# Position Paper: Drought Water Management

## Introduction

With BC snowpack averaging 66% of normal levels and anticipated dry weather this summer, water stewardship will be critical to ensure adequate resources for drinking water and agricultural production and to provide a healthy environment not only for fish but also our landscapes from forests, grasslands, farmlands, and parks to private yards. All British Columbians have an opportunity to rise to this challenge and work together to meet this year's drought. As our climate changes, we need to address immediate challenges and plan for and implement changes to mitigate more droughts in the future.

BC Landscape and Nursery Association members include landscape professionals, nursery growers, independent garden centres, and suppliers who provide irrigation systems, growing media, and fertilizers. BCLNA promotes and educates our members on water stewardship and conservation. BCLNA supports the use of mandated water conservation measures during times of drought; however, these measures need to be done in a manner that considers regional differences and collaborative approaches in communities, ensures soil and plant health and supports innovative technologies and infrastructure to reuse water resources.

It is essential for consumers, businesses, and all levels of government to understand how we can all be part of the solution to address water shortages.

## The Issue

Water restrictions and curtailment orders can have debilitating effects on soil and plant health, affecting food production, fire prevention and population health, as well as the environmental health of landscapes. The very environment we are trying to protect can be adversely affected by water restrictions and curtailments if not managed as carefully as the water resources themselves. Damaging the plant base of the environment increases over multiple years of restrictions with cumulative effect, and this impacts not only the environment but also the investment in the landscapes of municipalities, residents, and the province. They can also significantly affect the operations and economic viability of landscape professionals, nursery growers, and suppliers.

## Key Points

- When looking at water use trade-offs, living things should take precedence - drinking water, food, feed, and basic landscape/plant maintenance should be prioritized over inanimate water use.
- Hydrated plants increase resilience and reduce the risk of wildfires.
- Plants reduce $C0^2$ in the atmosphere and provide air quality, food, cooling, pollinator food, soil support, feed for domestic and wild animals, and wellness benefits for people. We must protect the plants that provide all these benefits.
- Soil health and biomes are essential for nutrient cycling, carbon storage, and the mitigation of greenhouse gases.

- Moist soil protects this biome and retains and uses less water than soil allowed to dry out.
- Each regional micro-climate has different soil, plant, water resources, and climatic conditions, which must be considered when implementing water conservation measures.
- Selecting the most effective water conservation timing and intensity is dependent on a wide variety of factors. Landscape professionals and nursery growers are trained to use water resources efficiently and should be consulted when drafting water use policies.

**Background**

Landscape professionals are trained and certified through the Canadian Landscape Standards. These standards ensure proper installation of plants and irrigation and that professional landscape maintenance reduces water usage. New installations (plantings) and repairs require more frequent but low-level watering to maintain soil and plant health. Using organic fertilizers and pest management products also requires water use but is typically preferred or even legislated over chemical pest management.

Many nursery growers employ precision water application through drip irrigation throughout their operations. Leaders in the industry have invested in world-leading water storage and recirculating systems to reduce water usage further. Water conservation is a general practice in the industry. There are innovative technologies and infrastructure that can raise the level of conservation in our sector. However, these require capital investment at a time when costs and interest rates are prohibitive. Assistance for smaller nurseries and those that need to refit their operations to incorporate the newest in irrigation systems would enable even greater conservation.

Nursery growers grow young plants, such as bedding plants for gardens, and must water daily to keep them alive. Even though shrubs and trees can use water efficiently with the available soil medium, they are still young at 3 to 5 years old and require watering to live and mature.

Plant growers and the services that support their success were designated essential during the pandemic due to their link to food and public resilience. They remain essential and must be prioritized in water management decision-making.

**The Solution**

Thoroughly understand the environment that is being regulated and implement water conservation measures in a targeted and collaborative manner.

**What Can Governments Do?**

**Short term**

- Consult with professional agrologists, leading landscape professionals and other water and landscape managers to develop water policy.
- Ensure water management policies consider our industry's efforts, including recycling water, efficient irrigation systems, etc.

- Encourage collaboration in the community regarding the timing and amount of water use early in the season to extend the period of water access.
- Encourage water conservation in homes and cities, using greywater where possible.
- Ensure that water conservation measures target non-life-threatening activities, including people, animals (including fish), and plants. Examples would be washing sidewalks, buildings, and cars (other than for safety reasons).
- Provide incentive programs for households, businesses and public infrastructure to adopt and install efficient irrigation, water conveyance technologies and storage. New technologies can save up to 50% of water over previous versions.
- Government bodies should only hire Certified landscape professionals to design, install, and maintain their landscapes.

**Medium term**

- Develop regulations, in consultation with industry professionals, that will mandate water conservation tools, systems and methods in new builds and renovations.
- Plant drought-tolerant plants with all new plantings on public lands.
- Research plants for our region that are tolerant of drought in the summer and saturation in the winter.
- Plan to implement grey water systems and water storage facilities in municipalities' infrastructure.

**Long term**

- Implement greywater systems and water storage facilities for municipalities.

**What Is BCLNA Doing?**

- Promoting and educating members to use leading water conservation technologies.
- Showcasing leading water conservation technologies for our industry.
- Working with the Ministry of Agriculture and Food to prepare our members for drought and ensure they are linked to Ministry drought resources.
- Working with the Ministry of Agriculture to do a water technology study for BC nurseries.
- Working with the CNLA on a broader Water Smart program for our sector.
- Established a Drought and Water Committee to coordinate industry input on relevant rules and policies.
- Providing drought communications to our members to ensure they know the situation and highlighting best drought management practices.
- Providing capacity for incentive programs to be delivered effectively to our sectors.