

Appendix 1: Inventory of Canadian freshwater-related Indicators (as of March 2009)

This inventory lists includes all Canadian federal, provincial and large-scale watershed (regional level) fresh-water related Indicators. Some examples of small-scale watershed (community level) indicators are also included. Note: The grey text refers to water monitoring and reporting tools. Since these are not indicators per se these reporting tools (grey text) are not included in the final indicator count, whereas Indicators under development (red text) are included in the final tally.

AGENCY	INDICATOR(S)
FEDERAL LEVEL	
Agriculture and Agri-Foods Canada	Agri-Environmental Indicators (AEIs) <ul style="list-style-type: none"> • Water use efficiency in irrigation - <i>under development</i> • Water Quality: <ul style="list-style-type: none"> - Risk of Water Contamination by Nitrogen - Risk of Water Contamination by Phosphorus - Risk of Water Contamination by Pesticides - <i>under development</i> - Risk of Water Contamination by Pathogens - <i>early stages of development</i> • Food & Beverage industry: water use and effluent generation • Soil erosion by water Integrated economic & environmental (AEIs) modeling - <i>under development</i>
Canadian Council of Ministers for the Environment (CCME)	Water Quality Index (WQI)
Canadian Councils of Resource Ministers (CCRM)	Ecosystem Status and Trends (ESTR) - <i>under development</i>
	Canadian Environmental Sustainability Indicators (CESI): <ul style="list-style-type: none"> • Freshwater Quality Index for the Protection of Aquatic Life • Source and treated water quality - <i>under development</i> • Agricultural Water Quality - <i>under development</i> • Freshwater Quality Indicator for Recreational Use - <i>under development</i> • Industrial Water Use - <i>recently disbanded</i>
Policy Research Initiative	Canadian Water Sustainability Index (CWSI): <ul style="list-style-type: none"> • Resources • Ecosystem Health • Infrastructure • Human health • Capacity
Convention on Biological Diversity	Water Quality of Freshwater Ecosystems
Environment Canada	Source Water Vulnerability Index - <i>under development</i>

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Environment Canada	Water Availability Index (WAI) - <i>under development</i>
Natural Resources Canada	Groundwater Vulnerability (Hazard Assessment) Index - <i>under development</i>
National Roundtable on the Environment & the Economy (NTREE) - State of the Debate <i>plus</i>	The Environment & Sustainability Development Indicators Initiative (ESDI) <ul style="list-style-type: none"> • Freshwater quality Indicator • Extent of wetlands Indicator NTREE State of the Debate on the Environment and the Economy: water and wastewater services (this is <u>not</u> an indicator)
Canadian Information System for the Environment (CISE)	National Environment Indicator Series (NEIS) - Urban Water Use Indicator: <ul style="list-style-type: none"> • Wastewater Treatment <ul style="list-style-type: none"> - Municipal population served by wastewater treatment - Levels of municipal wastewater treatment (primary, secondary or tertiary) - Phosphorous loadings in municipal wastewater effluents • Municipal Water Use <ul style="list-style-type: none"> - Daily municipal water use - Level of metered residential water use
Canadian Information System for the Environment (CISE) <i>plus</i>	
Environment Canada	
National Roundtable on the Environment & the Economy (NTREE)	
Statistics Canada	Human Activity and the Environment: <ul style="list-style-type: none"> • Total stream flow • Surface Fresh Water Intake (divided into: Municipal, Industrial, Agricultural) • Water Intake as share of stream flow in major basins • Substances Released into Water (by quantity)
North American Commission for Environmental Cooperation (CEC)	State of the North American Environment: <ul style="list-style-type: none"> • Water Quality • Water Quantity & Use • Shared Water Resources
North American Commission for Environmental Cooperation (CEC)	Children's Health and the Environment: <ul style="list-style-type: none"> • Drinking Water: <ul style="list-style-type: none"> - Percentage of children (households) without access to treated water - Percentage of children living in areas served by public water systems in violation of local standards • Sanitation: <ul style="list-style-type: none"> - Percentages of children (households) that are not served with sanitary sewers • Waterborne Disease: <ul style="list-style-type: none"> - Morbidity: number of cases of childhood illnesses attributed to waterborne diseases (Canada, Mexico, United States)
Statistics Canada	Natural Economic Accounts: Natural Resource Stocks (these data tables do not include

