SUBJECT: 2009 Vector Borne Disease Program (West Nile Virus) Service Level Impacts BOH09009(a) - (City Wide)

RECOMMENDATION:

a) That the reduction of the service levels for the Vector Borne Disease Program (West Nile Virus) as outlined in Report BOH09009(a) be approved.

b) That in the event of a year end Corporate Surplus that the net levy savings be transferred to the Public Health Services Reserve for emergency larviciding (mosquito control).

EXECUTIVE SUMMARY:

For 2009, the Ministry of Health and Long-Term Care (MOHLTC) transfer payment budget for Hamilton’s Vector Borne Disease program (locally referred to as the West Nile virus program) was reduced by 23% from 2007 actual spending levels. Per the April 27th Board of Health Information Report BOH09009, this May report provides the details on the expected service impacts of the subsidy reduction.

Reductions were based on an analysis of West Nile virus surveillance data and program information and were considered carefully in an effort to still conduct sufficient baseline
surveillance, monitoring and control, as well as to provide legally required public notification, basic communication and outreach within revised funding.

Reductions were made to larviciding (mosquito control), staffing costs, supplies & equipment (operating costs), research, and education efforts (communication and outreach).

Related service impacts will include:

**Surveillance:**
- elimination of crow and blue jay collection/disposal and related West Nile virus viral testing

**Mosquito Treatment and Remediation:**
- elimination of catch basin larviciding treatment in September (usual fourth round of treatment to approximately 38,000 catch basins)
- elimination of treatment to catch basins along major roadways and City cemeteries for all three rounds, in June, July, and August
- reduction to the number of surface water sites to be treated (based on moving to ‘high’ level trigger for treatment- Ministry of Environment has three levels for triggering treatment- low, moderate and high counts of mosquitoes in the water. Past seasons’ trigger for treatment was ‘low’.)
- elimination of funding for potential Lyme disease related tick control (Lyme disease control is within the West Nile virus budget)

**Communication (Awareness Education and Outreach):**
- reduction of paid messaging through radio and print to be limited to what is legally required by Ministry of Environment for spring public notification of larviciding and for July and August personal protection radio messaging
- reduction in presentations to groups about West Nile virus information
- reduction in participation at festivals to share information and offer free mosquito repellent spray application stations

Despite the West Nile virus program budget reduction, as per Regulation 199/03, Control of West Nile Virus, under the Health Protection and Promotion Act, the Medical Officer of Health must continue to conduct ongoing local risk assessments of West Nile virus throughout the summer. If the local risk assessment deems that additional actions for control or communication will be required, the City of Hamilton may experience a related budget pressure for emergency larviciding.

**BACKGROUND:**

As stated in the April Board of Health report, BOH09009, funding reductions to the West Nile virus programs across the province are outlined in a Ministry guideline entitled Vector-Borne Disease Budget Reduction 2009 Implications for Health Units. (The West Nile virus program name was expanded provincially to become the Vector Borne Diseases program as it incorporated the surveillance and control of Lyme Disease.)
Budget reductions were either 25%, 23% or 15%, based the Ministry of Health and Long-Term Care’s review of each health unit’s historical data, risk population, previous spending, and by reviewing current science. Hamilton has been assigned to Tier 1 – 23%.

**Tier 1: High Risk/Activity (23% budget reduction) - (West Nile virus)**

- Greater numbers of human cases
- Human cases over multiple years
- Large population at risk
- High activity
  - High vector numbers (mosquitoes that can transmit West Nile virus)
  - High positive vector numbers
  - High other animal surveillance numbers (horses or other animals positive for WNV)

**ANALYSIS/RATIONALE:**

Funding reductions were made to staffing and operating lines. These translate to specific service reductions and impacts in the areas of surveillance, mosquito treatment and communication (education and outreach).

**Surveillance**

Although there are reductions to the program, Public Health Services did not reduce the number of adult mosquito trap monitoring sites as adult mosquito trap results (abundance, species type and WNV viral testing results) provide important surveillance information to help assess the local risk for human WNV infection. Dead bird sighting surveillance (mapping and graphing reports of dead birds) will also continue in order to look for trends indicating increased risk for human WNV infection. Dead crows and blue jays will no longer be collected for submission for West Nile virus testing as the province eliminated this part of the program for 2009. Seasonal staffing was reduced, in part, for this component of the program.

**Mosquito Treatment and Remediation**

Since 2004, catch basin treatment has involved four rounds of treatment to up to 38,000 catch basins on city streets, parks, the City’s two long term care facilities, City cemeteries, and other specific public lands. The fourth round of treatment will be eliminated as the most reasonable round to cut while maintaining maximum effect of treatment. The rationale is that mosquitoes developing in June, July and August will be controlled to then reduce the number of adult mosquitoes that exist by September (so fewer to lay eggs in the catch basins). The fourth round was also included in the past in order to reduce the number of adult mosquitoes that would over-winter, to begin the mosquito development again the following spring.
For the three remaining rounds, catch basin treatments will no longer be made along major roadways or cemeteries where mosquito development has been at lower levels.

Surface water sites on public lands will be treated when developing mosquito levels reach high levels. Previously larviciding was triggered at the low level trigger as per the Ministry of Environment guideline for low, moderate, and high; some larviciding cost savings are expected through this change.

