

REGIONAL MUNICIPALITY OF OTTAWACARLETON
MUNICIPALITÉ RÉGIONALE D'OTTAWACARLETON

MEMORANDUM
NOTE DE SERVICE

Our File/N/Réf. RC
Your File/V/Réf.
DATE 27 April 1998

Information Previously Distributed	
To Be Listed on the Community Services Committee Agenda	21 May 98

TO/DEST. The Chair and Members of Regional Council
FROM/EXP. Medical Officer of Health
SUBJECT/OBJET **1998 BEACH RECOMMENDATIONS**

BACKGROUND

It is the responsibility of the Medical Officer of Health to make recommendations from a health perspective regarding the use of recreational waters for bathing purposes. The decision to permit bathing at any particular beach is made by the municipal Department of Recreation and Parks.

In Ottawa-Carleton, the most relevant factor in determining the beach water quality is the knowledge of the sanitary conditions at the site, supplemented by the bacteriological analysis of the water. Historical sampling results permit an analysis of past trends of bacterial influences at a site, while ongoing daily sampling permits analysis of current factors influencing the bacterial load at any given time.

The Environmental Health/Communicable Disease Control Division monitors the water quality at all beaches within the Region. A total of 25 sites on the Ottawa and Rideau Rivers are sampled. The three in-town beaches (Mooney's Bay, Westboro Beach and Britannia Beach) are sampled five days a week, while the out-of-town beaches are sampled once every two weeks. Samples were taken between May 19 and August 29, 1997. The City of Ottawa opened the in-town beaches to the public in 1997 for a total of 57 days on the following dates: June 14-15, June 21-22, and June 28 to August 19. This was a reduction in the number of days the beaches were open from previous years, and was the result of budget constraints.

Samples are tested for the presence of E. coli bacteria, and measured against the Ontario Ministry of Health standard of 100 organisms of E. coli per 100 ml of water in recreational waters. It takes a minimum of 24 hours for bacteriological results from the samples to be processed due to the nature of the culturing of the E. coli organisms measured. For this reason, bacteriological results are not available until the day after the sample was taken.

In preparing departmental recommendations, previous information including knowledge of various discharges into the rivers and their effects as measured by thousands of bacteriological samples taken over the past several years was reviewed. Rainfall is another factor which affects stormwater contribution to the rivers. In 1997, as well as in past years, there was a strong correlation between rainfall events of 10 millimetres (mm) or more on recreational water quality at both Britannia and Westboro Beaches. There was also a correlation with 5 to 9 mm rainfall events.

Water Quality at Beaches in 1997

Annex A shows the 1997 bacteriological results for the three in-town beaches: Mooney's Bay, Westboro Beach and Britannia Beach.

Mooney's Bay

Water quality at Mooney's Bay was excellent in 1997, not exceeding the Provincial standard in any of the water samples collected. There were 5 rainfall events where more than 10 mm of rain fell, however the bacterial quality of the bathing water remained good.

Westboro Beach

One sample in May, 3 samples in June, 7 samples in July, and 8 samples in August exceeded the bathing standard. This represented 26 % of the 72 samples taken (19 total, 12 during the City of Ottawa bathing season).

Britannia Beach

1997 saw a decline in the quality of water at Britannia Beach. Seven samples in May, 10 samples in June, 11 samples in July and 7 samples in August exceeded the bathing standard. This represents 45 % of the 77 samples taken (35 total, 14 during the City of Ottawa bathing season).

In 1997, the Health Department recommended that Britannia Beach be closed for 24 hours following a rainfall of 10 mm. or more. This resulted in 3 postings, all of which accurately predicted poor water quality. In addition, we recommended the beach be closed for an additional 7 days from July 31 to August 6, 1997 due to a trend of high bacteriological counts that persisted and was not connected to any rainfall incident.

