

Getting Started

Water and nutrient management is fundamentally important to the profitable production of container-grown woody and herbaceous crops. Best management practices (BMPs) can help you to improve production efficiency and protect our environment by making the best use of water and nutrient resources.

BMPs are voluntary tools that can help you:

- scrutinize the current use of water and fertilizer at your production facility
- prioritize your water and fertilizer use
- determine where improvements can be made
- document ongoing improvements.

Every BMP will not be suitable for every operation and goal. Your completed Environmental Farm Plan (EFP) and this Self-Assessment can help you determine which BMPs to implement in your outdoor container production system.

Start by taking a comprehensive and critical overview of your production areas.

1. Map all source, stored and post-production water movement on and off your property.
2. Review all fertilizer and chemical storage and mixing areas to ensure proper containment.
3. Identify areas on your property where current production practices may impact surface or ground water.
4. Test all irrigation, container yard runoff, as well as collected and stored water for pH, EC, bicarbonates, sulphates and nutrients.
5. Calculate and record your current water and fertilizer use per unit area of production.
6. Describe how water and fertilizer are collected and stored for reuse.
7. Develop and review contingency plans for when irrigation water availability is restricted or quality reduced, and for post-production water storage.
8. Evaluate potential for effective conservation of water and nutrient inputs.
9. Know and comply with all local, provincial and federal bylaws and regulations.

In the following Self-Assessment, BMPs are grouped by production stage:

Irrigation Water Management: management of water and nutrients before application to the outdoor container production area

Crop Nutrient and Water Management: management of water and nutrients within the outdoor container production area

Runoff Management: management of water and nutrients after runoff intercepts the outdoor container production area

Each section is guided by the following key principles:

- Know your water quantity and quality throughout the system.
- Manage water and nutrient inputs efficiently.
- Maximize collection and reuse of post-production water.
- Maximize storage capacity and integrity to keep post-production water contained.

Implementation of the BMPs provided in this document does not remove the operator's responsibility to ensure compliance with applicable legislation, including municipal, provincial and federal requirements.

Container production farms must be managed in accordance with applicable legislation such as the *Conservation Authorities Act*, *Environmental Protection Act*, *Lakes and Rivers Improvement Act*, *Nutrient Management Act*, *Ontario Water Resources Act* and the *Pesticides Act*.