

Reducing Phosphorus Levels Great Lakes Domestic Action Plan

Presentation to: OMAFRA Agriculture Working Group

WHY WE ARE HERE TODAY

1. Discuss our **shared objective** of reducing phosphorus levels in the Great Lakes
2. Re-introduce Grow Ontario Together (GOT)
3. Outline the Grow Ontario Together **policy framework**

ABOUT GROW ONTARIO TOGETHER

- A **collaboration** of agriculture commodity organizations that recognizes the need to provide leadership on phosphorus reduction in the province.
- Our objective is to approach the issue of phosphorus collaboratively – in **partnership** with government and other interested stakeholders.

GOT POLICY FRAMEWORK – PRINCIPLES

1. Build on **existing scientific monitoring** and research
2. Set clear and **proportional reduction targets** for all sources
3. **Cost/benefit** analysis is critical
4. Ongoing improvement and **adaptation**

GOT POLICY FRAMEWORK – STRATEGIES

1. Adaptive Management
2. Watershed Approach
3. Stewardship and Community Action
4. Source-specific Actions
5. Monitoring and Compliance
6. Research, Modeling and Innovation

ADAPTIVE MANAGEMENT

- **Continuous improvement over time**
 - Immediate action based on best scientific information
 - Measuring progress
 - Pursuing further scientific monitoring and innovation
 - Developing and incorporating new information and technology

WATERSHED APPROACH

- A comprehensive approach, including **“sub-watershed” phosphorus loading targets**
- Focus on outcomes

STEWARDSHIP AND COMMUNITY ACTION

- Regulation alone may prove to be insufficient and/or inefficient
- Promote individual actions and **change behaviour**
- Education and **public engagement**
- Most watershed is **privately owned**

AGRICULTURE SOURCE-SPECIFIC ACTIONS – BACKGROUND

- Recognize the role **agriculture** has played and must continue to play
 - OSCIA's Great Lakes Agricultural Stewardship Initiative
 - Canada-Ontario Environmental Farm Plan
 - Grain Farmers \$1.5 million understand movement of phosphorus in soil

AGRICULTURE SOURCE-SPECIFIC ACTIONS – INTERMEDIATE TERM GOALS

- Enhance industry **engagement**
- Prioritize Lake Erie phosphorus reduction for **funding programs**
- Reduce the application of nutrients in the **non-growing season**

AGRICULTURE SOURCE-SPECIFIC ACTIONS – LONGER TERM GOALS

- A **joint process** to develop priorities for action and ensure prioritization of mitigation activities:
 - Research and monitoring infrastructure
 - Incorporating phosphorus management into infrastructure and other green initiatives
 - Review current NMS and NMP documentation, training and certification requirements
- Solutions to **improve market mobility** of nutrients
- Support **community solutions** to stop nutrient laden sources before they reach the Great Lakes

AGRICULTURE SOURCE-SPECIFIC ACTIONS – Greenhouse

- Since 2011 OGVG, FCO, MOECC and OMAFRA have worked together through the Ontario Greenhouse Environmental Strategy group to implement the shared vision for “the greenhouse sector be recognized as a leader in environmental performance, innovation and compliance.”
- Currently, over **90%** of the acreage represented by OGVG recirculates. Since 2010, Ontario’s greenhouse farmers have reduced their fertilizer consumption by **58%** on a per acre basis.
- **Grower Outreach:** OGVG has put in place resources to deliver one-on-one support to our membership. Approximately **44% of the greenhouse acreage in the Lake Erie priority watersheds** has been directly contacted.
- Stormwater Compliance (55 applications started)
- Educational Material
- Adaptive Management/Sampling Feedback
- Good News Stories
- Contingency Planning
- Sanitary Sewer Expansion

AGRICULTURE SOURCE-SPECIFIC ACTIONS – Livestock

- Build on the existing strengths of the Nutrient Management Act
 - What are the gaps that need to be addressed in order to meet the Domestic Action Plan objectives?
- Continue on collaborative education and outreach activities with OMAFRA to discourage land application of livestock manure on frozen and snow covered ground without incorporation
- In cooperation with the MOECC and OMAFRA – develop an appropriate complaint response protocol for land application on frozen and snow covered ground in the priority Lake Erie tributaries
- Producer outreach – awareness sessions on Great Lakes
- Research priorities and funding towards reducing phosphorus footprint of barns

MONITORING AND COMPLIANCE

- Monitoring
 - An integrated **monitoring network** across all jurisdictions
- Compliance
 - Utilize **existing strong legislative and regulatory frameworks**

RESEARCH, MODELING AND INNOVATION

- Research
 - **Collaborative research** will be a key component of meeting targets in each watershed
- Modeling
 - Critical to adaptive management and **accurate measurement** of watersheds
- Innovation
 - To address **future challenges** and opportunities

CONCLUSION

- **Shared objectives and responsibility**
- **Collaboration and Leadership**
- **Action with a bias towards outcomes, supported by ongoing innovation and adaptation**