Out-of-Town Beaches

The water quality at out-of-town beaches along the Rideau and Ottawa Rivers remained good in 1997. One of the beaches at the Fitzroy Provincial Park had two incidences of bad water sample results which may have been linked to sewage overflows at the Arnprior Sewage Treatment Plant during some upgrading that was being done at the facility. No further incidences were noted after the work at the plant was completed.

Medical Officer of Health Recommendations for 1998

The Health Department will continue to monitor all beaches in the Region on the same schedule as in 1997, with increases as necessary. In 1998, the City of Ottawa will open the three in-town beaches to the public on the following dates: June 13-14; June 20-21, June 27 to August 20.

For the in-town beaches, I recommend the following:

- Mooney's Bay Beach be open for swimming;
- Westboro Beach be open for swimming but close for 24 hours following a rainfall of 5 mm. or more; and
- Britannia Beach be open for swimming but close for 24 hours following a rainfall of 5 mm. or more.
- If bacteriological trends indicate a problem at any of these beaches, I will recommend the beach in question be closed until such time as sample results indicate it is safe for bathing.

For the out-of-town beaches, I recommend the following be open for swimming in 1998:

Ottawa River

Fitzroy Provincial Park (2)
 Camp Woolsey
 Constance Bay
 Camp "Y"
 Shirley's Bay
 Auger Beach
 Baskins Beach
 Buckham's Bay

Rideau River

Rideau Provincial Park (4)
 Baxter Conservation Centre
 Long Island (RCMP Camp)
 Taylor Conservation Area
 Kars Dock
 Echolands

The following out-of-town monitoring points should continue to be sampled:

Ottawa River

Phiney Point
 Ottawa Beach

Rideau River

Manotick East
 Black Rapids

Financial Implications

There are no financial implications resulting from this report.

Public Consultation

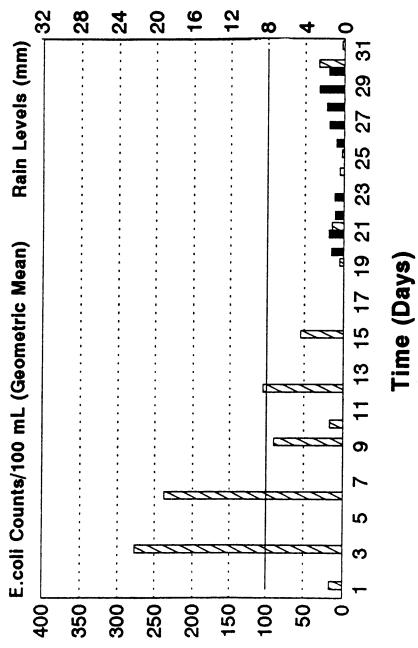
No public consultation was required for this report. Under the Health Protection and Promotion Act, 1983 and the Mandatory Programs and Services Guidelines, 1997 the Medical Officer of Health has a legislated responsibility to ensure that recreational waters are suitable for bathing purposes.

*Approved by
Robert Cushman MD, MBA, FRCPC*

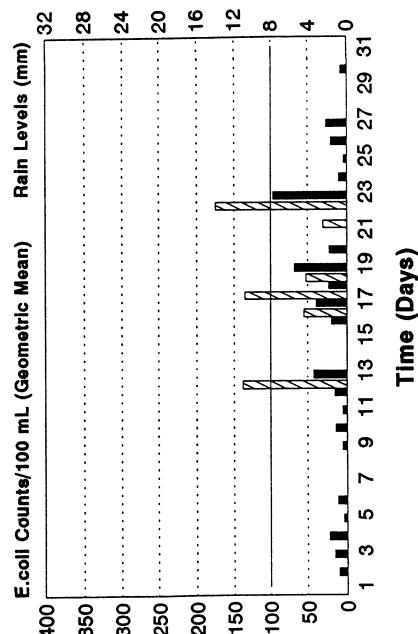
Attach. (1)

