



Lake Simcoe Region
conservation authority

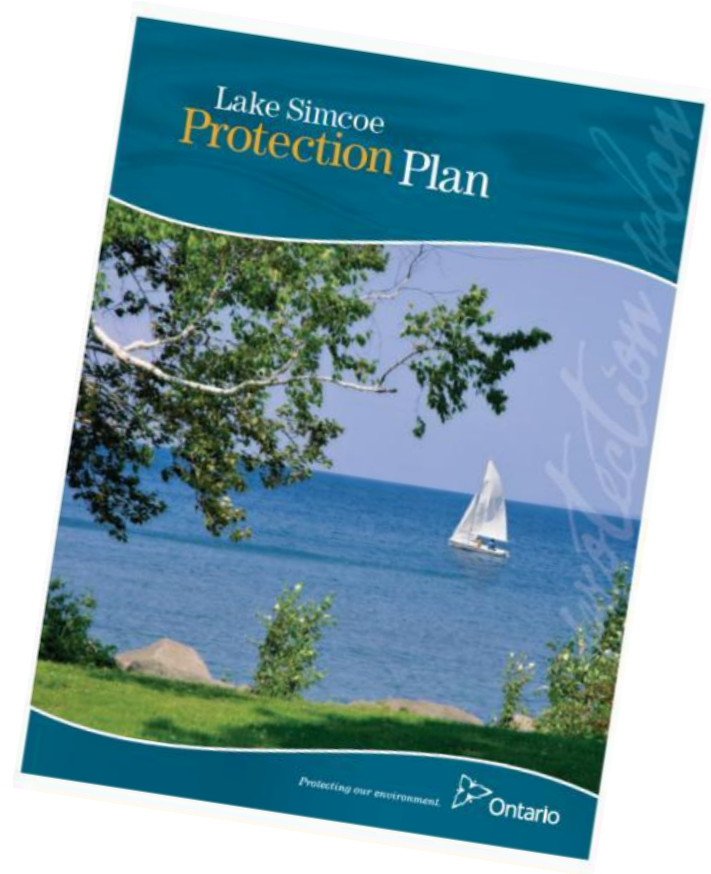
A Watershed for Life

Integrated Watershed Management Using Science to Make Informed Decisions

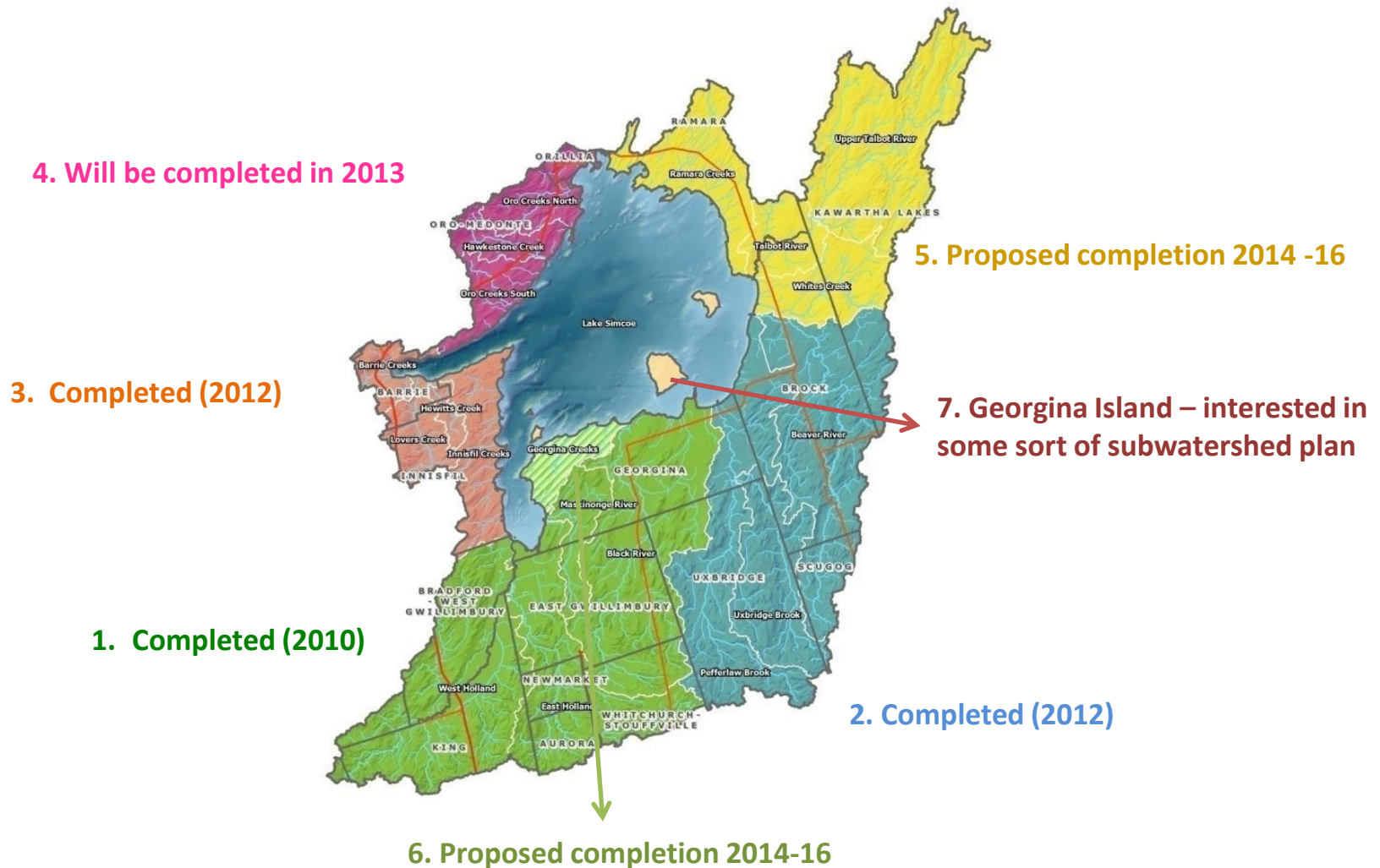
Mike Walters
General Manager, Watershed Management
Ontario Association for Impact Assessment, 2013

Lake Simcoe Protection Plan (LSPP)

- LSPA 2008 enabling legislation,
- Plan took effect June 2, 2009,
- LSRCOA to undertake integrated watershed plans for priority subwatersheds,
- Requirement for watershed municipalities to change their Official Plans to be in conformity with the Subwatershed Plans.



