Agenda - Executive Policy Committee - April 30, 2003

Report - Standing Policy Committee on Protection and Community Services – April 24, 2003

Item No. 1 Mosquito Control Strategy - Blueprint for Action
File PA (Vol. 11)

STANDING COMMITTEE RECOMMENDATION:

On April 24, 2003, the Standing Policy Committee on Protection and Community Services recommended:

1. That Council approve in principle the overall intergovernmental Mosquito Control Strategy - Blueprint for Action.

2. That Council approve the additional contingency funding required to support the City of Winnipeg's portion of the following strategic actions, based on the range of Provincial cost sharing mechanisms as described in the report dated April 23, 2003, from the Director of Community Services. Those strategic actions requiring additional City of Winnipeg funding are:

   A. Enhanced and Targeted Larviciding for West Nile Virus within Winnipeg ($50,000.00 as required)

   B. Emergency Adulticiding (Fogging) for West Nile Virus within Winnipeg ($21,250.00 per round, as required)

   C. Improved Public Education and Communication ($145,000.00)

   D. TEAAM (Targeted Environmental Action Against Mosquitoes) Pilot Project (estimated $75,000.00)

3. That the Community Services Department be authorized to proceed with implementation of the above strategies as required, and that the actual costs incurred be processed after the fact through an additional appropriation.

4. That the Administration be directed to provide notification to the citizens of an area eight (8) hours prior to adulticiding (fogging) operations.

5. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Agenda - Executive Policy Committee - April 30, 2003

Report - Standing Policy Committee on Protection and Community Services – April 24, 2003

DECISION MAKING HISTORY:

STANDING COMMITTEE RECOMMENDATION:

On April 24, 2003, the Standing Policy Committee on Protection and Community Services concurred in the administration recommendation, with the addition of the following:

- That the Administration be directed to provide notification to the citizens of an area eight hours prior to adulticiding (fogging) operations,

and submitted its recommendation to Executive Policy Committee and to Council.

On March 10, 2003, the Standing Policy Committee on Protection and Community Services requested the Administration to provide the Standing Policy Committee with an update on the mosquito issue.

ADMINISTRATIVE REPORT

RE: MOSQUITO CONTROL STRATEGY – BLUEPRINT FOR ACTION

FOR SUBMISSION TO:	**Standing Policy Committee on Protection & Community Services**
ORIGINAL REPORT SIGNED BY:	**Ursula Stelman, Director Community Services Department**
REPORT DATE:	**April 23, 2003**

RECOMMENDATION(S):

1. That Council approve in principle the overall intergovernmental Mosquito Control Strategy – Blueprint for Action.

2. That Council approve the additional contingency funding required to support the City of Winnipeg's portion of the following strategic actions, based on the range of Provincial cost sharing mechanisms as described in the report. Those strategic actions requiring additional City of Winnipeg funding are:
   - Enhanced and Targeted Larviciding for West Nile Virus within Winnipeg ($50,000 as required)
   - Emergency Adulticiding (Fogging) for West Nile Virus within Winnipeg ($21,250 per round, as required)
   - Improved Public Education and Communication ($145,000)
   - TEAAM (**T**argeted **E**nvironmental **A**ction **A**gainst **M**osquitoes) Pilot Project (estimated $75,000)

3. That the Community Services Department be authorized to proceed with implementation of the above strategies as required, and that the actual costs incurred be processed after the fact through an additional appropriation.

REPORT SUMMARY:

Key Issues:

- This report presents a Mosquito Control Strategy – Blueprint for Action for 2003 and beyond, and is a product of a collaborative planning effort between the City of Winnipeg, the Province of Manitoba, and the Winnipeg Regional Health Authority.

- The Blueprint for Action proposes enhanced strategies for 2003 whereby the City of Winnipeg would continue to integrate additional environmentally sensitive approaches within its mosquito control program.

- This report addresses the range of mosquito control services provided by the City of Winnipeg, as well as a comprehensive response plan for West Nile Virus.

- Key components include:

    - Establishment of several intergovernmental Regional Response Teams (including one for Winnipeg) by the Province of Manitoba, to coordinate and plan West Nile Virus response strategies.

    - Enhanced and targeted West Nile Virus surveillance and larviciding.

    - A Student Employment Program will be identified and requested to submit a funding proposal to deliver a community-based pilot project in Wolseley and Garden City (**T**argeted **E**nvironmental **A**ction **A**gainst **M**osquitoes – TEAAM). The project is aimed at increasing public education and mosquito breeding source reduction. The TEAAM pilot project will include a door-to-door home audit, and a backyard clean-up initiative that eliminates potential mosquito breeding sources.