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	water)
Total Number Of Federal Indicators	= 40 (approximate)
Total Number Of Federal Indicators currently under development	= 9 (approximate)

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AGENCY	INDICATOR(S)
PROVINCIAL & TERRITORIAL LEVEL:	
Alberta Environment	Alberta River Water Quality Index (RWQI) <ul style="list-style-type: none"> • River Pesticide Index • River Nutrient Index • River Bacteria Index • Metals Drinking Water Safety Indicator <ul style="list-style-type: none"> • Facility Design • Facility Operational Requirements • Drinking Water Quality Lake Level Index Lake Trophic Status Reservoir Index River Flow Quantity Index Groundwater Observation Wells Groundwater Well Density Water Allocations by Sector Water Allocations - compared to natural flows Hydrometric Monitoring Network Water Used for Oilfield Injection Water Used for Irrigation Sharing Water (across Alberta's borders) Pulp Mill Effluent Loads Watershed Organisations (Stewardship)
BC Ministry of Environment	<ul style="list-style-type: none"> • Water Quality Index for surface water bodies in BC • Trends in Surface Water Quality • Percentage of Observation Wells that show declining water levels due primarily to human activity • Number of Heavily Developed Aquifers in BC • Daily Municipal Water Use per capita in BC Trend in the number of road crossings of streams in B.C. Economic and conservation tenures in the inter-tidal areas of B.C. Estuaries Protected area in BC Level of Municipal Wastewater Treatment in BC

	Trends in shellfish closures due to sewage contamination
BC MoE State of the Environment Reporting	Precipitation changes in BC
	Changes in the spring snow-pack in BC
	Total on-site discharge of toxic substances in BC (this includes many types of discharge, but some are discharge to water)
	Trends in dioxin and furan levels in pulp and paper mill effluent, sediments and Dungeness crab tissues
	The Species Conservation Indicators include information on either freshwater or marine species
BC MoE Indicators for Climate Change Report	The 2002 report used five indicators for climate change and freshwater ecosystems: 1) glaciers, 2) freezing & thawing, 3) timing and volume of river flow, 4) river temperature and 5) salmon in the river.
BC Ministry of Environment, Environment Canada, Universities of BC and Western Ontario plus 3 forest licensees	Benthic Macroinvertebrate Sustainability Indicator Development Project (Benthic invertebrates are an indicator of water quality and ecosystem health) <ul style="list-style-type: none"> Water quality biological assessment – Northern, British Columbia - <i>under development</i>
Canadian Aquatic Biomonitoring Network (CABIN)	Fraser River, British Columbia (Wadeable Stream: Sample site characteristics (flow, benthic invertebrates), water substrate samples (TSS, Total P, Nitrate, Major Ions) and substrate composition. – Protocol, rather than indicator
Manitoba Conservation	Water Quality (based on the CCME WQI)
	Water Allocation/Consumption, by municipal, industrial and agricultural users (used as a trend).
	Fish Species Biodiversity & Population
	Commercial Fish Harvest Trends
	<ul style="list-style-type: none"> Surface water quality (using the CCME water quality index) Surface water quantity (based on level of allocation) Groundwater quality and quantity – <i>under development</i> The level of water treatment needed for potable purposes – <i>under development</i>
New Brunswick Department of Environment	Percentage of Post Treatment Tests for Municipal Water Supplies Exceeding Guidelines for Drinking Water Quality
	Percentage of New Private Wells Exceeding Guidelines for Canadian Drinking Water Quality
	Quality of Major River Systems as Measured by Annual Average Dissolved Oxygen, Nitrates, and pH Dissolved Oxygen (D.O.)
	Proportion of Water Used by Major Sectors
Newfoundland and Labrador Department of	Drinking Water Quality Index (WQI)
	Water Quality Index (CCME WQI) for the Protection of Aquatic Life