Integrated Watershed Planning

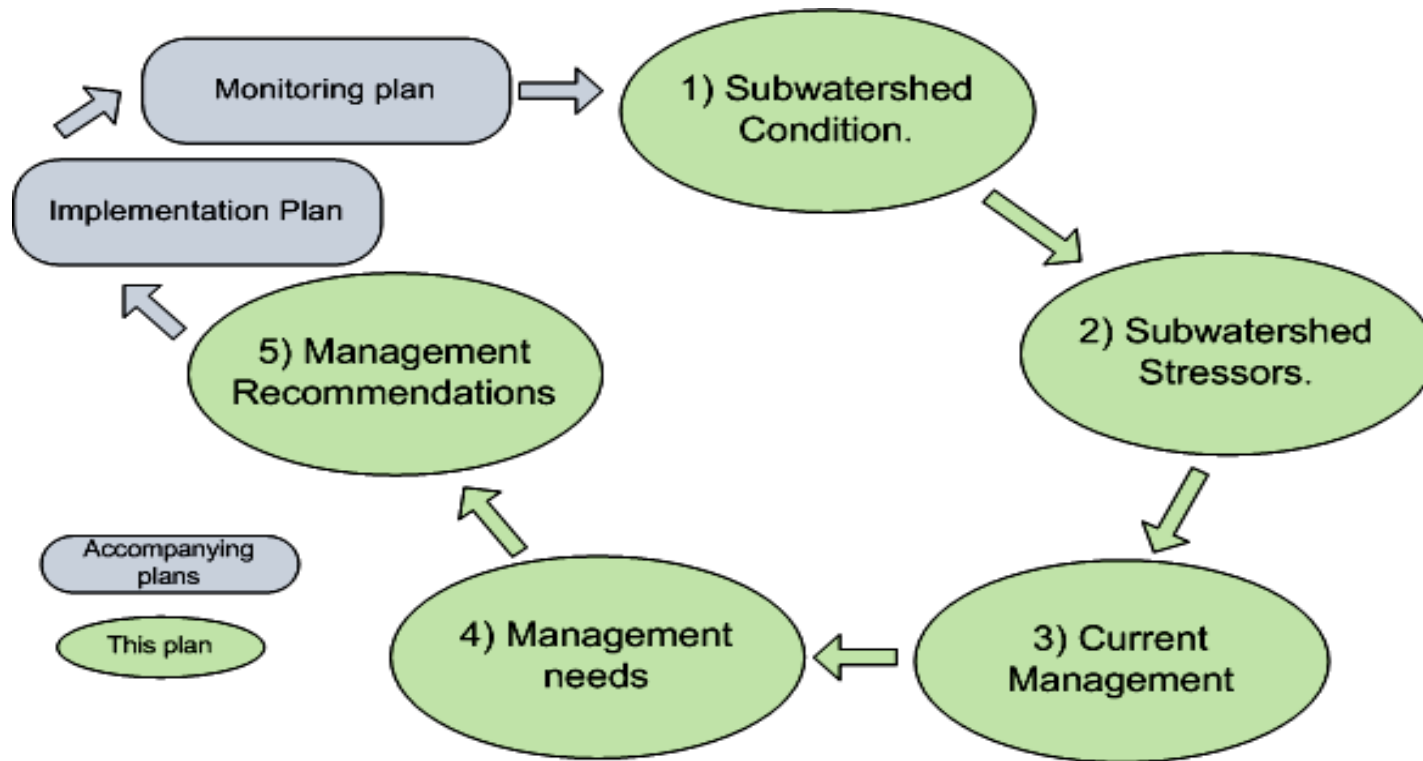


Integrated Watershed Planning

- The process of managing human activities and natural resources on a watershed basis,
- Allows us to protect important land and water resources, while at the same time addressing critical issues such as the current and future impacts of rapid growth and climate change.



