SUBJECT: Ontario Drinking Water Stewardship Program Funding for 2009 (under the Clean Water Act, 2006) - (PW09010) - (Wards 14 and 15)

RECOMMENDATION:

(a) That the draft two-year time of travel capture zones (attached as Appendix A to Report PW09010) for the City of Hamilton’s groundwater-based municipal drinking water systems be accepted as the basis of applying for the Ontario Drinking Water Stewardship Program Early Action Funding;

(b) That at such time the draft two-year time of travel capture zones for the City of Hamilton’s groundwater-based municipal drinking water systems are finalized, the finalized two-year time of travel capture zones will replace the draft versions for the exclusive purpose of applying for the Ontario Drinking Water Stewardship Program Early Action Funding.

EXECUTIVE SUMMARY:

Under the Clean Water Act, 2006 the Province of Ontario has committed funding for prescribed actions that aim to protect sources of drinking water where it is most vulnerable. Eventually Source Protection Committees will prepare Source Protection Plans (2012) to prioritize actions and policies aimed at protecting drinking water sources. These plans will incorporate scientific assessments that are currently being
undertaken with comprehensive stakeholder involvement. Once the source protection plans are developed they must be approved by the local Municipal Councils including the finalized time of travel capture zones. In the interim, as these plans are being developed, there are improvements and actions that can be undertaken in the vicinity of our municipal supply wells to safeguard the sources now. The Province recognizes that earlier action will benefit sources of drinking water close to the supply wells and has prepared a framework for dispensing stewardship funds to facilitate these community outreach and early action initiatives. This framework includes funding eligibility requirements; the eligibility requirements specifically state that the eligible areas include a two-year time of travel area (capture zone) that has been accepted by the municipality through a council resolution. This report summarizes the eligibility requirements and it provides the rationale to accept the capture zones, attached hereto as Appendix A.

**BACKGROUND:**

The recommendations contained within this report primarily affect Wards 14 and 15. The *Clean Water Act, 2006* establishes the Ontario Drinking Water Stewardship Program (ODWSP). The purpose of the program is to provide financial assistance for activities and properties that may be affected by the *Clean Water Act, 2006* and to certain groups, organizations, and individuals for activities related to source protection plans and the protection of drinking water sources. The financial assistance is to be provided in accordance with regulations made under the *Clean Water Act, 2006*.

In advance of regulations and to ensure that activities to protect drinking water sources across the province could begin immediately, the Premier announced in September 2006 that an initial $7M in financial assistance would be made available in 2007-2008. This was referred to as the Source Protection Program. For the purpose of this initial funding, and for the ODWSP program, principles were established and adhered to in accordance with guidance provided by the Ontario Stewardship Advisory Panel. Also, financial assistance was provided under the 2007-2008 Source Protection Program according to an extensive and rigorous accountability framework developed by Ministry of the Environment (MOE) staff. The City of Hamilton through the Infrastructure and Source Water Planning Section of Public Works applied for and received financial support to successfully undertake an effective landowner and community outreach program. This program included: several public information sessions, preparation and dissemination of information material, procurement of instructional/educational tools used at several children’s events, and drinking water protection area road sign installations around our Municipal Supply Wells. In the 2007-2008 Provincial Budget, another $21M was committed for the ODWSP once regulated, for a total of $28M over four years.

The Province will continue to provide financial assistance for the protection of drinking water sources under the regulated ODWSP, making available the $21M over three years, beginning in 2008 and continuing through to the spring of 2011. This financial assistance program is the first of its kind in Ontario to be enshrined in legislation (section 97 of the *Clean Water Act, 2006*), focusing on proactive initiatives, education and outreach activities to protect drinking water sources in advance of source protection plans being in effect.
The City of Hamilton has recently undertaken to complete a Groundwater Vulnerability Assessment to satisfy the source protection assessment reports required under the Clean Water Act, 2006 and to support our groundwater based Municipal Drinking Water Systems planning and operational objectives. The assessment project involved the creation of a hydro-stratigraphic model, which is essentially a computer generated simulation of the groundwater flow based on known geological and hydrogeological data. Once the data is collected and input into a database, a computer model simulates the response of pumping wells and generates various outputs related to this response. One such output is the time of travel capture zones; commonly use to delineate a well head protection area. These time of travel capture zones depict an area on the surface which through computer modeling, indicates that any rainfall within the area can potentially reach the well within a specified time. The capture zones (attached hereto as Appendix A) depict the area whereby any rain that falls within these zones can reach the well in two years or less. The significance of delineating these areas considers not only rain that can reach the well intake within two years, but other substances and possibly contamination that can also reach the well in this length of time.