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Environment & Conservation	Site Specific Water Quality Index
	Forestry Water Quality Index
	Langlier Index
	The Agri-food Water Quality Index (AFWQI)
	Ag-Water Use Performance Indicators – <i>under development</i>
	Safe Drinking Water Indicators – <i>under development</i>
	Sustainability Indicators – <i>under development</i>
	Aquaculture Water Quality Index – <i>under development</i>
Northwest Territories	Freshwater Fish – 7 indicators to monitor population sizes and trends: SIZE: 1) Population size, 2) number of occurrences, 3) distribution TREND: 4) Trend in Population, 5) Trend in Distribution THREAT: 6) Threats to population 7) Threats to habitat
Northwest Territories – Environment Canada & INAC	Surface Water Quality and Quantity (Monitoring may include measurements of surface water flow rates/events, rain and snow measurements or other meteorological phenomena)
Northwest Territories Municipal and Community Affairs	Drinking Water Quality (Database)
Nova Scotia Department of Environment	CCME WQI for the protection of Aquatic Life
	Drinking Water Quality Index
	Percentage of population served by municipal water supplies that meet the health-based criteria for bacteriological quality, as stated in the Guidelines for Canadian Drinking Water Quality, at all times during the calendar year.
	Surface Water Management Programs <ul style="list-style-type: none"> • Track long-term trends in surface water quality and quantity • Establish resource inventories for surface water quality and quantity • Allocate available water resources amongst various users (through approval processes) • Source Water Protection (e.g. watershed plans and BMPs)
	Water quality data is used in predictive and evaluative tools: <ul style="list-style-type: none"> • a phosphorus loading model which predicts effects of nutrient discharges this can be used to help manage activities having nutrient rich discharges
	Boil Water Advisories (not an indicator, but a website that is updated weekly)
	Groundwater Observation Well Network
	Groundwater Mapping Website & Groundwater Resource Assessment (interactive groundwater maps)
Determining Groundwater Under the Direct Influence of Surface Water (GUDI) - Protocol	

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Nunavut	No indicators found
Ontario Ministry of Environment	Ontario Drinking Water Standards (ODWS) – Regulated, no indicators found
	Drinking Water Inspectors Protocol – Protocol, no indicators found
	Source Water Protection Plans Reporting Guidelines: Watershed: <ul style="list-style-type: none"> • Water Quality Indicators • Indicators of vulnerable aquifers • Microbial Indicators – source water Groundwater Vulnerability: <ul style="list-style-type: none"> • Water Quality • Wellhead protection • Vulnerability mapping • Geochemical indicators (water) Surface Water Vulnerability: <ul style="list-style-type: none"> • Water Quality • Vulnerability Indicators
	Principle indicators (nitrate and pesticide concentrations) for drinking & surface water quality – <i>under development</i>
Ontario Ministry of Natural Resources (Surface Water Monitoring Centre – SWMC)	Low water response protocol: <ul style="list-style-type: none"> • Rainfall indicator • Streamflow indicator Water Quality (using the CCME WQI)
Prince Edward Island Ministry of Environment	Drinking Water Quality <ul style="list-style-type: none"> • Nitrate Concentrations in Private Wells • Escherichia coli in Private Wells • Water and wastewater central servicing (the number of single family homes that are serviced by a central water supply system and a central wastewater collection and treatment system)
	Surface Water Quality <ul style="list-style-type: none"> • Nitrate concentrations in surface water • Shellfish closures
	Pesticides <ul style="list-style-type: none"> • Numbers of suspected pesticide-related fish kills in Island rivers
	Air Quality <ul style="list-style-type: none"> • Acid Rain
	Biodiversity <ul style="list-style-type: none"> • Protected Land Area