Adaptive Process



Pressure, State, Response Model



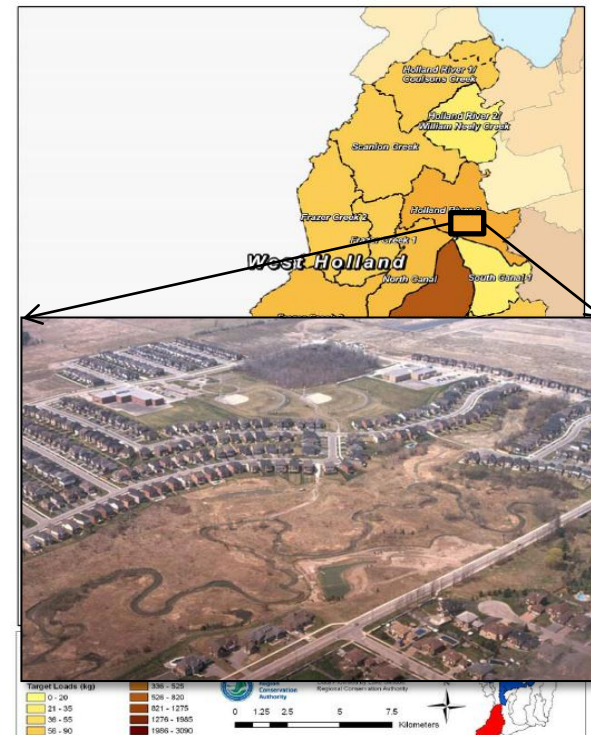
Watershed

Subwatershed

Catchment

Site Level

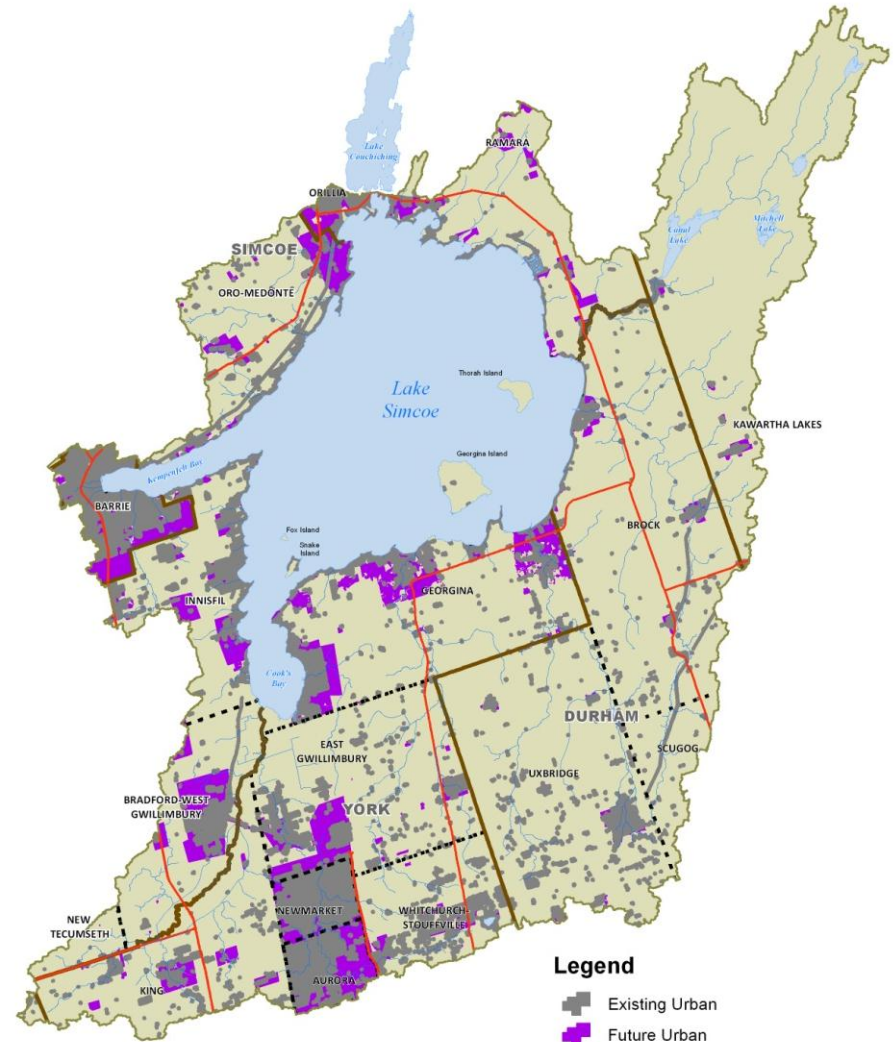
— Increasing Level of Detail —
