



GUELPH-GUELPH/ERAMOSA WATER QUANTITY POLICY DEVELOPMENT STUDY

Draft Water Quantity Policy Approaches

Community Liaison Group
November 8, 2018

COMMUNITY LIAISON GROUP

Meeting Purpose

- Present draft policy approaches for addressing significant water quantity threats
 - Consumptive water taking
 - Recharge reduction
- Receive feedback on draft policy approaches

COMMUNITY LIAISON GROUP

Agenda

7:00 p.m.	Welcome, Agenda and Previous Meeting Review and Introductions
7:10 p.m.	Presentation – Water Taking Policy Approaches
7:40 p.m.	Discussion Session 1
8:15 p.m.	Presentation – Recharge Reduction Policy Approaches
8:25 p.m.	Discussion Session 2
8:50 p.m.	Next Steps and Closing Remarks
9:00 p.m.	Adjourn

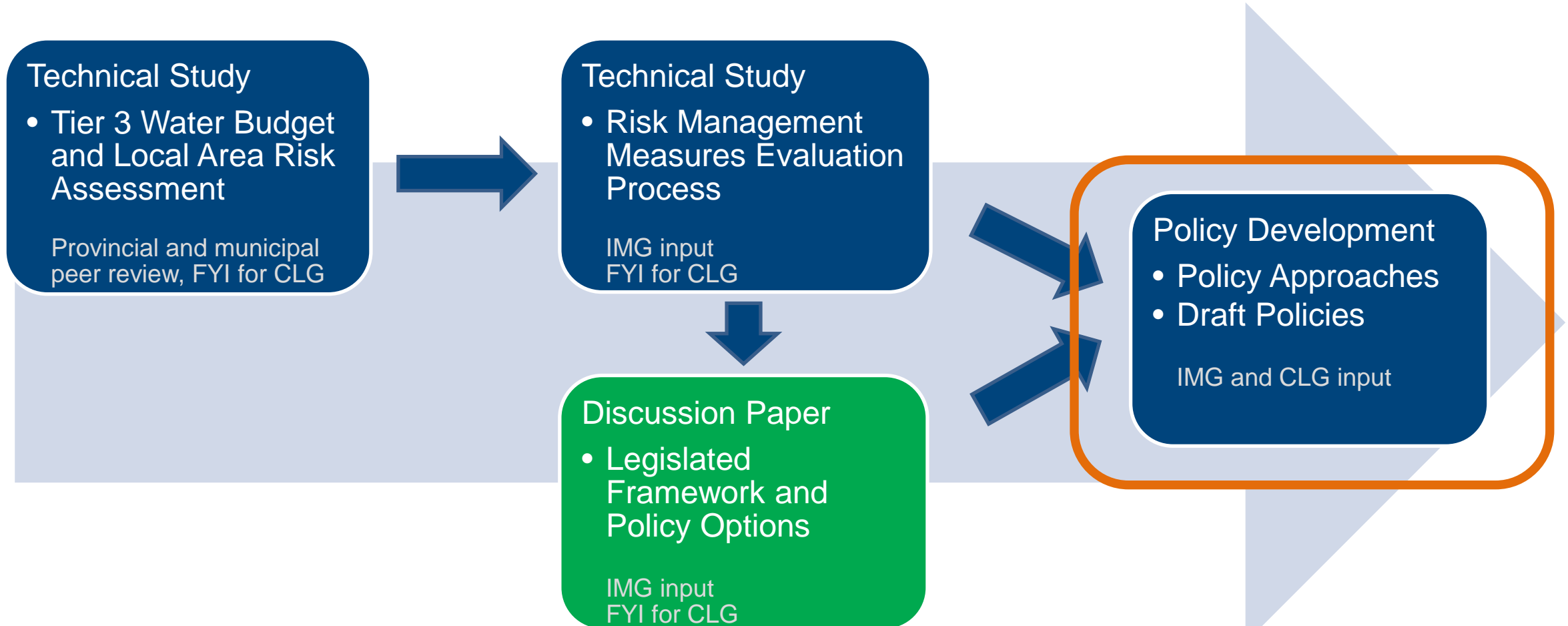
COMMUNITY LIAISON GROUP

HELLO

My Name Is

POLICY DEVELOPMENT

Guelph-Guelph/Eramosa Water Quantity Policy Development Study



RMMEP COMPONENTS

Risk Management Measures Evaluation Process

Greatest impact

- Impact of water quantity threats on water level in municipal wells and whether they can still be pumped under existing, future, and drought conditions
- Evaluated using Tier 3 model

