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**CITY OF KELOWNA**

**MEMORANDUM**

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**Date:** June 30, 2006.

**File No.:** 5280-08

**To:** City Manager

**From:** Environment & Solid Waste Manager and Parks Manager

**Subject:** **E.Coli Source Reduction and Public Education**

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**RECOMMENDATION:**

THAT Council approves \$35,000 for increased action and education directed at probable source areas of e.coli contamination.

AND THAT staff report back to Council to establish ongoing needs and budget requirements.

**DISCUSSION:**

At Council's June 19th meeting City Council requested staff report back with suggestions on what can be done to improve water quality at the beaches most affected. Staff recommends that funding be provided to identify potential sources of e. coli; public education programs on how the public can assist in source reduction and other actions to improve water quality.

E.Coli, as has already been reported, comes from many sources. E.Coli at local beaches could be from a variety of sources including bird, animal or human sources. The Kelowna and Area Watershed Study demonstrated that there are varying amounts of e.coli from livestock, wildlife and from human sources (Nordine, 2000).

City staff has determined that there is no commercially available laboratory to further identify e.coli (bacterial source tracking). Previously there was research studies in Kelowna and area watersheds that provided some information related to source drinking water quality. City staff will continue to search for an opportunity to have additional testing for identification of sources of e.coli. If certain mammal or waterfowl species are generating the larger volume of e.coli found at local beaches then programs could be developed further to assist with reducing the e.coli from those sources. The City over the last 10 years has taken many steps towards improving the water quality in all source waters including the lake. Programs and works include the following:

Watershed Restoration and Education  
Increased Beach Park Maintenance  
Goose Control  
Storm Drain Marking Program  
Storm Drain Removal from Okanagan Lake and more catch basin maintenance.  
Reduced septic system reliance in Kelowna and in the Central Okanagan (WWTP expansion and greater service areas)  
Boater Education (Clean Water Campaign)  
Creek sampling shows that there are high counts of e.coli in many creek areas.

\$35,000 will initially be spent on providing:

Increased education on source reduction.

Provide more beach park garbage removal at peak times.

Remove more waterfowl from specific beaches.

Provide washrooms in strategic locations for the homeless.

Educate the public about proper hygiene at beach parks

Educate the public about feeding waterfowl.

Increase by-law action approach to pet waste and waterfowl offences

Ensure that storm drains are not conveying sewage by more routine bacterial counts in drainage outlet areas (increase bacterial creek sampling).

Research innovative solutions to improving water quality.

Further studies of shoreline processes.

We suspect this may be the beginning of an ongoing program that requires annual budgeting. Staff will report back to Council in the fall with additional information on the sources of e.coli and the proposed 2007 program.

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Environment and Solid Waste Manager

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Parks Manager

Cc: Keith Grayston, Financial Planning Manager