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Pressure – State – Response Model

Pressure: Growth

- Continued urban expansion to accommodate a growing population.
 - Changing landscape with increased impervious area,



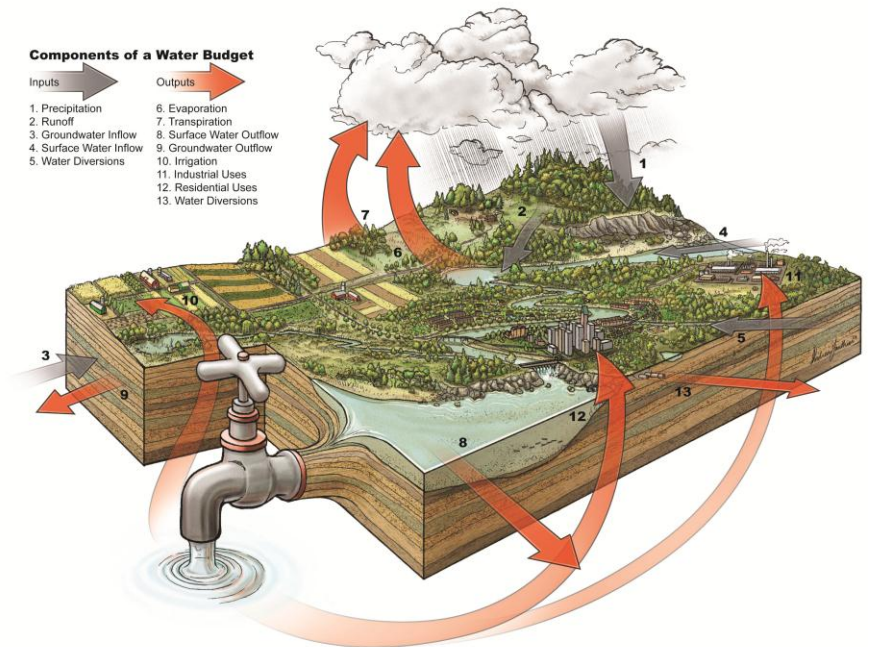
State (Impact)

