

Summary of EOWRMS Recommendations

The following table is a compilation of recommendations from the Eastern Ontario Water Resources Study, grouped into 35 key recommendations (ID #). When completing the EOWRP application form, please reference the ID# for the applicable recommendations. A description of each recommendation is provided at www.nation.on.ca/eowrp.

ID #	Recommendation	Description
1	Regional Water Budget	a) establish and implement program for collecting data on surface and groundwater quantity and quality; including human water-taking and discharges; and b) amend water budget to include seasonal human use.
2	Water Resource Protection Land Use Policies	a) identify areas where there is a need for location specific groundwater and surface water quality/quantity protection; b) develop regional and location specific policies in consultation with the public and affected landowners; c) adopt policies.
3	Program Evaluation	a) identify existing water resource management programs; and b) assess the benefits and costs of existing and proposed programs.
4	Surface & Groundwater Resource Linkages Map	a) develop a map and documentation that shows availability of ground and surface water resources and explains the inter-relationship between upstream and downstream communities on a watershed and subwatershed basis.
5	Groundwater Constraints Mapping	a) develop a map and documentation identifying limitations on resource development based upon groundwater availability/quality.
6	Flow Management Strategy	a) determine how changes in water-taking and discharge patterns and improved flow management could be used to increase development potential on a subwatershed and watershed basis.
7	Localized Model Development and Application	a) identify priority areas that must undergo localized water balance analysis prior to changes in water-taking, surface water discharges, and land development.
8	Watercourse Baseflow Source Investigation	a) record and map systematic measurement of baseflow within each subwatershed to determine groundwater discharge locations.
9	Amend "Permits to Take Water" Approval Process	a) determine the circumstances under which subwatershed and watershed analysis will be required.
10	Non-Point Source (NPS) Reduction Program	a) Continued support for existing programs and investigate opportunities for municipal and agricultural NPS initiatives within the watershed.
11	Municipal Sewage Treatment Optimization	a) improve the efficiency and operations of municipal treatment facilities to improve nutrient removal.
12	Total Phosphorus Management (TPM) Program	a) Identify and adopt relevant and helpful elements of the TPM program to direct waste treatment system operators to increase treatment standards or provide funds towards NPS programs.

13	Regional Sewage Discharge Program	a) Estimate existing and projected discharges assuming implementation of best management practices on a subwatershed basis; and b) develop and implement a program to enable coordinated discharge from sewage lagoons on a subwatershed basis.
14	Polish Municipal Lagoon Effluent	a) identify municipal lagoon facilities where installation of polishing facilities is feasible and would provide significant improvements in the quality of discharges to the receiving water bodies; and b) develop implementation plan including cost sharing strategy.
15	Road Salt Education Program	a) develop program aimed at informing municipal and private road maintenance contractors of the potential and persistent effects of road salt and alternatives and mitigating measures to minimize impacts.
16	Well Capture Zone Identification	a) study surficial areas where recharge reaches supply wells and assess the vulnerability of the well to surficial contamination; and b) develop a plan for wellhead protection including, where appropriate, public education.
17	Inventory of Wells	a) identify existing and abandoned wells; b) evaluate potential for groundwater contamination from each well; c) confirm water taking quantities; and d) identify wells requiring decommissioning or other remedial action
18	Inventory of Contaminated Sites	a) identify areas of potential soil and groundwater contamination arising from current or historical land uses; and b) assess potential risk of aquifer contamination and develop policies and action plan to reduce or eliminate threat.
19	Fault Zone Analysis	a) identify faults where higher yield aquifers may exist and implement local studies to better characterize groundwater flow.
20	Investigation of Permeable Overburden Feature	a) local groundwater investigation of suspected eskers or moraines that may be associated with a higher-yielding aquifer zone.
21	Ground Water Management Plans	a) develop plans for specific areas that provide policies regarding water supply, water quality, and source vulnerability and protection.
22	Aquifer delineation and characterization	a) identify key aquifers requiring further analysis; b) undertake standard tests to refine delineation and characteristics of aquifer and overlying aquitard material; and c) determine travel time of surface water to aquifer and vulnerability classification of land.
23	Spill Plans	a) develop emergency spill response plans for areas considered at high risk of groundwater contamination.
24	Public Education	a) develop and implement multi-faceted plan to increase public understanding and action around surface and groundwater management and protection including: well head protection and water testing, septic tank and tile field maintenance, water efficiency, and nutrient management.
25	3D Groundwater Model	a) update model developed for the EOWRMS to include aquifer depth and flow parameters.
26	Agricultural Land Use Study	a) identify agricultural land in proximity to sensitive areas (e.g. recharge areas, streams, communal wells) and develop nutrient, pesticide and sediment management plans and establish other best management practices (BMPs) on site specific and regional basis.
27	Nutrient Management Plan (NMP)	a) strategy for nutrient application and biosolids disposal, including by-laws governing rate and timing of nutrient application and establishment of restricted and buffer zones in Official Plans.
28	Regional Water Supply Plan	a) identify water sources, quality and quantity in each subwatershed and develop long-term water supply plan, considering existing and projected water demand.

29	Assessment of Stormwater Management (SWM) Methods	a) identify and assess effectiveness of stormwater management applied locally and regionally and develop list of most appropriate and successful methods for the watershed.
30	Stream Corridor Protection Plan	a) develop stream corridor protection and enhancement measures, on a watershed basis, for adoption by municipalities within their Official Plans (OPs).
31	Regional Water Efficiency Strategy	a) evaluate cost-benefit of various water efficiency measures for major water consumer groups in the watershed; and b) develop implementation plan for the most cost-effective and beneficial measures.
32	Standardized Testing & Inspection Program	a) design and implement a watershed-wide well water testing and septic tank inspection program, including procedures, fees and administrative structure, and enforcement measures / fines.
33	Woodland Protection Policies	a) identify woodlands within watersheds and develop policies to protect them in consultation with the public and affected landowners; and b) incorporate policies and guidelines into municipal official plans and zoning by-laws.
34	GIS Information Distribution	a) determine the most appropriate means of sharing the EOWRMS GIS information; and b) distribute information.
35	Water Resource Management Administrative Review	a) study to determine which organizations are best suited to the various roles of water resource protection from data collection and analysis through to decision-making on a range of policy and development matters; and b) proposed governance structure.