MOONEY'S BAY BEACH 1997

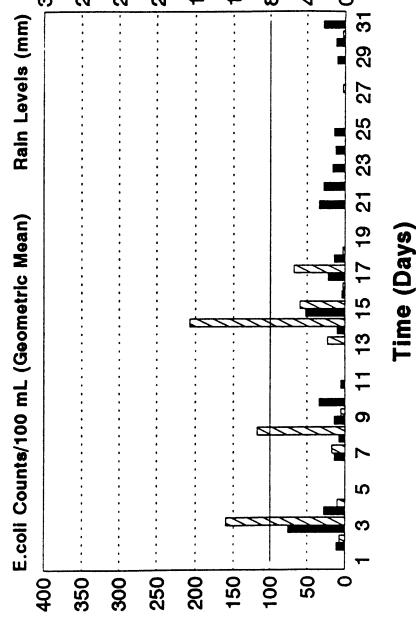
May



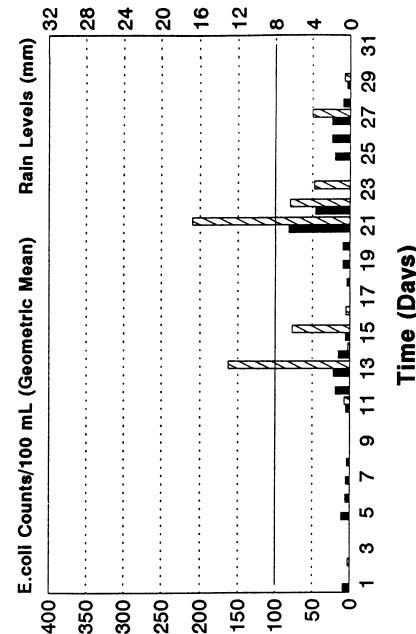
June



July



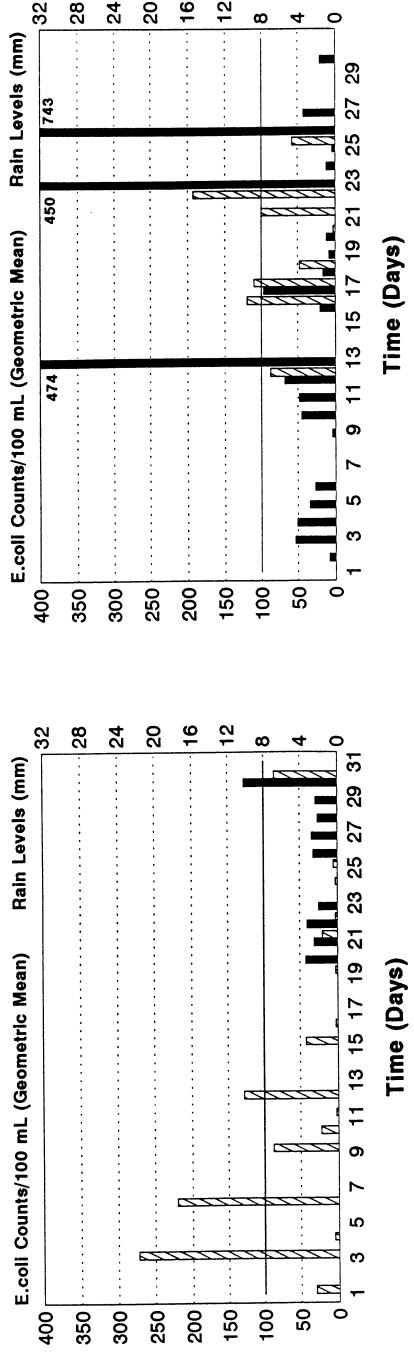
August



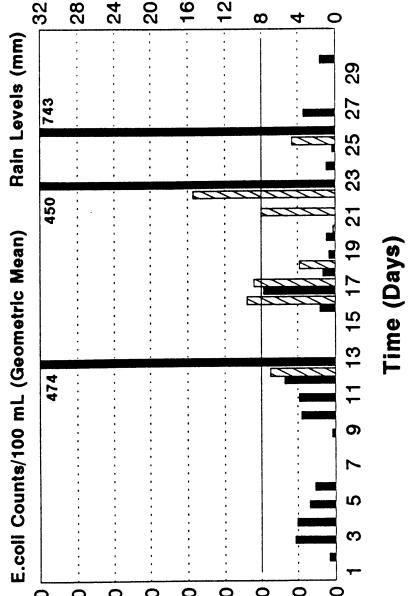
■ E.coli // Rain Level — Provincial Guideline

