A National Water Quality Indicator for Canada - A Demonstration of Reporting on Competitiveness and Environmental Sustainability

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ABSTRACT: While continuing its focus on the preservation of environmental qualities such as clean air and water, Canada is actively pursuing a fundamental shift in environmental policy direction to align with competitiveness, human and environmental health opportunities. Towards this end, federal, provincial and territorial partners have committed to building a better information system on the state of the Canadian environment and generate core indicators that will enable decision-makers and citizens to monitor the current environmental situation and trends, and track progress on addressing key issues over time. Moreover, investments are being made in longer-term, national air and water quality monitoring networks required to benchmark and track national year over year progress in preserving our natural capital. As part of this new systematic approach, Canada will for the first time, develop measure and report in 2005 on the national state of water quality using a Water Quality Index (WQI) method. Credible monitoring data related to the water use being assessed will be compared against appropriate water quality guidelines or objectives to identify instances where limits have been exceeded. The WQI will generate a score based on the nature, frequency and magnitude of excursions from effects-based guidelines. Simply put, the WQI integrates and transforms complex scientific water quality data into a simple understandable form – a score between 1 to 100. WQI scores are then categorized as excellent (95-100), good (80-94), fair (65-79), marginal (45-64), or poor (0-44). This paper will describe this new national indicator and the underlying monitoring networks that will provide the data for its use.