<p>PEI Ministry of Environment: Roundtable on Resource Land Use and Stewardship - <i>Recommendations</i></p>	<p>Continuous monitoring of groundwater levels at nine existing index stations across the province Continuous monitoring of surface water levels on the three index watersheds In areas with high volume extraction for industrial, municipal or irrigation purposes the following should be recorded (and baselines established):</p> <ul style="list-style-type: none"> • Groundwater levels • Water withdrawal rates • Stream flow <hr/> <p>Principal indicators of surface water quality in freshwater streams</p> <ul style="list-style-type: none"> • Suspended solids (silt) – 100mg/l, stream substrate, fine sediment levels and • Nitrate concentration <hr/> <p>Recommends that estuarine water be monitored to establish an index of general water quality and ecosystem health, based on the following indicators:</p> <ul style="list-style-type: none"> • Salinity • Temperature • Dissolved oxygen • pH • Ammonia • Faecal coliform • Bacteria and • Chlorophyll 'a,'.
<p>Environment Quebec</p>	<p>CCME WQI</p> <ul style="list-style-type: none"> • Including sediment quality criteria
	<p>Bathing Water Quality</p> <ul style="list-style-type: none"> • Bacteriological water quality
	<p>Sustainable Indicators to be adopted by Government of Quebec are pending (as of February 2009 – <i>under development</i>)</p>
<p>Quebec (various partners): Monitoring the St. Lawrence River</p>	<p>Currently there are 22 monitoring activities divided by 6 government partners:</p> <ul style="list-style-type: none"> • Contamination of sediments • Invasive plant species in freshwater wetlands • Quality of shellfish waters in the estuary and gulf • Surface area of freshwater wetlands • Toxic substances at the inlet and outlet of the fluvial section • Contamination of marine resources by toxic substances • Monitoring of toxic algae in the estuary and gulf • Physico-chemical parameters of water (estuary and gulf) • Contamination of freshwater fish by toxic substances

	<ul style="list-style-type: none"> • Organic toxic substances at the mouths of the Richelieu and Yamaska rivers • Physico-chemical and bacteriological parameters of water (river) • Water quality in potential freshwater swimming areas • Monitoring of freshwater fish communities • Reintroduction of Striped Bass • Water level (hydrometric network) • Water flow (hydrometric network)
Saskatchewan Environment	<p>Infrastructure:</p> <ul style="list-style-type: none"> • Per cent of communities with human consumptive waterworks whose operators have received some level of certification • Per cent of facilities that meet bacteriological guidelines 90 per cent of the time • Per cent of waterworks [regulated by Saskatchewan Environment] that meet disinfection requirements 90 per cent of the time • Number of waterworks that do not meet Saskatchewan Environment's minimum treatment requirements [broken down by pre and post regulatory changes] • Number and percentage of municipalities that have waterworks rates that cover waterworks expenditures and debt payments
	<p>Drinking Water:</p> <ul style="list-style-type: none"> • Number of accredited drinking water testing laboratories • Number and average duration of visits to the www.saskh2o.ca website
	<p>Source Water:</p> <ul style="list-style-type: none"> • Number of sewage effluent discharges that represent a risk to source waters • Number and percentage of municipalities with bylaws in place to protect their drinking water supplies • Water Quality Index ratings for lakes • Water Quality Index ratings for rivers
	<p>Citizens and Consumers:</p> <ul style="list-style-type: none"> • Per cent of survey respondents indicating that they are willing to pay more for their drinking water • Per cent of survey respondents indicating that they are very or somewhat confident in the quality of their tap water • Number of system owners that publicly release water quality results • Average per capita consumption of water (gallons per day)
Saskatchewan Water Authority	<ul style="list-style-type: none"> • Risk associated with water management infrastructure • The number of dams requiring upgrades to meet dam safety criteria
	<ul style="list-style-type: none"> • Proportion of surface water industrial projects with detailed assessments completed that comply with licensing and approval requirements

	<ul style="list-style-type: none"> Number of 1:250,000 map sheets for which Geographic Information System-based digital ground water maps have been completed
	<ul style="list-style-type: none"> Total municipal per capita water consumption (data is collected on a calendar year basis) Winter municipal per capita water consumption. (The winter measure uses the same methodology as annual consumption, except it sums total water consumption for November 1 to March 31 only)
	<ul style="list-style-type: none"> Number of flood plain development audits for communities involved in the Flood Damage Reduction Program Per cent of flood susceptibility studies on new subdivisions forwarded to Municipal Affairs (formerly Government Relations) within 30 days Number of flood susceptibility studies on new subdivision forwarded to Municipal Government
	Number of completed watershed and aquifer plans
	Water Quality Index Values and Ratings for Lakes
	Three Year Average Water Quality Index Values and Ratings for Rivers
	The number of teachers attending Project WET and Project WILD workshops.
Environment Yukon	CCME WQI
Yukon Placer Secretariat	<p>Water Quality Objectives Monitoring Protocol: measure concentration of sediment in fish-bearing waters</p> <ul style="list-style-type: none"> Total suspended solids Settleable solids Turbidity Conductivity and pH
Environment Yukon	<p>Federal-Territorial Water Quality Monitoring Program – <i>under development</i></p> <ul style="list-style-type: none"> Assessment of water quality status and trends Development of guidelines and objectives Determination of contaminant loading Reporting on sustainability Detection of emerging issues Impact assessment
Canadian Aquatic Biomonitoring Network (CABIN)	<p>Stream Health Indicator</p> <ul style="list-style-type: none"> Assess biological health of fresh water (using bioassessment methods)
Yukon River Inter-Tribal Watershed Council (YRITWC)	<p>Climate Change & Water Quality Monitoring Program – carbon release by melting permafrost. Over 90 constituents are measured in every water sample. Parameters of interest include mercury, organic carbon in water, carbon dioxide in water and some nutrients.</p>
<p>Total Number Of Provincial / Territorial Indicators = 143 (approximate)</p>	