WESTBORO BEACH 1997

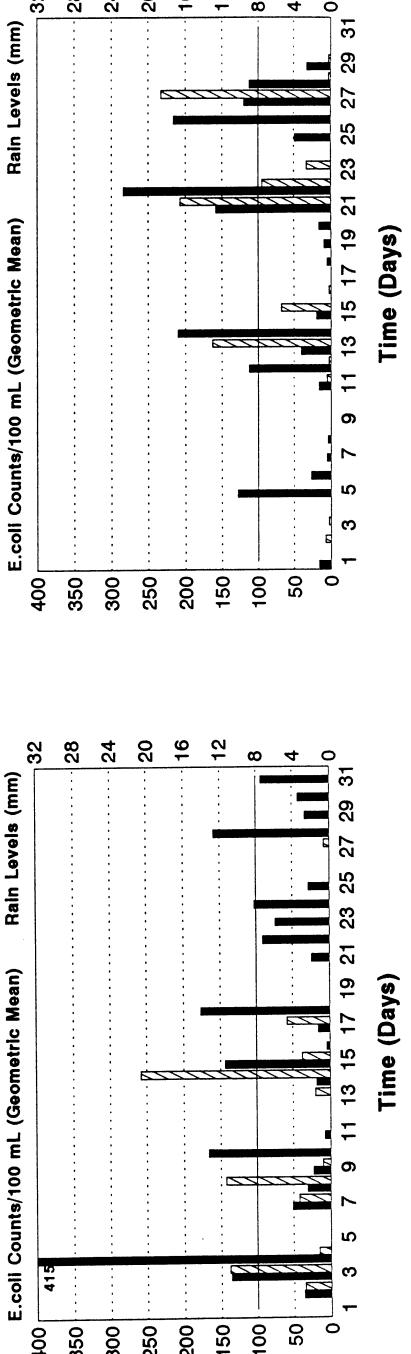
May



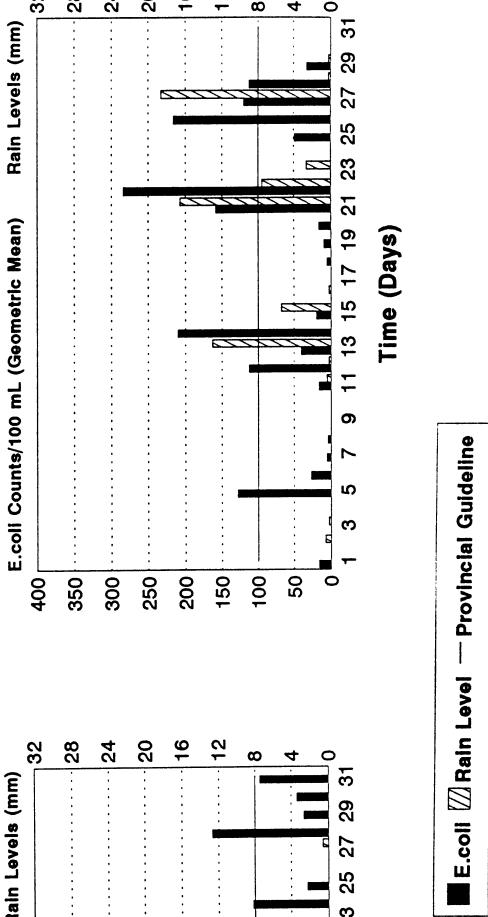
June



July



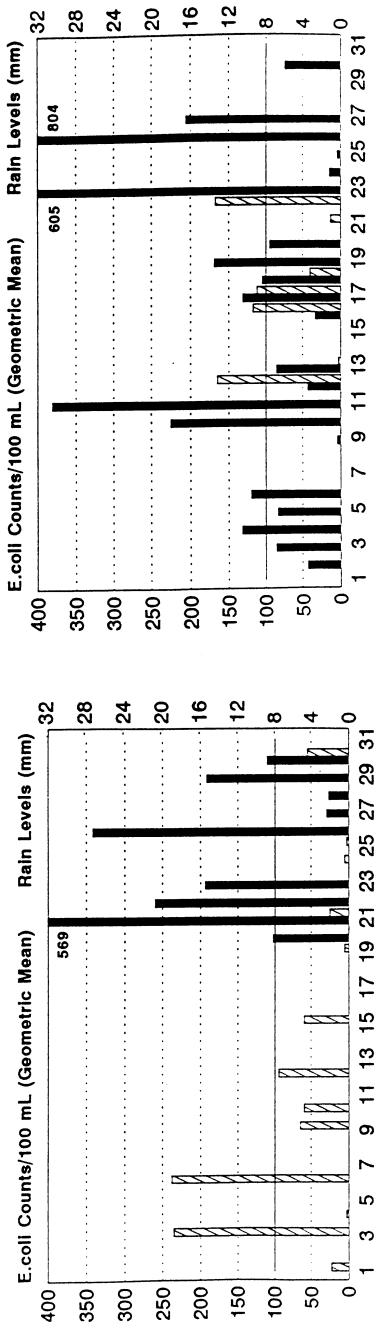
August