    - Opportunities for citizens to share ideas, concerns and issues within 'Community Conversation' forums.

    - Improved public education and communication mechanisms, with particular attention to public notification when adulticiding (fogging) is required.

    - The Province of Manitoba and the City of Winnipeg will explore the feasibility of alternative shelter arrangements if deemed necessary for concerned residents during neighbourhood mosquito adulticiding, in the event that the Province of Manitoba declares a health emergency related to West Nile Virus.

    - A range of funding mechanisms have been identified for the proposed strategies, including some that are joint City/Provincial cost-sharing.

    - In 2003 the City of Winnipeg will pursue intergovernmental discussions with respect to longer term strategies, as noted below:
        - Expanded Larviciding Program: Obtaining a commitment from the Province for ongoing, multi-year funding of the $1 million larviciding program in the Capital Region.

- Source Reduction and Water Management: Developing a source reduction and water management plan for Winnipeg in collaboration with the City of Winnipeg, the Province of Manitoba, businesses, private industry, etc.
- Research: Establishing a "blue ribbon" research panel to provide advice relative to the most effective and environmentally sensitive mosquito control methods.

Implications of the Recommendation(s):

General implications:

? **None**

x **For the organization overall &/or for other departments**

x **For the community and/or organizations external to the City**

? **Involves a multi-year contract**

Comment(s):

- This report outlines an Insect Control Strategy for 2003 that (a) reduces nuisance mosquitoes, and (b) reduces the risk to the health of Winnipeg citizens from West Nile Virus. This strategy is a product of collaborative planning between the Province of Manitoba and the City of Winnipeg.
- Community forums will be held to provide an overview of the 2003 strategy for mosquito control, and an opportunity for community feedback.

Policy implications:

? **No**

x **Yes** **Comment(s):**

- Council approval is required for the new policy directions, intergovernmental initiatives, and the additional funding associated with the enhanced and more environmentally friendly 2003 mosquito control activities proposed within this report.

Environmental implications:

? **No**

x **Yes** **Comment(s):**

- The Blueprint for Action proposes enhanced strategies for 2003 whereby the City of Winnipeg would continue to integrate additional environmentally sensitive approaches within its mosquito control program.
- In particular, the report proposes a pilot project entitled TEAAM (Targeted Environmental Action Against Mosquitoes). The focus of the project will be targeted strategies aimed at reducing potential sources of mosquito breeding within neighbourhoods. The two pilot neighbourhoods are Wolseley and Garden City.
- In 2003 the City of Winnipeg will pursue intergovernmental discussions with respect to longer term strategies, as noted below:
  - Source Reduction and Water Management,

- establishment of a “Blue Ribbon” Research Panel to provide advice relative to the most effective and environmentally sensitive mosquito control methods,
- seeking approval from senior levels of government to carry out research re use of alternative pesticides.

Human Resources implications:

? **No**

x **Yes Comment(s):**

- Seasonal positions will be created within the Insect Control Branch, contingent upon the need for targeted West Nile Virus mosquito control activities.

Financial implications:

? **Within approved current and/or capital budget**

x **Current and/or capital budget adjustment required**

Comment(s):

- A range of funding mechanisms have been identified for the proposed strategies, including some that are joint City/Provincial cost-sharing.
- Additional funding is required to support the City of Winnipeg’s portion of the strategic actions, based on the range of Provincial cost sharing mechanisms as described in the report.
- Those strategic actions requiring additional City of Winnipeg funding are:
  - Enhanced and Targeted Larviciding for West Nile Virus ($50,000 as required)
  - Emergency Adulticiding (Fogging) for West Nile Virus ($21,250 per round, as required)
  - Improved Public Education and Communication ($145,000)
  - TEAAM (**T**argeted **E**nvironmental **A**ction **A**gainst **M**osquitoes) Pilot Project (estimated $75,000)
- The Community Services Department is requesting authorization to proceed with implementation of the above strategies as required, and that the actual costs incurred be processed after the fact through an additional appropriation.
- A longer term strategy (2004 and beyond) proposes that intergovernmental discussions occur with respect to obtaining a commitment from the Province for ongoing, multi-year funding of the $1 million larviciding program in the Capital Region.

REASON FOR THE REPORT:

On September 4, 2002, Executive Policy Committee requested that the Chief Administrative Officer be requested to investigate the role of the Province of Manitoba with respect to the issue and the partnership program with the City of Winnipeg and provide Executive Policy Committee with a status report.