Lyme disease tick control may be required if human case results and local black legged ticks are found and test positive. If control is deemed necessary, there is no funding for this control. In 2008 there were no locally acquired human cases (persons did not get infected within City of Hamilton) so control is not anticipated to be required for the 2009 season but had been funded as a potential.

Communication (Education and Outreach)

Communication funding was reduced to include only the Ministry of Environment’s required advertising in the spring for notification of the City’s larviciding treatment program to city catch basins and surface water sites and for awareness messaging in late July to August through radio advertising to remind the public of personal protection messages (such as avoiding mosquito areas and preventing bites through the use of DEET based insect repellents).

Participation at festivals will be limited and will be based on the McMaster Institute of Environment’s (MIEH) evaluation of the West Nile virus program 2008 festival outreach as to which festival(s) may provide the best public outreach in terms of number of people expected at the festival, time of year, and current risk level in the community for West Nile virus. The only other form of communication will be through non paid media releases of surveillance findings.

In past seasons, the communication portion of the West Nile virus budget provided comprehensive reach through radio (spring and summer), print (newspaper and magazines), and bus advertising as well as through forums such as presentations to groups, and at major summer festivals (information and mosquito repellent spray station booths). Messaging included promoting the dead bird hotline, reminding the public to remove standing water, and to use personal protection measures to avoid being bitten by an infected mosquito.

The province eliminated their West Nile virus communication campaign in 2008 (no print, radio or television advertising). Prior to the 2009 funding reduction, Hamilton’s WNV program had planned to fill this gap in provincial communication through multiple media reach in 2009, however this is now curtailed.
ALTERNATIVES FOR CONSIDERATION:

The Board of Health could consider maintaining approved service levels funded 100% by the City levy.

FINANCIAL/STAFFING/LEGAL IMPLICATIONS:

FINANCIAL

The total 2009 gross budget for Vector Borne Disease was approved at $1,384,751. As communicated by the Province, the provincial subsidy is reduced in funding by $276,880 or 23% of 2007 actual subsidy levels. As a result, staff are reducing service levels for the VBD program to compensate for this reduced subsidy level. The service reduction would result in an overall net levy savings in this program of approximately $92,000. Should there be an overall year end Corporate Surplus, staff would recommend setting these funds aside for emergency larviciding in the future.

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STAFFING

Elimination of 1 FTE

LEGAL IMPLICATIONS

The Medical Officer of Health under Regulation 199/03, Control of West Nile Virus, under the Health Protection and Promotion Act (HPPA) has the authority to direct the municipality to do work related to West Nile virus. The regulation states, in part,

“Determination if action required

1. A medical officer of health shall make a determination whether action is required by a municipality to decrease the risk of West Nile Virus to persons either inside or outside the health unit served by the medical officer of health, based upon a local risk assessment in accordance with the document entitled West Nile Virus Preparedness and Prevention Plan 2008, published by and available from the Ministry of Health and Long-Term Care, dated June 23, 2008. O. Reg. 231/03, s. 1; O. Reg. 322/04, s. 1; O. Reg. 413/06, s. 1; O. Reg. 422/07, s. 1; O. Reg. 229/08, s. 1.

Notice to municipality

2. (1) Where the medical officer of health has determined that action is required, he or she may give notice to the municipality of the required action. O. Reg. 199/03, s. 2 (1).

(2) In determining required actions under subsection (1), the medical officer of health shall have regard to,

(a) the document mentioned in section 1; and
(b) the generally accepted practices in the field of public health with regard to decreasing the risk of West Nile virus to persons. O. Reg. 199/03, s. 2 (2).

Must comply

3. A municipality shall comply with any requirements set out in the notice. O. Reg. 199/03, s. 3.

What may be required

4. Action required under this Regulation may include, without being limited to,

(a) requirements respecting source reduction measures;
(b) requirements respecting surveillance;
(c) requirements respecting public awareness campaigns about personal protection;
(d) requirements respecting the control measures for larviciding and adulticiding set out in Table 1; and
(e) requirements respecting the time within which the action shall be taken. O. Reg. 199/03, s. 4.”

POLICIES AFFECTING PROPOSAL:

N/A

RELEVANT CONSULTATION:

SMT - A presentation was made to SMT (Senior Management Team) April 23, 2009 to explain the requirement for all departments to undertake and maintain a standing water management plan (source reduction and remediation) with no direct funding from the Vector Borne disease (West Nile virus) budget.

Human Resources on staffing issues

Budgets and Finance on funding

CITY STRATEGIC COMMITMENT:

By evaluating the “Triple Bottom Line”, (community, environment, economic implications) we can make choices that create value across all three bottom lines, moving us closer to our vision for a sustainable community, and Provincial interests.

Community Well-Being is enhanced. ☑ Yes ☐ No
Public services and programs are delivered in an equitable manner, coordinated, efficient, effective and easily accessible to all citizens.

Environmental Well-Being is enhanced. ☑ Yes ☐ No
Human health and safety are protected.

Economic Well-Being is enhanced. ☐ Yes ☑ No

Does the option you are recommending create value across all three bottom lines?
Do the options you are recommending make Hamilton a City of choice for high performance public servants?

☐ Yes ☒ No