



Corporate Report

NO: R176

COUNCIL DATE: JULY 23, 2007

REGULAR COUNCIL

TO: **Mayor & Council** DATE: **July 16, 2007**
FROM: **General Manager, Engineering** SUBJECT FILE: **5280-23 WNV**
SUBJECT: **West Nile Virus and Possible Adult Mosquito Control Local Advisory Committee**

RECOMMENDATION

The Engineering Department recommends that Council:

1. Receive this report as information on the current status of mosquito control activities within Surrey;
2. Pre-appoint the Mayor or Acting Mayor to act on the Adult Mosquito Control Local Advisory Committee (LAC) in advance of any notification by the Fraser Health Authority; and
3. Approve and forward to the Fraser Health Authority the names of the members pre-assigned to the LAC.

PURPOSE OF REPORT

The purpose of this report is to apprise Council of current mosquito control activities underway within Surrey and to have Council pre-appoint members to a Fraser Health Authority Adult Mosquito Control Local Advisory Committee that would be formed should an outbreak of West Nile Virus (WNV) occur and adult control is deemed necessary by the Fraser Health Authority.

BACKGROUND

The City of Surrey currently has two separate Mosquito Control Programs. The first is the ongoing nuisance Mosquito Control Program administered by the Greater Vancouver Regional District (GVRD) on behalf of four municipalities (the others being the District of Maple Ridge, the Township of Langley, and the District of Pitt Meadows). Surrey has participated in this Program since the 1990s. The goal of the Control Program is to reduce the potential for widespread adult mosquito annoyance.

The second Mosquito Control Program is the WNV Control Program. The goal of this program is to ensure a sufficient level of preparedness in advance of the eventual arrival of WNV in B.C. The driving force behind this program is risk to human health.

There are essentially three basic methods for controlling mosquito populations: larviciding, adulticiding, and source control. Larval mosquito control, or larviciding, targets immature mosquitoes in their aquatic habitat before they become flying, biting adults. In general, larval control is the most effective method of controlling mosquito populations, has the least effect on non-target species, and has the smallest “footprint” in terms of environmental impacts. Adult Mosquito Control targets adult mosquitoes using insecticides that are applied using “foggers” that produce clouds of tiny droplets that kill mosquitoes upon contact. Adulticiding is relatively ineffective, non-selective (kills other insects including mosquitoes), and can create other problems. Source Control consists of modifying potential mosquito breeding habitat so that it no longer functions as a breeding habitat. Examples include agitation of stagnant water bodies (e.g., golf course water features) and elimination of areas of pooled water on private properties (e.g., birdbaths, ornamental ponds, old tires, etc.).

Nuisance Control Program

The 2007 Freshet, followed by the recent hot weather, has led to conditions favourable to mosquito breeding. The City’s contractor has been monitoring and conducting pre-emptive larviciding on public lands to reduce the numbers of nuisance mosquitoes.

West Nile Virus Control Program

City staff have initiated the WNV Control Program as outlined in the May 23, 2007 Corporate Report Item R109. The City’s contractor has been conducting catch basin and adult mosquito surveillance. The vector mosquitoes of concern have recently been identified in some surveillance catch basins which is the trigger for the pre-emptive treatment of all catch basins in the City for WNV. The contractor began catch basin treatments the week of July 9, 2007 and is projected to be complete by July 28, 2007. This treatment lasts for approximately 60 days in the catch basins, which should cover the critical breeding period for the mosquito species of concern. There is sufficient budget to conduct a second treatment if deemed necessary later in the summer.

If WNV is found in BC this year, and if the Fraser Health Authority deems it necessary to conduct Adult Mosquito Control, they will be calling for the formation of an “Adult Mosquito Control Local Advisory Committee.” The goal of this Committee is to provide consultation for the Medical Health Officer regarding the advisability and feasibility of Adult Mosquito Control in a specific situation or situations in order to mitigate a human health hazard. The members of the Committee are:

- Two to three Regional Health staff including the Manager, Health Protection (Communicable Disease) or designate, and an MHO;
- Two or more Local/Regional Government representatives including an Engineering Department representative, Emergency Preparedness Coordinator,

representative from the City's WNV contractor and an elected Municipal and/or Regional District official;

- A MOE Pesticide Officer; and
- A BC Centre for Disease Control representative.

For the City of Surrey, it is recommended the following be appointed as the representatives:

- Mayor or Acting Mayor (in event any governance decisions need to be made);
- General Manager, Engineering;
- Drainage & Environment Manager (GVRD REAC Mosquito Committee member for Surrey); and
- Fire Chief or designate as Emergency Program Coordinator.

The City's contractor for both the WNV and Nuisance Mosquito programs is Culex Environmental. This is also the contractor for many other Local Governments within the GVRD. A representative of the contractor will be at the Committee table representing other stakeholders.

CONCLUSION

Staff are currently conducting Mosquito Control and surveillance works throughout Surrey to address nuisance mosquitoes and those which may carry WNV. The Program is underway as per the City's Policy.

In the event of WNV outbreak in the GVRD, and potential need for the Fraser Health Authority to establish an Adult Mosquito Control Local Advisory Committee, a Council member is required to be appointed for this duty, along with staff members to act in the situation should it arise.

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General Manager, Engineering

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c.c. - City Manager