

Floricultural Greenhouse Action Plan

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May 27, 2016
Ag Sector Working Group**









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Issue

- Nutrient waters and other discharges from greenhouses
- Farms that discharge nutrient feed water contribute to N & P in surface water
- MOECC pushing for action by greenhouse growers to have permits for discharges and to reduce P leaving the farm

Actions by FCO

- Hired a Water Specialist to support members
- Participation on Ontario Greenhouse Environmental Sustainability (OGES) steering committee
- TOGA Round-Table and high-level government relations efforts
- Tours for policy staff (MOECC, OMAFRA)
- \$1.7M in applied research projects (characterization, communication, alternative technologies, pathogens)



Hybrid Treatment Systems



Key findings

- Over 70 site visits completed, action plans developed
 - Many cross-connections, complicated plumbing
 - Source water often mixed with other low-risk waters
 - Lots of different waters generated in GH
 - Many farms had discharges (nutrient and/or storm)
- Need for applied research
 - Solutions for water treatment so water can be safely recycled and re-used
 - Investigate fertilizer recommendations with subirrigation growing systems



Grower Actions

- What we learned from growers...
 - Do it in stages
 - Major infrastructure changes have meant more productivity, better efficiencies, and more flexibility
 - **Environmental sustainability ∞ good business**
- Members prepared over 70 Action Plans to address discharges and any non-compliance



Barriers to Recirculation

**Existing
Infrastructure**

Costs

**Treatment
Options**

**Individual
Farm Needs**

Pathogens

**Regulations &
Targets**

**Variety of
Crops**

Next Steps

- Success stories of individual farmers
- Communication of new regs/options/research
- GF2 cost sharing opportunities
- Continue to work with OGES for long-term sustainable regulatory solutions
- Individual farm support to move farms toward recirculation
- Research into more recirculation treatment options, biofilm research, fertilizer requirements, etc.

Thanks to:

Floriculture Greenhouse Farmers

OMAFRA, MOECC

TOGA

Canadian Greenhouse Conference

Flowers Canada (ON)

Soil Resource Group