The delineations attached to this report are subject to amendments following a peer review of the input data and methodology, however, for the purpose of applying for early action funding these approximations are adequate. Once the finalized capture zones are prepared they will replace the current draft delineations for purpose of funding applications. The final capture zones will be submitted to the various Source Protection Authorities (SPAs) (Hamilton-Halton SPA and Lake Erie SPA) for inclusion in the technical assessment reports and follow-up action by the Source Protection committees. The follow-up action may include various policy recommendations and actions as outlined in the final source protection plans for each source protection area (defined by the current conservation area boundaries). These source protection plans will include the finalized time of travel capture zones and must be approved by the local municipal council before the consent to implement the plans will be granted by the Province under the Clean Water Act, 2006. The source protection plans are expected to be completed by 2012.

Whereas the City of Hamilton has yet to finalize its capture zone delineations, and whereas early action funding applications are currently being accepted, staff proposed an interim solution based on the best available information to date. This approach was to adopt the current draft delineations for early action funding purposes exclusively and the approach was deemed acceptable by the administrators of the stewardship program.

**ANALYSIS/RATIONALE:**

As with the 2007-2008 Source Protection Program, the ODWSP will provide financial assistance to Ontarians such as farmers, property owners, organizations, agencies and businesses, for activities they undertake to protect drinking water sources. This will be done in anticipation of source protection plans that will be prepared locally by Source Protection Committees across the province. The ODWSP is made up of three components:
Early Actions, providing financial assistance to organizations to administer programs that support activities to protect drinking water sources immediately within intake and wellhead protection areas;

Education and Outreach, to inform the public about the Clean Water Act, 2006, the Ontario Drinking Water Stewardship Program (ODWSP) and the drinking water source protection planning concepts; and,

Special Projects, aimed at activities that complement the Early Actions and Education and Outreach components.

The framework of the ODWSP will mirror the 2007-2008 Source Protection Program with a few changes to the scope and delivery framework, and will have the flexibility to adjust and build on previous years’ experiences. The process for providing financial assistance will be consistent with the 2007-2008 Source Protection Program, as it will be available through selected program administrators (Conservation Authorities) delivering funds to property owners, or directly through the Ministry of the Environment in the case of financial assistance for Special Projects and Education and Outreach activities. The types of initiatives and projects funded will also remain the same as in 2007-2008, with some additions.

Building on the 2007-2008 Source Protection Program, the scope of the ODWSP has been broadened as follows:

- Initiating proposals from potential new Early Actions funding recipients, in addition to conservation authorities (CAs) and the Ontario Federation of Agriculture (OFA), to cover as much of the province as possible and to optimize synergy with other programs. The City of Hamilton, though various Source Water Protection efforts to date, has established a mutually-beneficial working relationship with the Conservation Authorities, Landowner Associations, and the Ministry of the Environment.

The City of Hamilton through the Infrastructure and Source Water Planning Section of Public Works applied for and received financial support to successfully undertake an effective landowner and community outreach program in 2007-2008. This program included:

- several public information sessions; Carlisle, Freelton, Greensville, Lynden and Hamilton (concentrating on the areas proximal to our supply wells and lake intake),
- preparation and dissemination of information material, brochures, and booklets with helpful suggestions and recommendations for landowners about the care and maintenance of wells and septic systems,
- procurement of instructional/educational tools (groundwater simulator that allows children to visualize and interact with a 3-D model that highlights the significance of surface activities and the vulnerability of groundwater sources) used at several children’s events (the Water and Wastewater Division’s Children’s Water Festival, May 2008, and Christie Lake Splash Day, June 2008), and,
- drinking water protection area road sign installations around our Municipal Supply Wells (advising drivers that they are entering an area of heightened groundwater protection)
• Allowing for multi-year agreements that may run the timeframe of the current funding commitment until 2011
• Expanding the area covered around municipal wells from 100-metres to a two-year time of travel area that has been accepted by municipalities through a council resolution
• Expanding the area covered around municipal surface water intakes from 200-metres to the intake protection zone-one (IPZ-1) that has been accepted by municipalities through a council resolution (the City of Hamilton has established an IPZ-1, however it is entirely within Lake Ontario and therefore not subject to this round of funding applications)
• Adjusting the balance of funds allocated between each of the funding components (i.e. Education and Outreach, Special Projects, and Early Action priorities)
• Rolling out the Early Actions land conservation module to support municipalities gaining control of lands directly adjacent to municipal wellhead protection areas and surface water intakes