Threats ranking

- Water quantity threats are ranked based on relative impact to water levels at a municipal well

Best measures

- Threats ranking guides the selection of preliminary Risk Management Measures (RMMs)
- RMMs evaluated and recommended through scenarios using Tier 3 model

RMMEP RESULTS

Risk Management Measures Evaluation Process

Municipal Results:

- Majority of high ranked threats are municipal wells (Queensdale Well - #1, Arkell System - #2)
- Municipal wells are a threat to themselves
- BUT: Water quantity policies are to be designed to protect municipal wells

Non-Municipal Results:

- Individually, majority of non-municipal water taking has little influence on water levels in municipal wells except for Dolime Quarry
- Quarry dewatering (Dolime Quarry) ranked #3

THREATS MANAGEMENT STRATEGY

Recommended Risk Management Measures (RMMs)

- Municipal Water Supply Optimization
- Water Conservation and Efficiency
- Addition of New Municipal Water Supplies
- Maintaining Pre-development Groundwater Recharge Rates
- Mitigating Impacts from Non-municipal Consumptive Water Takings

Other recommendations:

- Tier 3 model maintenance
- Collective water resource management by municipalities, the conservation authority and the province to ensure municipal drinking water is sustainable and other water uses* (e.g., non-municipal takings, surface water flows, domestic users) have sufficient water to meet their respective needs

*protecting other water uses not an objective of the CWA unless it is a drinking water use

POLICY DISCUSSION PAPER

Discusses promising policy tools that could be used to protect water quantity sources.

- Consumptive water taking:

- Prescribed Instrument* – Permit to Take Water (PTTW)
- Part IV prohibition and Risk Management Plan (RMP)
- Land use planning
- Specify action

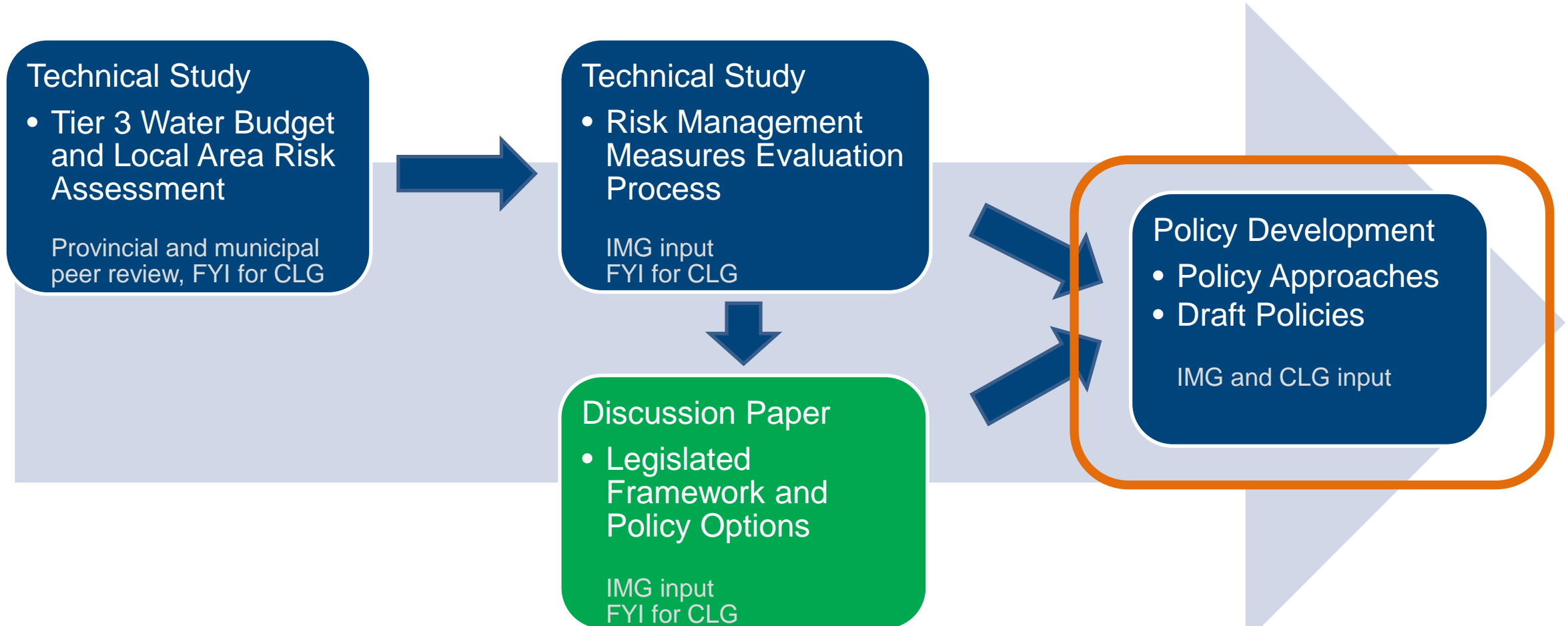
* Other prescribed instruments, e.g., Aggregate Resources Act (ARA) approvals