■ E.coli // Rain Level — Provincial Guideline

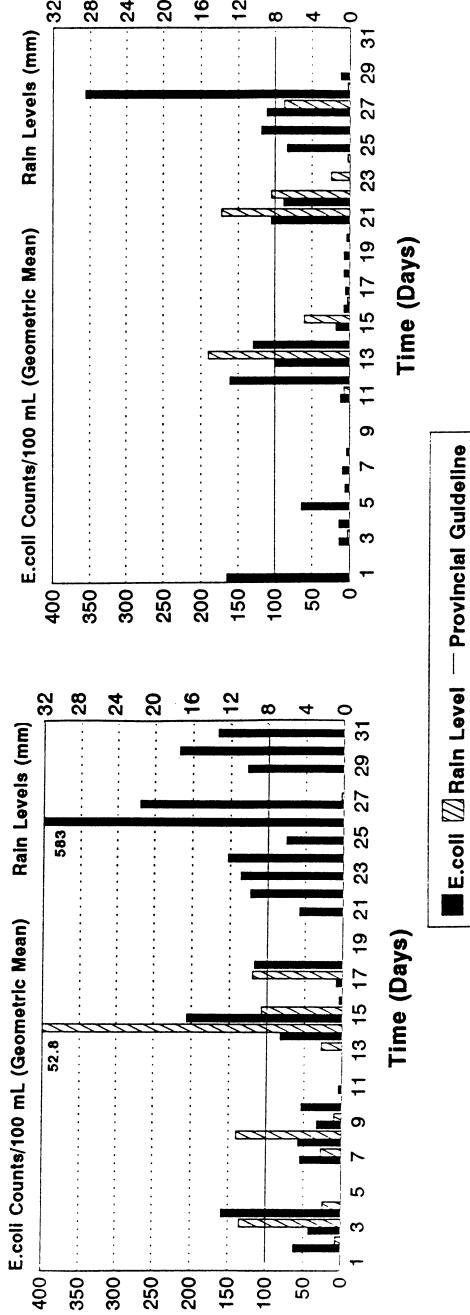
BRITANNIA BEACH 1997

May



Time (Days)

July



Time (Days)

August



Time (Days)

Legend:
 E.coli
 Rain Level — Provincial Guideline