AREA	AGENCY INITIATIVE	INDICATOR(S)
LARGE SCALE WATERSHED (REGIONAL LEVEL):		
Yukon, NWT, Saskatchewan, BC and Alberta	Mackenzie River Basin	CCME WQI – State of the Mackenzie River Aquatic Ecosystem
Lake Superior, Huron, Michigan, Erie and Ontario	Great Lakes Management Plans (each of the 5 Great Lakes must produce a Lakewide Management Plan at least once every 2 years)	There are approximately 80 ecosystem indicators which are grouped into the following categories: <ul style="list-style-type: none"> • Contamination (Nutrients, Toxics in Biota, Toxics in Media, Sources and Loadings) • Biotic Communities (Fish, Birds, Mammals, Amphibians, Invertebrates, Plants) • Coastal Zones (Near shore Aquatic, Coastal Wetlands, Terrestrial) • Aquatic Habitats (Open Lake, Groundwater) • Human Health • Invasive Species • Resource Utilization and • Climate Change
Upper Great Lakes Region	GEM Center for Science and Environmental Outreach	Socioeconomic sustainability indicators: <ul style="list-style-type: none"> • Water Use • Groundwater Quality • Availability • Wastewater Treatment
Arctic Canada	The Arctic Water Resource Vulnerability Index (AWRVI)	An Integrated Assessment Tool for Community Resilience and Vulnerability with respect to Freshwater
Alberta Saskatchewan and Manitoba	Composite index of vulnerability for Prairie water resources	Water Availability Stresses: <ul style="list-style-type: none"> • Precipitation surplus/deficit (total Precip-PE) • Soil available water holding capacity • % Area of Fresh Water
		Water Use Stresses: <ul style="list-style-type: none"> • % Total hectares of seeded land with irrigation • Total human water flow (m3 per year) per km2 (dom., indus., comm.) • Total Livestock water use (m3 per year) per km2)
		Water Quality Stresses: <ul style="list-style-type: none"> • Total Livestock Animal Units per km2 cattle, pigs, horses, sheep, goats, bison, poultry, etc per km2

		<ul style="list-style-type: none"> • % total land with agricultural Chemical Units applied, Fertilizer, Herbicide, Insecticide, Fungicide applied • 2001 Population - people per km²
		<p>Agr Soil and Water Conservation Practices</p> <ul style="list-style-type: none"> • % seeded land with No/zero tillage • % Farms with cropland having Grass Waterways • % Farms with cropland having Windbreaks or shelterbelts)
		<p>Water Policy Programs</p> <ul style="list-style-type: none"> • Industrial, commercial advice of water conservation • Public Advert on water conservation in RM • Installation of water efficiency equipment • Lawn watering bylaws • Other water conservation programs
British Columbia, Washington State	The Georgia Basin Puget Sound Ecosystem Indicators Project	<ul style="list-style-type: none"> • River, stream and lake Quality • Marine Water Quality • Shellfish Indicator
New Brunswick, Nova Scotia, Maine, Massachusetts and New Hampshire	Gulf of Maine Council on the Marine Environment (GoMC)	<p>The Ecosystem Indicators Partnership (ESIP) is developing indicators of ecosystem integrity. The six indicator areas:</p> <ul style="list-style-type: none"> • Coastal development • Contaminants and pathogens • Eutrophication • Aquatic habitat • Fisheries and aquaculture, and • Climate change <p><i>– under development</i></p>
Columbia Basin	Columbia Watershed Network	GIS mapping, water quality monitoring pilot project
Columbia Basin	Columbia Basin trust – Water Quality Report Card	Degradable organic matter, sediments, nutrients, phosphorus, trace metals, pathogenic microorganisms, persistent organic pollutants, pesticides, non-chlorinated organic compounds, acids, endocrine disrupting compounds (EDC's), Pharmaceuticals and personal care products, disinfection byproducts.
Total Number Of Large-Scale Watershed (regional level) Indicators		= 112