Reduced Groundwater Recharge

- Natural heritage features,
- Reduced drinking water supplies,

Increased Urban Runoff

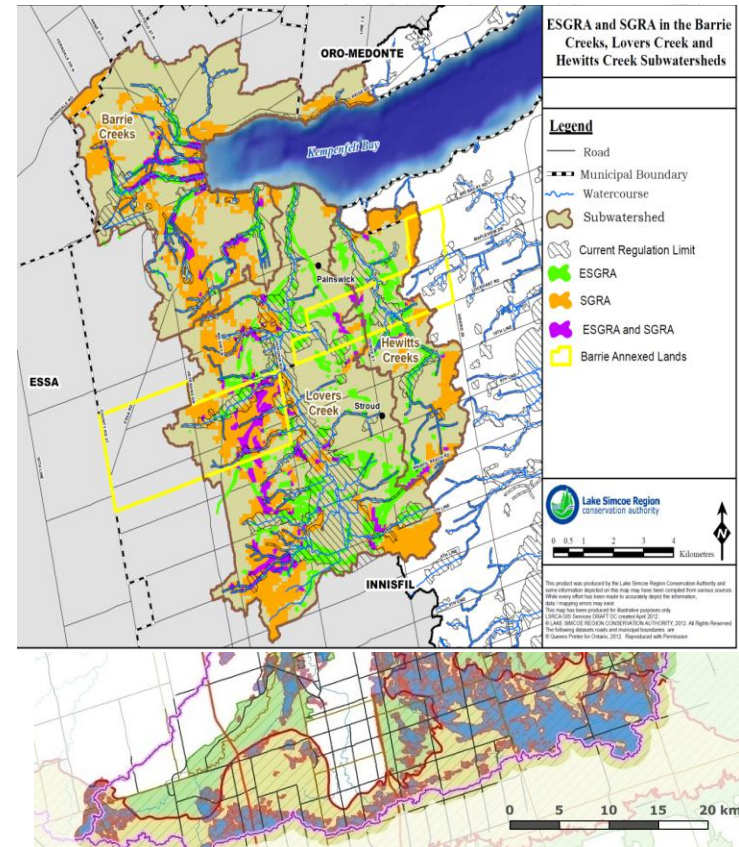
- Increase in pollution loading
- Increased risk of flooding,
- Increased streambank erosion.



Response: (Study, Policy, Stewardship, Education)

Reduced Groundwater Recharge

- SGRA's (completed) and,
- ESGRA's (for 5 subwatersheds),
- Policies have been developed to protect these areas,
- Targeting stewardship projects,
- Launched RainScaping,
- Distributing education materials,
- Providing training opportunities.



Response: (Study, Policy, Stewardship, Education)

Increased Urban Runoff

- Evaluated conventional storm-water practices,
- Researched alternatives (LID) and launched RainScaping,



- Developing new SWM Policies,
- Evaluating opportunities for flood relief projects,
- Researching potential impacts of Climate Change.

Summary and Conclusion

- Pressure\State\Response Model is one accepted approach to assess impacts from human activities,
- Integration of the results throughout the process is critical in selecting the appropriate response,
- Important to involve multidisciplinary lens in the process to ensure success,
- An Adaptive Framework is essential – requires follow up monitoring to assess success and adapt efforts if it is necessary.



Questions?