenhouse Floriculture Production

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What is it?

A tool designed for:

Greenhouse floriculture producers…like you!

Allows you to:

- Assess the current use of water and fertilizer at your production facility
- Determine where improvements can be made
- Document ongoing improvements

How will it help me?

- **Map** water movement on and off your property.
- Review all **fertilizer and chemical storage** and mixing areas.
- Identify areas **current production practices** may impact surface water.
- Measure and record your **current water and fertilizer use** in production.
- Describe how water and fertilizer are **collected and stored** for reuse.
- Evaluate potential for **conservation of water and nutrient input**s.

What will be included?

Production Water
As used in production

Pre-Production Water
Before use in the greenhouse

Post Production Water
After use in the greenhouse

BMPs for water and fertilizer use at all stages of production

Example: Water sampling

Do you test your irrigation source water for its nutrient and chemical attributes?	
4	1
☐ Yes	☐ No

BMP: Test irrigation source water before it becomes a part of your production system. Knowing your water quality can help manage undesirable attributes and nutrients post production

Take irrigation source water samples throughout the year or when changing water sources to identify chemical analyses and manage the water accordingly for optimal crop production

Test water for:

- Macronutrients: N, P, K, Mg, S, Ca
- Micronutrients : Mn, Mo, Cu, Cl, B, Zn, Fe
- Other components: EC, pH, bicarbonates, Na, Cl, SO_4

Frequency of water chemistry testing depends on irrigation water source:

- Regularly: well water, pond water, lake, municipal water, rainwater stored cistern/water silo
- More often in cases where warranted (e.g. water borne pathogen concerns)

Example: Equipment monitoring

How often do you monitor your irrigation system for delivery uniformity and perform routine maintenance?			
4	3	2	1
☐ Irrigation system is monitored during each irrigation event; repairs completed immediately if necessary; regular irrigation maintenance completed	☐ Irrigation system is monitored weekly; repairs completed immediately if necessary; regular irrigation maintenance completed	☐ Irrigation system is monitored monthly or seasonally; repairs completed immediately if necessary; regular irrigation maintenance completed	☐ Irrigation system is not regularly monitored; maintenance completed only as required

BMP:

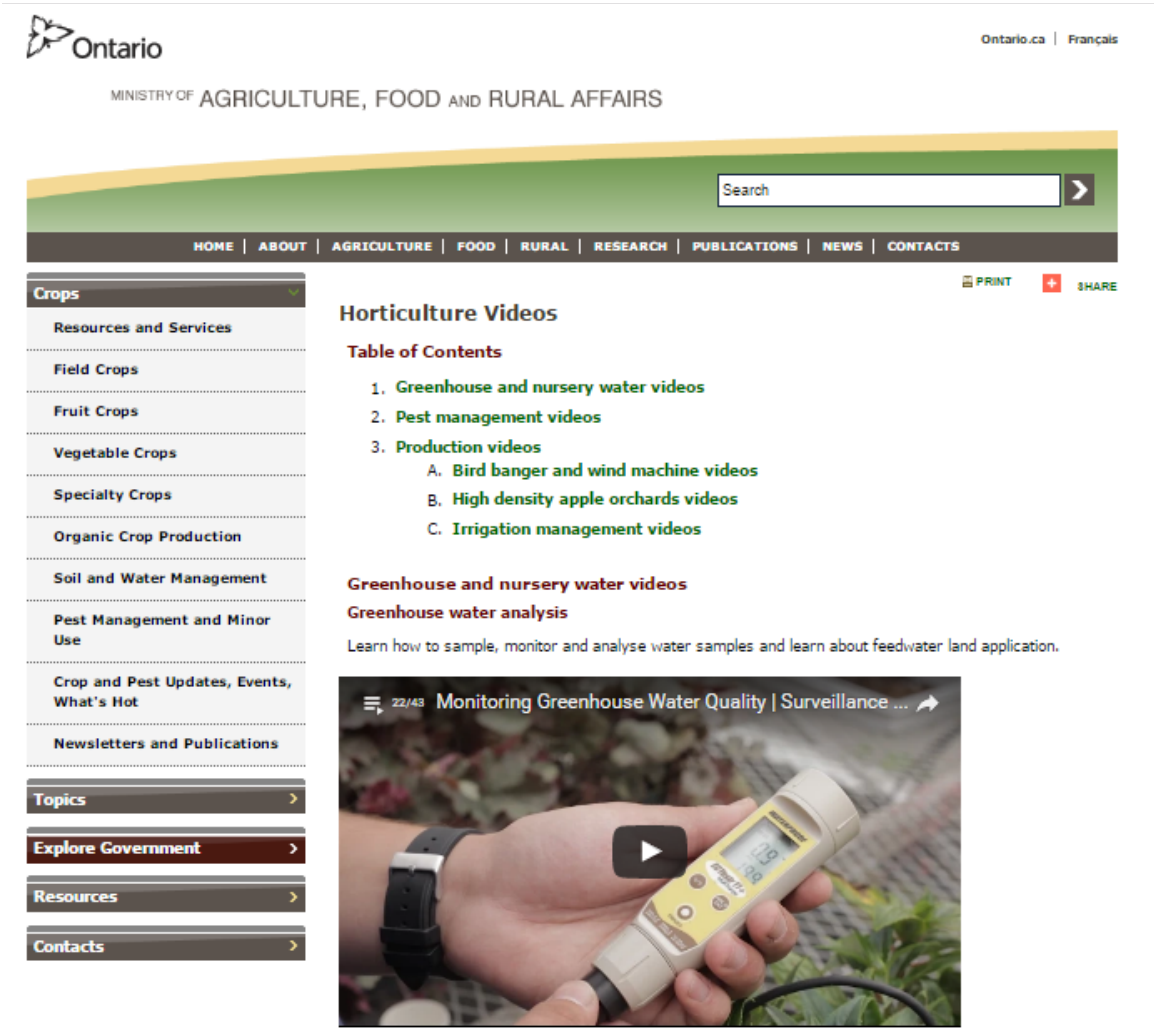
Monitor and visually inspect the system regularly during each irrigation event.

Have a regular maintenance plan, at least annually, for pumping equipment. Keep maintenance records and output volumes.

Repair and clean filters, lines, nozzle heads of stationary or movable misting systems. Acid treat low volume (LV) pressure compensated drip emitters to remove possible salt buildup at least annually.

Install monitoring equipment (water volumes/pressure gauges/flow meters) to detect changes in water volumes and application rates. Test output for delivery uniformity. This is especially important for sub-irrigation systems such as flood benches or floors.

Other Resources



http://www.omafra.gov.on.ca/english/crops/hort/videos.htm