- Recharge reduction:

- Land use planning
- Prescribed Instrument – Environmental Compliance Approvals (ECAs)
- Education and outreach / incentives

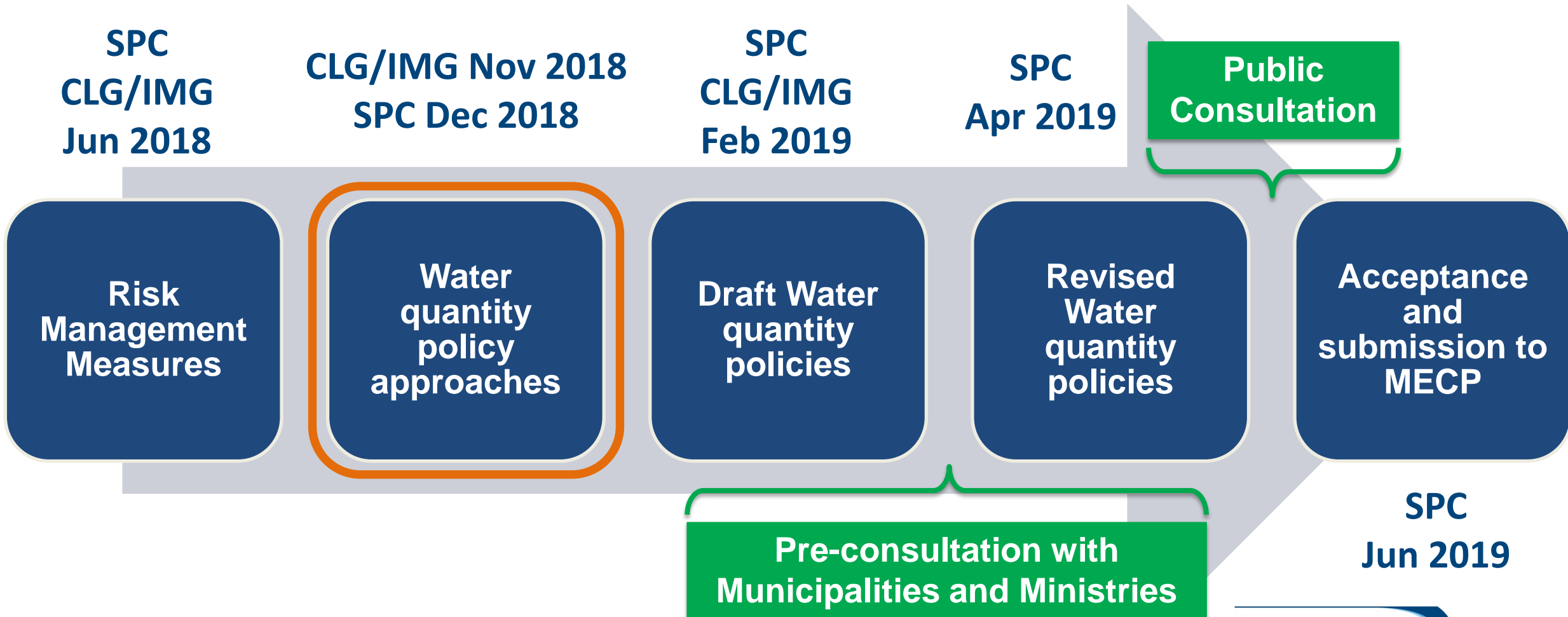
POLICY DEVELOPMENT

Guelph-Guelph/Eramosa Water Quantity Policy Development Study



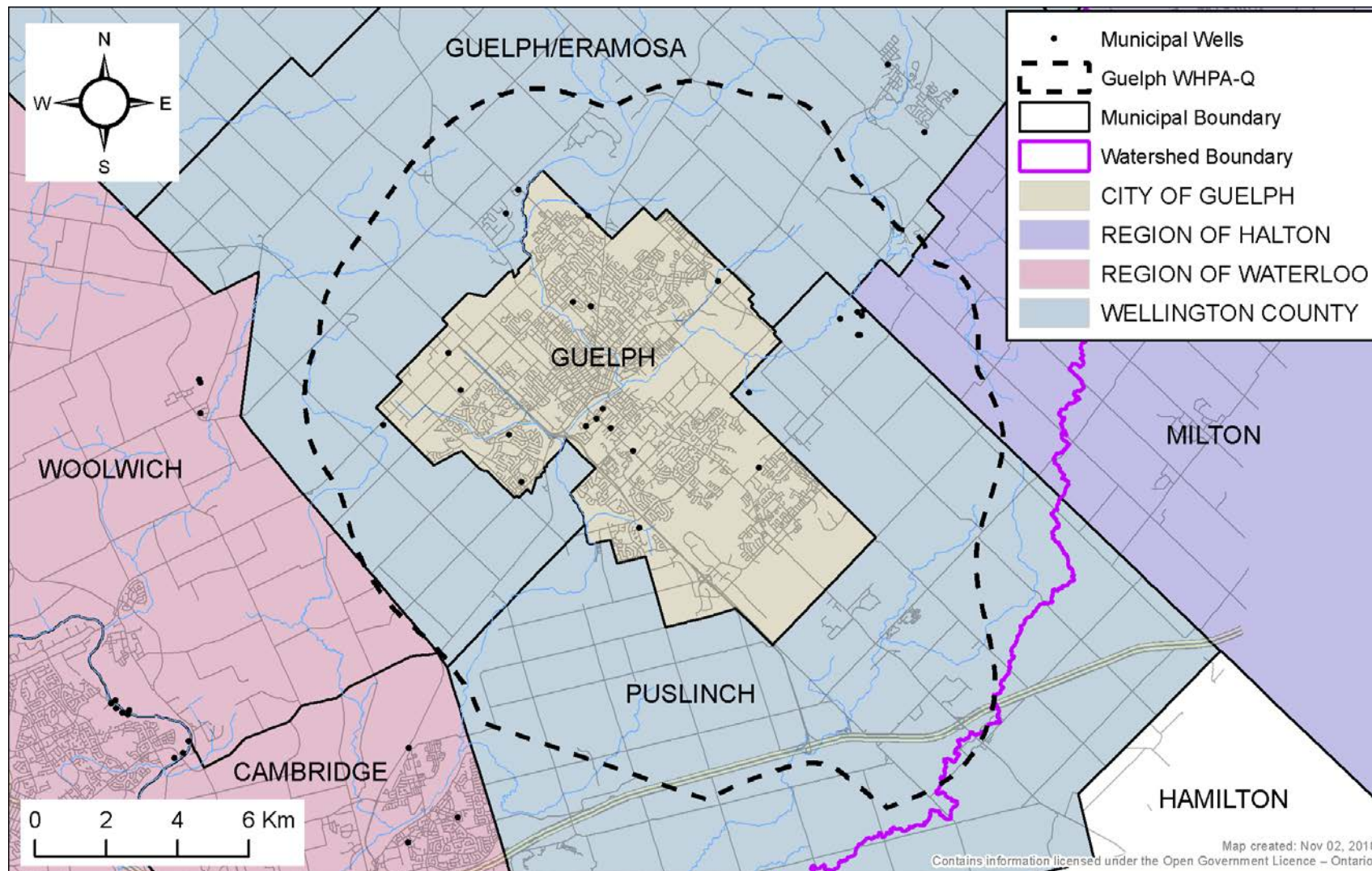