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SMALL-SCALE WATERSHED (COMMUNITY LEVEL):		
National	CIW Network	Canadian Index of Wellbeing (CIW) – health of the ecosystem
Alberta	City of Leduc: Genuine Well-being Report	Resource Consumption and Conservation <ul style="list-style-type: none"> • Water use per resident per day • Water storage capacity
British Columbia	Fraser Basin Council – Sustainability Indicators	<ul style="list-style-type: none"> • Water Quality Index • Water Quality Trends • Municipal Water Consumption • Wastewater Treatment
	Southeast False Creek Steering Committee – Sustainability Indicators	<ul style="list-style-type: none"> • Water Consumption (residential), litres/capita/day • Storm Water Drainage (Effective Impervious Area (EIA), as % of total site area)
	Vancouver Foundation – Vancouver’s Vital Signs	<ul style="list-style-type: none"> • Residential Water Consumption (included in the 2006 & 2007, but not the 2008) • Preference of tap water over bottled water (2008 report only)
	Water Quality for Salmon in Stoney Creek	Water quality measurements to establish background values include: pH, temperature, turbidity and dissolved oxygen
	Bowen Island- Sustaining the Island: Measuring Progress	<i>- under development</i>
	Okanagon Basin Water Board (OBWB)	Environmental base flow in streams and creeks <ul style="list-style-type: none"> • Kokanee salmon and rainbow trout
		Four different indices are used to measure drought intensity: <ul style="list-style-type: none"> • The standardized precipitation index • Snow pack, • Stream and • Groundwater levels
	British Columbia Environmental Network (BCEN) – Toward Sustainability Indicators for BC:	<ul style="list-style-type: none"> • Freshwater • Governance • Natural Resources
Mackenzie River Basin Board – State of the Aquatic Ecosystem		

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	Canada West Foundation – State of the West	A comparison of provinces & territories in terms of: <ul style="list-style-type: none"> • Percentage of jurisdictions covered by freshwater • Percentage of Canada's freshwater and • Percentage of Canada's total stream flow
	Columbia Basin Trust - Water Quality Report on the Columbia Basin	<ul style="list-style-type: none"> • Point source pollution: municipal wastewater effluent, industrial effluent, spills and releases • Non-point source pollution: impacts from dams, forestry, agricultures, air pollution, landfills and waste disposal, urban land development, urban runoff
	British Columbia Progress Board – Benchmark Report	<ul style="list-style-type: none"> • BC Water Quality Index • Per Capita Municipal Water Use • Climate Change (precipitation levels)
	Metro Vancouver	<p>Infrastructure Leakage Index: Ratio of current annual losses to unavoidable annual losses</p> <p>Peak day per capita water use by all customers (<i>includes water system leakage</i>)</p> <p>Water Policy Programs: Industrial, commercial advice of water conservation, Public Advert on water conservation in RM, Installation of water efficiency equipment, Lawn watering bylaws, other water conservation programs</p>
Manitoba – Watershed Plans	Turtle Mountain Conservation District	Hydrometric data (stream flows and lake levels), surface water management, water quality, fisheries, allocation and water supply.
	Upper Assiniboine River Conservation District	Daily discharge data (stream runoff), surface water management, allocation/licensing, water quality (incl. ecoli, phosphorus, conductivity, dissolved oxygen, suspended solids, metals), groundwater, source water protection. Rare, threatened and endangered species, riparian habitats, wetlands and fisheries.
	Upper Assiniboine River Conservation District	Daily discharge data (stream runoff), surface water management, allocation/licensing, water quality (incl. ecoli, phosphorus, conductivity, dissolved oxygen, suspended solids, metals), groundwater, source water protection. Rare, threatened and endangered species, riparian habitats, wetlands and fisheries.
New Brunswick	Petitcodiac Watershed Alliance	Sample water collected from the 25 rivers and streams that run into the Petitcodiac River and test them for 7 different indicators that we use to assess the health of the Petitcodiac River ecosystem.
Newfoundland and Labrador	-	-
Northwest Territories	Land Use Planning Boards	Water Quality
Nova Scotia	Genuine Progress Index (GPI)	Drinking Water Quality (based on the Guidelines for Drinking Water Quality)