At its March 10, 2003 meeting, Standing Policy Committee on Protection and Community Services requested the Administration to provide an update on the mosquito issue at its meeting scheduled for April 14, 2003.

Council approval is required for the new policy directions, intergovernmental initiatives, and the additional funding associated with the enhanced and more environmentally friendly 2003 mosquito control activities proposed within this report.

HISTORY:

The City of Winnipeg has carried out mosquito control activities aimed at the reduction of nuisance and disease carrying mosquitoes since 1927. The Insect Control Branch has the responsibility for the control of several other major urban insect pests affecting public health or the property of the City and its citizens; however, mosquito control has always been its primary concern.

Most recently, the City of Winnipeg has demonstrated commitment to its environmentally friendly agenda by significantly increasing funding to provide for the expanded use of environmentally more sensitive biological insecticides. In 2001 $626,957 was added, which has been increased by the cost of living each year thereafter; 2003 will be the third year of significantly increased funding to support the City's environmental agenda.

In 2002 a partnership was formed between the Province of Manitoba, the City of Winnipeg, and a number of Capital Region municipalities to enhance the City's mosquito larviciding efforts within a 6-10 km radius of Winnipeg. The Province of Manitoba and the surrounding Capital Region municipalities contributed $1 million toward this expanded program. This program will continue in 2003.

The new and emerging threat of West Nile Virus has been spreading across North America in the last few years. West Nile Virus was identified in Winnipeg for the first time in the summer of 2002. It was determined to be a public health threat and required specific mosquito control actions to reduce risk. The Province of Manitoba established contractual agreements with the City of Winnipeg for the provision of dead bird pick-up and mosquito surveillance (trapping). Following the issuance of a Ministerial Order in 2002, the City provided the required adulticiding (fogging) throughout Winnipeg.

DISCUSSION:

This report reflects the collaborative planning efforts between the Province of Manitoba and the City of Winnipeg to ensure an Insect Control Strategy for 2003 that (a) reduces nuisance mosquitoes, and (b) reduces risk to the health of Winnipeg citizens from West Nile Virus.

In recent years the City of Winnipeg has continued to demonstrate its leadership and significant progress in delivering an Integrated Pest Management Program, with major emphasis on environmentally friendly approaches. The strategies described in this report further enhance the delivery of the City's Green Agenda.

The introduction of West Nile Virus into Winnipeg last summer has resulted in the formation of a strong intergovernmental planning process for the development of this year's strategy. In planning this year's Mosquito Control Strategy, the Province of Manitoba is sharing in this commitment to enhance environmentally friendly measures.

The Mosquito Control Strategy described within this report reflects the planning that has occurred between the Province of Manitoba, Winnipeg Regional Health Authority, and the City of Winnipeg. The Province of Manitoba has indicated that contingency funding for larviciding and adulticiding in response to West Nile Virus will be provided on a 75% Provincial / 25% Municipal cost-sharing basis. In addition, other intergovernmental funding mechanisms are identified relative to the range of activities presented within this report.

The following "Blueprint for Action" proposes new and enhanced strategies for 2003. This will ensure a comprehensive, responsible and environmentally sensitive approach aimed at nuisance control and protection of the public's health. As well, a number of the proposed strategies would be jointly funded between the Province of Manitoba and the City of Winnipeg, as indicated in the following chart. The funds proposed for several of the strategies are contingent upon the level of response that will be required for West Nile Virus, as the season progresses. Appropriate response levels will be implemented by the intergovernmental Regional Response Team with direction from Manitoba Health. The figures specified are maximum amounts that may be required.

Blueprint for Action – 2003			
STRATEGY	**COST**	**CITY FUNDING**	**PROVINCIAL FUNDING**
• **ESTABLISHMENT OF WEST NILE VIRUS REGIONAL RESPONSE TEAMS** • In response to West Nile Virus, the Province of Manitoba has implemented Regional Response Team structures that bring together: ▪ Manitoba Health ▪ Manitoba Conservation ▪ Manitoba Agriculture ▪ Manitoba Intergovernmental Affairs ▪ district representation from the Association of Manitoba Municipalities (AMM) ▪ Winnipeg Regional Health Authority (WRHA) ▪ City of Winnipeg • Several Regional Response Teams responsible for planning within a defined geographic area of the province are currently being developed. **One of these teams will be dedicated to the City of Winnipeg,** including the municipalities of East and West St. Paul. • Purpose: to provide a structure and process required to coordinate and implement the regional and local West Nile Virus program operations in a way that involves shared responsibility with the municipalities, and addresses communications and information flow issues. • The Winnipeg West Nile Virus Response Planning Structure is attached as Appendix 1. • **Action by: Province of Manitoba / Winnipeg Regional Health Authority / City of Winnipeg**		No additional cost	
• **ESTABLISHMENT OF CENTRAL HEALTH OPERATIONS COORDINATION** • Manitoba Health has also established a Central Health Operations Coordination office to provide leadership, expertise and direction regarding West Nile Virus program policy, and manage provincial communications. An Entomologist has been retained by the Province as a member of this office. • **Action by: Province of Manitoba**		No additional cost	