POLICY DEVELOPMENT

Process and Timeline



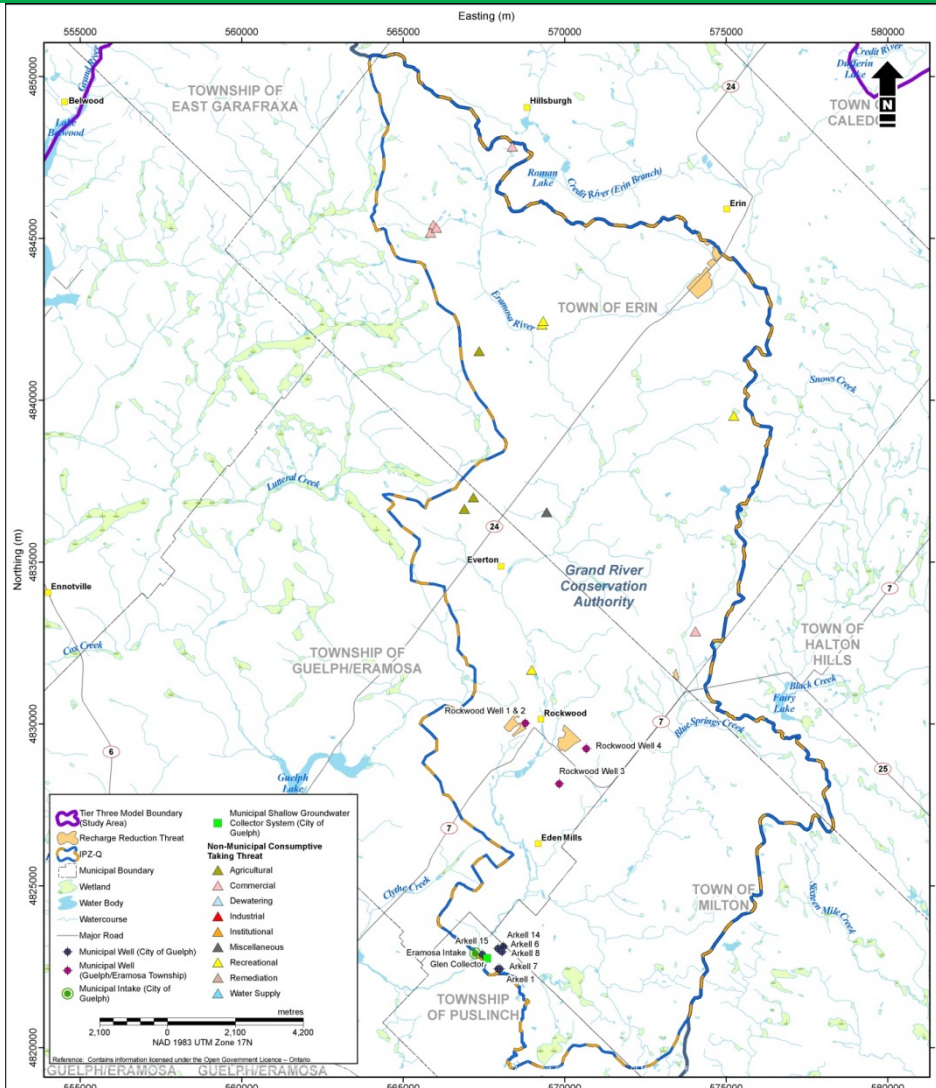
POLICY APPLICABILITY

Wellhead Protection Area Quantity (WHPA-Q)



