
CITY OF KELOWNA

MEMORANDUM

Date: November 3, 2004
File No.: 5260-08
To: City Manager
From: Environment Manager
Subject: State of the Environment Report

RECOMMENDATION

THAT Council receives for their information the *2003 State of the Environment Report* (Executive Summary attached).

BACKGROUND

In 1995, the Environmental Division completed the *Preliminary State of the Environment Report* for the City of Kelowna. The goal of this report was to define the base condition from which progress could be measured. In 1998, a finalized *State of the Environment Report* was issued.

The *State of the Environment Reports* are environmental management tools, which outline local environmental issues and initiatives related to air, water, land use, and ecology. They identify a set of twenty environmental indicators specific to Kelowna, which enables measurable environmental conditions to be tracked over time and trends established. Kelowna's environmental indicators were chosen through a public consultation process. The City has been monitoring the outlined indicators annually since 1999 and has strived to report data and trends in a clear, concise manner.

The *2003 State of the Environment Report* reviews the state of Kelowna's air, water, and land use and includes supplemental sections on the 2003 Okanagan Mountain Fire, City education initiatives, and Environmental Indicators. The *2003 State of the Environment Report* provides information which can be used in developing recommendations for enhancement of environmental policy. It is also a useful tool for environmentally sustainable management of our community. Due to the extensive nature of the Environmental Indicators, they are located in a separate document and will be available for review as a *web link*, which is included in the *State of the Environment Report*.

While the original draft was compiled in the summer of 2003, Environment Division staff delayed release of the report in order to incorporate year end 2003 data and reflect any environmental influences that the 2003 Okanagan Mountain Fire may have had. The impact of the Okanagan Mountain Fire on the City of Kelowna's Environmental Indicators is somewhat evident in 2003 data in areas such as air quality; however, the full extent of the environmental impacts of this event will become apparent over time.

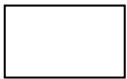
The Okanagan Mountain Park forest fire significantly influenced the ambient air quality for 2003, causing the only poor air quality of the year, as well as contributing to a 58% increase over the number of fair air quality hours recorded in 2002. However, the general long-term trend over the past decade is one of improvement for PM₁₀ in the Central Okanagan. The number of registered vehicles in the City has grown by 6165 since 1998 and, assuming travel habits and modes of transport remain the same, Kelowna's personal automobile use during peak periods is expected to increase by 77% by 2013. This increase in vehicle emissions is a significant contributing source to ozone formation; the number of hours in the fair air quality range for ozone increased from 106 in 2002 to 225 in 2003, while 170 hours were spent in the fair air quality range in 1998.

In regards to community development, building multi-family residential housing close to a city's core and urban town centres allows a greater proportion of the population to decrease commute distances, which translates to less pollution emissions and increased use of alternative travel modes, such as walking, public transit, and biking. In addition, multi-family housing minimizes development of open space and creates a more efficient and sustainable city. In 1998, 76% of residential development was single/semi detached housing and 23% was multiple housing; the proportion of multiple housing units has increased each year, with 59% single/semi detached housing units and 41% multiple housing units in 2003.

Water quality has remained relatively consistent in Okanagan Lake tributaries. The BC Water Quality Status Report graded Okanagan Lake as fair in 2002, with the main problem being pollution from non-point sources, such as agriculture and urban runoff. In regards to water quantity, Kelowna's daily water consumption rates remain one of the highest in the world, at 525 litres/day; this is a small decrease from 570 litres/day in 1998, despite water conservation efforts.

These are just a few of the trends highlighted in the *2003 State of the Environment Report*. In the future, more detail and more frequent State of the Environment reporting may be required, in order to gauge rapid growth impacts that the City of Kelowna faces.

Mark Watt, B.Sc
Environment and Solid Waste Manager



Approved for inclusion:
John Vos
Director of Works & Utilities

Attach.

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The following is a list of the attachments that are **not** available with the electronic version of this report. The attachments can be viewed in the City Clerk's Department (3rd level, City Hall):

- State of the Environment Executive Summary