

STAFF REPORT ACTION REQUIRED

Funding for Heat Vulnerability Assessment Mapping Project

| Date: | December 21, 2009 | | |
|----------------------|---------------------------|--|--|
| То: | Board of Health | | |
| From: | Medical Officer of Health | | |
| Wards: | All | | |
| Reference Number: | | | |

SUMMARY

The purpose of this report is to inform the Board of Health about funding to be allocated to Toronto Public Health (TPH) for participation in an Ontario-wide initiative to help communities adapt to climate change. This report also seeks City Council approval for a one-time budget adjustment to the TPH 2010 Operating Budget for the 100 percent funding provided by the Ontario Ministry of the Environment.

TPH is a member of the Ontario Regional Adaptation Collaborative (ORAC), which was recently awarded funding by Natural Resources Canada. The Ontario Ministry of the Environment will be administering the funding and has committed to provide TPH with one-time funding of \$135.0 thousand, covering the period February 2010 to March 2012. The purpose of the funding is to enable TPH to enter into Purchase of Service contracts with external experts to implement, test, and refine a map-based decision support approach for hot weather response. The products will improve the ability of public health staff and other community partners to effectively deliver health-protective services to the most vulnerable populations during extreme heat events.

RECOMMENDATIONS

The Medical Officer of Health recommends that:

1. City Council approve an increase of \$93.0 thousand gross and \$0.0 net to Toronto Public Health's 2010 Operating Budget to reflect confirmed 2010 funding from the Ontario Ministry of the Environment, the lead agency for disbursing Natural Resources Canada funding to members of the Ontario Regional Adaptation Collaborative;

- 2. City Council authorize the Medical Officer of Health to award, execute, and amend Purchase of Service contracts with Dr. Claus Rinner of Ryerson University, Dianne Patychuk of Steps to Equity, and Dr. Kate Bassil of Simon Fraser University for research and geospatial analysis services on the heat vulnerability mapping project; and
- 3. This report be forwarded to the City Council meeting of January 26, 2010 for approval.

Financial Impact

Funding for the ORAC project will be administered through the Ontario Ministry of the Environment. TPH's share for the period February 2010 to March 2012 is \$135.0 thousand.

The table below summarizes the annual cash flow for the duration of the project. For 2010, an increase of \$93.0 thousand gross and \$0.0 net is required to Toronto Public Health's 2010 Operating Budget and an additional \$42.0 thousand gross and \$0.0 net is required in 2011.

| ORAC FUNDING 2010 – 2011 | | | | |
|--------------------------|-------------|---------------|-----------|--|
| Year | Gross \$ | Revenue \$ | Net \$ | |
| 2010 | 93,000 | 93,000 | 0.0 | |
| 2011 | 42,000 | 42,000 | 0.0 | |
| Total | 135,000 | 135,000 | 0.0 | |

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

ISSUE BACKGROUND

TPH has partnered with municipal and provincial agencies across Ontario on an initiative to reduce vulnerability to climate change across the province. The collaborative will focus on risk management, outreach and capacity building, and water resources. The Ontario Regional Adaptation Collaborative includes partners such as the Ontario Centre for Climate Change Impacts and Adaptation Resources, three Ontario Ministries (Environment, Health and Long-term Care, and Municipal Affairs and Housing), the Clean Air Partnership, Toronto and Region Conservation Authority/Conservation Ontario, York University, and the Toronto Environment Office.

TPH and its partners successfully participated in a competitive process to create a major grant proposal on climate change adaptation planning. A letter of intent was prepared in response to an initial call for letters of interest issued by Natural Resources Canada in July 2008. Approval of the letter by Natural Resources Canada led to development of a comprehensive proposal that was accepted in November 2009. Project personnel identified in the Toronto Public Health component of the proposal included Dr. Claus Rinner, Dianne Patychuck, and Dr. Kate Bassil, as a result of their unique expertise and experience in heat vulnerability mapping.

The Ontario Ministry of the Environment is the lead agency designated to administer the grant and they will allocate funding to partnership members such as Toronto Public Health. In December 2009, the Ontario Ministry of the Environment committed to providing TPH with total funding of \$135.0 thousand to retain GIS and heat-health experts to implement, test, and refine a map-based decision support approach. Funding will also be used to purchase computer equipment for the project and support dissemination of the findings.

COMMENTS

In 2005, Toronto Public Health (TPH) and Environment Canada estimated that between 1954 and 2000, heat contributed to an average of 120 premature deaths per year in the City. Temperatures in Toronto are expected to increase as a result of climate change. Environment Canada predicts that the number of days with temperatures over 30 degrees in Toronto will more than triple from about 15 days per year between 1961-1990 to about 65 days per year by 2080-2100.

TPH has implemented some heat-related adaptation measures, including developing a heat warning system and implementing a response plan when a heat alert or an extreme heat alert is declared in Toronto. However, there is presently little information to guide where and for whom delivery of heat response is most crucial within Toronto.

TPH recently developed an approach to visualize risk information related to heat vulnerability and adaptation using maps. The purpose of the new funding is to enable TPH to enter into Purchase of Service contracts with Dr. Claus Rinner of Ryerson University, Dianne Patychuk of Steps to Equity, and Dr. Kate Bassil of Simon Fraser University to implement, test, and refine the map-based decision support approach. The tool will de designed specifically for use by public health staff and community partners to effectively deliver health-protective services to the most vulnerable populations during extreme heat events. The heat vulnerability tool will improve hot weather response planning and decision-making in Toronto, and could support hot weather planning in communities across Canada.

CONTACT

Monica Campbell, Manager Environmental Protection Office Toronto Public Health Tel: 416-338-8091 Fax: 416-392-7418 Email: <u>mcampbe2@toronto.ca</u> Carol Timmings Interim Director, Planning & Policy Toronto Public Health Tel: 416-392-7463 Fax: 416-392-0713 Email: <u>ctimming@toronto.ca</u>

SIGNATURE

Dr. David McKeown Medical Officer of Health

ATTACHMENT

Attachment 1: Funding Confirmation Letter from Ontario Ministry of the Environment