- Policies will apply within WHPA-Q (Guelph-Guelph/Eramosa Hamilton Drive)
- Policies do not apply outside WHPA-Q
- Policies to be incorporated into different municipal chapters

CLIMATE CHANGE ASSESSMENT



- Draft assessment of the potential impact of climate change as a threat to the quantity of municipal water supplies in Guelph-Guelph/Eramosa completed
- Work ongoing to finalize the assessment
- Draft assessment supports the current direction of policy approaches
- Details of the final assessment to be provided at a future CLG meeting
- No policies drafted for IPZ-Q yet

POLICY DEVELOPMENT

Context

- *Clean Water Act (2006)* protects source of municipal drinking water supplies through prevention, developing collaborative, watershed-based source protection plans
- Source protection plan policies protect current and future drinking water supplies from contamination (quality) and overuse (quantity) activities
- Policy objectives:
 - Ensure activity never becomes significant drinking water threat
 - Ensure activity ceases to be significant drinking water threat
- Policy approaches are high-level, draft, and subject to change. Additional approaches may be considered
- Approaches inform the development of detailed policy texts
- Policy texts will be more specific and may differ among municipalities

POLICY FRAMEWORK

Threats Management Strategy (TMS) and Policy Discussion Paper provide Risk Management Measures (RMMs) that inform water quantity policy development:

Optimization of Municipal Water Supply Systems (Wells)