	Clean Annapolis River Project (CARP)	River Water Quality: The parameters monitored by the Annapolis River Guardians have varied throughout the years. The following parameters have been monitored continuously since the start of the program: fecal coliform bacteria, dissolved oxygen, air and water temperature, and weather conditions. Additional parameters that have been sampled periodically include: nitrate, chlorophyll a, chloride, sulphate, pH, conductivity, total dissolved solids, salinity, total suspended solids, colour and transparency.
Nunavut	-	-
Ontario	Grand River Conservation Authority	<ul style="list-style-type: none"> • Water Quality (using the CCME WQI) • Stream flow • Rainfall • Reservoir levels
	Association of Public Health Epidemiologists in Ontario	<ul style="list-style-type: none"> • The number of boil water advisories (BWAs) by household-days affected • The number of drinking water advisories (DWAs) by household-days affected • Drinking water quality exceedences for health parameters • Trihalomethanes (THMs) in drinking water • Coliform bacteria in drinking water • E.coli in drinking water • Fluoride in drinking water • Percentage of households on private wells • Percentage of households with a shallow/bored well • Percentage of households with a deep drilled well • Percentage of households with a private well that has been tested for bacteria at least three times in the past 12 months
	City of Hamilton Sustainability Indicators	<ul style="list-style-type: none"> • Total Loading of Ammonia to Hamilton Harbour (measured at Municipal Woodward Avenue Sewage Treatment Plant) • Total Loading of Phosphorus to Hamilton Harbour (measured at Municipal Woodward Avenue Sewage Treatment Plant) • Percentage of “Beaches Days Open for Swimming”
	Pembina Institute: Ontario Community Sustainability Report (The Smart Growth Index)	<p>Tertiary Water Treatment:</p> <ul style="list-style-type: none"> • % of population served with tertiary water treatment
	The CLEAR Network: Community of London Environmental Awareness	<p>Drinking Water Indicators:</p> <ul style="list-style-type: none"> • Consumption per person • Drinking water testing (adverse samples)

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	The CLEAR Network: Community of London Environmental Awareness Reporting Network	Drinking Water Indicators: <ul style="list-style-type: none"> • Consumption per person • Drinking water testing (adverse samples) • Drinking water losses (non-revenue water) Sewage Treatment Indicators: <ul style="list-style-type: none"> • Volume of Sewage per person (per capita) • Sewage plant efficiency (removing phosphorus) • Sewage treatment bypass
	City of Guelph: The Green Plan	Drinking Water
	Source Protection Committee (SPC): Ausable Bayfield Maitland Valley Source Protection Region	Watershed Description <ul style="list-style-type: none"> • Water Quality • Conceptual Water Budget • Survey of Existing Programs • Initiation of a provincial pilot project to update water well records • Consultation with stakeholders • Development of an interactive website for public users, staff and SPC, Working Group and Municipal Subcommittee members • Development of a learning program to provide to working group members
Prince Edward Island	-	-
Quebec	Hydro Quebec	Global Reporting Initiative G3 Guidelines: <ul style="list-style-type: none"> • EN 8 Total water withdrawal (core) • EN 9 Water sources affected by withdrawal (additional) • EN 10 Water recycled and reused • EN 25 Water bodies and habitats affected by discharges (additional)
		Mercury in Hydroelectric Reservoirs
Saskatchewan	Water Watchdogs	<ul style="list-style-type: none"> • Water footprint • Monitoring report card
Yukon	Peel Watershed Planning Commission (a land use planning council)	<ul style="list-style-type: none"> • Water Quality Indices (for human life) • Water Quality Indices (for aquatic life) • Water Quality Index (undermined % of baseline volumes)
	North Yukon Planning	<i>- indicators are under development</i>