Eligible Early Actions

Under the Early Actions component of the ODWSP, organizations receive financial assistance from the Ministry of the Environment (MOE) to administer programs that assist property owners to protect municipal drinking water sources. The MOE intends to fund programs that will target properties located in the 100-metre radius of a municipal wellhead, and/or a 200-metre radius of a municipal surface water intake, or (new this year) properties within a two-year time of travel around municipal wells and/or within the IPZ-1 that is accepted by local municipalities through council resolution. Priority projects and activities for Early Actions have been identified by the MOE as follows:

• Decommissioning old abandoned wells and the maintenance of existing wells, complementing our existing well abandonment program.
• Septic systems inspections and upgrades
• Pollution prevention reviews for small- and medium-sized businesses
• Runoff and erosion protection measures and additional best management practices
• Land conservation measures
• Fuel storage management practices

Under the 2007-2008 Source Protection Program recipients of Early Actions funding included certain conservation authorities and the Ontario Federation of Agriculture (OFA) (the Ontario Soil and Crop Improvement Association being the delivery agent for the OFA). For the Ontario Drinking Water Stewardship Program, the MOE intends to seek out and provide Early Actions funding to additional organizations that would like to administer early action initiatives, by applying through a Request for Grant Proposal.

ALTERNATIVES FOR CONSIDERATION:

The only other alternative is to resolve to not accept these modelled capture zones for the two-year time of travel and in doing so, restrict any person or party within these geographic areas from applying for the Ontario Drinking Water Stewardship Program early action funding. This would be contrary to the City of Hamilton’s position with respect to community engagement and our encouragement for citizens to take measures to protect its sources of drinking water.
FINANCIAL/STAFFING/LEGAL IMPLICATIONS:

There are no direct financial or staffing implications, however the financial support available to the public will lessen the burden for ratepayers should the actions that are currently funded be required in future without compensation from higher levels of government.

POLICIES AFFECTING PROPOSAL:

No policies are affected by or affect this proposal. The recommendations included herein are to satisfy the regulatory requirement for funding eligibility exclusively. The recommendations are consistent with Council endorsed policies to provide safe drinking water established through the development of the Water and Wastewater Division’s Drinking Water Quality Management System.

RELEVANT CONSULTATION:

As this report aims to establish a regulated requirement for any parties wishing to participate in provincially-funded ODWSP early actions, there was no requirement for extensive internal consultation. For the most part consultation was required with the administrators of the funding programs to ensure our approach to satisfying the regulated requirements was acceptable. In light of this staff consulted with the Source Protection Authorities within the City of Hamilton political boundaries and the Ministry of the Environment and ensured our approach was adequate for funding application purpose.

In some cases municipalities have already resolved to adopt capture zones for purposes related to land-use planning and in these cases were not required to pass resolutions to use these delineations for funding purposes.

Consultation with the Lake Erie Source Protection Area, Hamilton-Halton Source Protection Area and the Ontario Ministry of the Environment resulted in the development of the recommendations. Whereas the City of Hamilton has yet to finalize its capture zone delineations, and whereas Early Action funding applications are currently being accepted, staff proposed an interim solution based on the best available information to date and hence to accept by way of resolution the draft capture zone delineations (attached hereto as Appendix A) solely for the use of ODWSP Early Action funding applicants and further to replace these draft delineations with the finalized delineations once completed.

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
The rural settlement areas within our community rely on their municipal government to take appropriate steps to safeguard their drinking water. If the municipality can assist those to adopt a stewardship mentality to further enhance the level of protection by leveraging provincial funding, we are thereby enhancing the well-being of groundwater dependant populations.
Environmental Well-Being is enhanced. ☑ Yes  □ No
Early action funding provides numerous options for the community to take an active roll in protecting groundwater quality. The eventual outcome in any situation will be inherently positive for the environment.

Economic Well-Being is enhanced. ☑ Yes  □ No
The community will be able to access funds otherwise not available to undertake stewardship projects that fall within the Early Action framework.

Does the option you are recommending create value across all three bottom lines?
☑ Yes  □ No
As described above, the recommendations provide value across all three bottom lines without creating a financial burden to the community.

Do the options you are recommending make Hamilton a City of choice for high performance public servants?
□ Yes  ☑ No
This recommendation does not directly affect perceptions of high performance public servants in terms of employment choices.
Appendix A Draft Two-Year time of travel capture zones
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