Water Conservation and Efficiency

Addition of New Municipal Supply

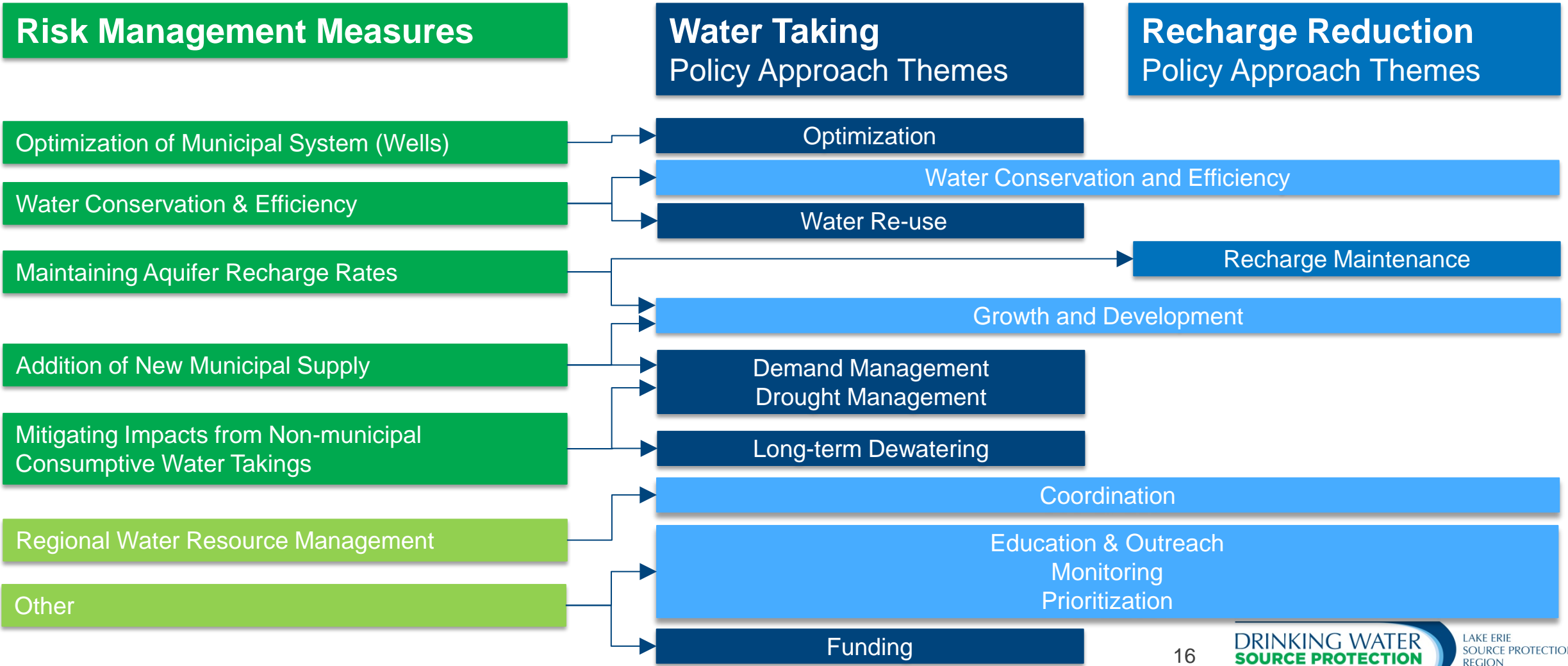
Maintaining Aquifer Recharge Rates

Mitigating Impacts from Non-municipal Consumptive Water Takings

Regional Water Resource Management

Other

POLICY FRAMEWORK



POLICY APPROACHES

Water Taking

Themes	Policy Approach
Optimization	<ul style="list-style-type: none">• Optimization programs for municipal water supply systems
Water Conservation and Efficiency	<ul style="list-style-type: none">• Incentive programs for water conservation and efficiency
Water Re-use	<ul style="list-style-type: none">• Guidelines for water re-use systems and technologies
Growth and Development	<ul style="list-style-type: none">• Growth targets under Places to Grow Plan• Update of subwatershed studies• Demand management for new drinking water supply sources• Conditions as part of development approvals• Water takings in areas of municipal servicing
Coordination	<ul style="list-style-type: none">• Water Resource Technical Working Group
Demand Management	<ul style="list-style-type: none">• Permits To Take Water (PTTW) review• Water takings in areas of municipal servicing

POLICY APPROACHES

Water Taking

Themes	Policy Approach
Drought Management	<ul style="list-style-type: none">• City of Guelph drought response plan
Education and Outreach	<ul style="list-style-type: none">• Education and outreach initiatives• Web-based resources as part of EnviroGuide platform
Monitoring	<ul style="list-style-type: none">• Subwatershed monitoring program• Collection of water usage data for water takers exempted from PTTW requirements• Long-term monitoring of shallow groundwater and surface water systems* <p><i>*under discussion</i></p>
Prioritization	<ul style="list-style-type: none">• Prioritization of municipal water use• Prioritization of inspection and abatement
Funding	<ul style="list-style-type: none">• Tier 3 water budget model maintenance• Climate change assessment model
Long-term Dewatering	<ul style="list-style-type: none">• <i>Under discussion</i>

COMMUNITY LIAISON GROUP

Policy Approaches: Water Taking

1. Are the policy approaches understandable?
2. Are the policy approaches on the right track?
3. Are there any specific gaps that need to be addressed?



POLICY APPROACHES

Recharge Reduction

Themes	Policy Approach
Water Conservation and Efficiency	<ul style="list-style-type: none">• Incentive programs for recharge
Recharge Maintenance	<ul style="list-style-type: none">• Guidelines for groundwater recharge maintenance• Groundwater recharge maintenance where appropriate• Environmental Compliance Approval (ECA) review for stormwater management facilities with LID systems
Growth and Development	<ul style="list-style-type: none">• Update of subwatershed studies
Coordination	<ul style="list-style-type: none">• Water Resource Technical Working Group
Education and Outreach	<ul style="list-style-type: none">• Education and outreach initiatives• Web-based resources as part of EnviroGuide platform
Monitoring	<ul style="list-style-type: none">• Long-term monitoring program of shallow groundwater and surface water systems* <p><i>*under discussion</i></p>
Prioritization	<ul style="list-style-type: none">• Prioritization of ECA review and inspection for stormwater management facilities with LID systems

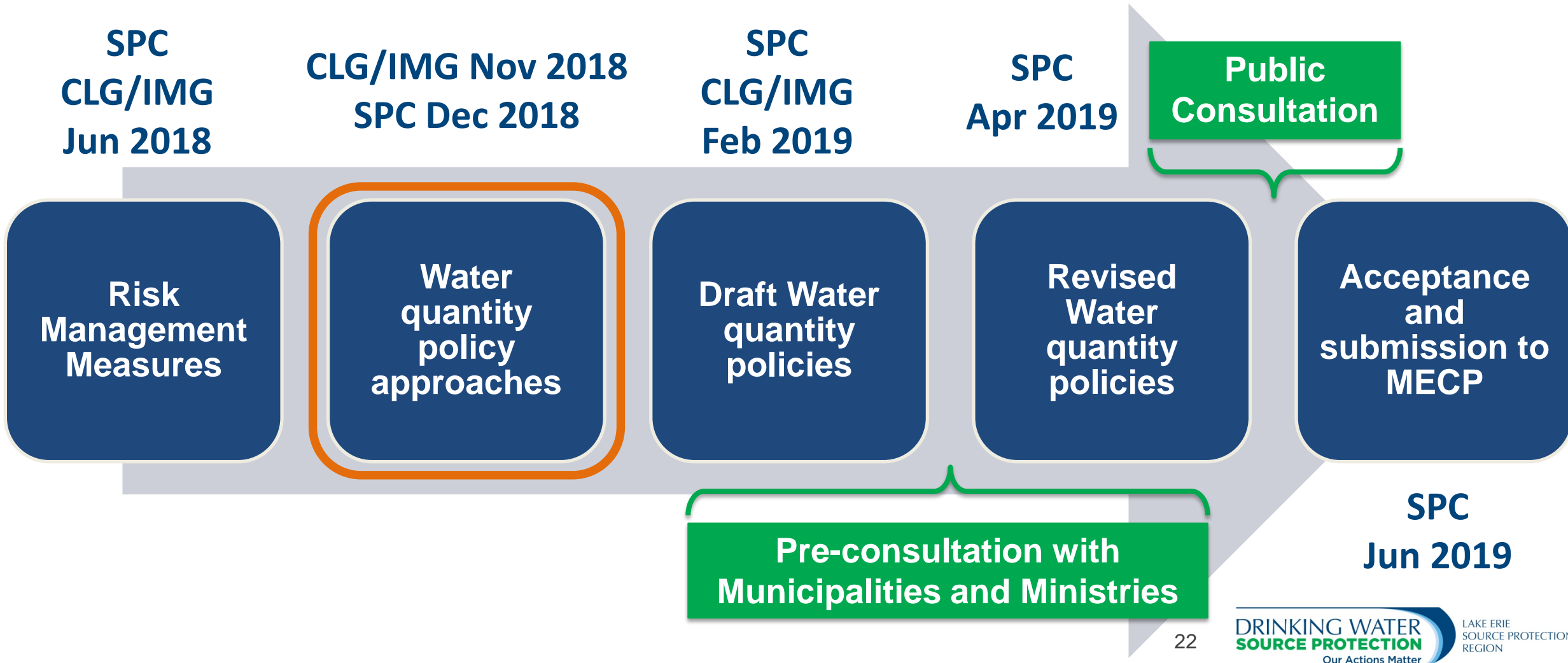
COMMUNITY LIAISON GROUP

Policy Approaches: Recharge Reduction

1. Are the policy approaches presented understandable?
2. Are the policy approaches on the right track?
3. Are there any specific gaps that need to be addressed?



NEXT STEPS



NEXT STEPS

- Lake Erie Region committed to collaborative process for policy development through municipal and stakeholder engagement with Project Team, IMG, and CLG
- Further discussion with ministry staff required for outstanding policy approaches
- CLG feedback on policy approaches due on **November 22, 2018**
- Policy framework and approaches to be revised and brought to the Lake Erie Region Source Protection Committee (SPC) on **December 6, 2018**
- Policy text to be drafted over the remainder of the fall and early winter and presented to the SPC on **February 7, 2019**
- Draft policy text presented to the CLG for feedback on **February 13, 2019**
- Revised policy text to be brought to the SPC on **April 4, 2019**