STRATEGY	COST	CITY FUNDING	PROVINCIAL FUNDING
• **DEVELOPMENT OF BY-LAW PERMITTING ACCESS TO PRIVATE PROPERTY** Purpose: To allow Insect Control staff access to private land (not buildings) in order to identify potential mosquito breeding sites, sample standing water for larvae, and require that appropriate control measures be applied (e.g., elimination of standing water sites, larviciding). The proposed by-law would utilize the authority provided in the recently revised City of Winnipeg Charter to permit public notice to be given of an inspection program affecting privately property rather than having to provide individual notice to each property owner. Property owners would retain the right to object to an inspection of their land. • **Action by: City of Winnipeg**	No additional cost		
• **MOSQUITO SURVEILLANCE FOR NUISANCE MOSQUITOES** • All known mosquito-breeding sites will be routinely surveyed. • Standing water sites will continue to be identified and mapped. • Larval samples will be taken to identify and quantify mosquito species. • Adult mosquito populations will be carefully monitored in and around Winnipeg, using a network of 20 standard New Jersey style mosquito light traps. • **Action by: City of Winnipeg**	No additional cost	Contained within 2003 budget	
• **TARGETED MOSQUITO SURVEILLANCE FOR WEST NILE VIRUS – Provincial Contract with City** • The Province of Manitoba will contract with the City for a more rigorous and inclusive program of surveillance, including the identification of sites, and mapping specifically for the Culex mosquito known to carry West Nile Virus in and around Winnipeg: ▪ Targeted larval sampling in selected mosquito breeding sites, and catch basin surveillance ▪ Adult mosquito trapping – sorting and identification • **Action by: Winnipeg Regional Response Team / City of Winnipeg**			This will be 100% recovered from the Province.
• **DEAD BIRD SURVEILLANCE PROGRAM FOR WEST NILE VIRUS – Provincial Contract with City** • The City will be contracted by the Province for dead bird pick-up. • **Action by: Winnipeg Regional Response Team / City of Winnipeg**	$75,000	No cost	$75,000 * (Estimate based on last year's contract with the City)
***** ***Provincial contribution contingent on the level of response needed for West Nile Virus; not expected to exceed amount shown.***			

STRATEGY	COST	CITY FUNDING	PROVINCIAL FUNDING
• **LARVICIDING FOR NUISANCE MOSQUITOES** • Mosquito larviciding and source reduction are the most effective and environmentally acceptable methods of reducing the mosquito population. • Larviciding will be carried out throughout Winnipeg and within the 6-10 km radius as in 2002. • **Action by: Province of Manitoba / City of Winnipeg / 10 municipalities in the Capital Region**		Contained within 2003 budget.	$1 million has been provided to the City by the Province and surrounding municipalities for expanded larviciding within the Capital Region in 2003.
• **ENHANCED AND TARGETED LARVICIDING FOR WEST NILE VIRUS WITHIN WINNIPEG** • Purpose: To provide an enhanced, aggressive but environmentally friendly larviciding program in an effort to avoid the use of adult mosquito control measures (fogging) whenever possible. • Further expansion to include: ▪ Larvicide in non-traditional sites such as marshy areas, etc. ▪ Accelerate the timing of larviciding to every few weeks, independent of rainfall. ▪ Use of environmentally friendlier insecticides. • The Province of Manitoba has established contingency funds which will be available to the municipality, based on a 75/25 cost sharing model, in the event of a West Nile Virus threat. • **Action by: Winnipeg Regional Response Team / City of Winnipeg**	$200,000	$50,000 (25%) REQUIRES COUNCIL APPROVAL CONTINGENT UPON PROVINCIAL COST-SHARING, WHICH IS AVAILABLE BASED UPON AN ASSESSED RISK TO HUMAN HEALTH FROM WEST NILE VIRUS	$150,000 * (75%)
• **ADULTICIDING (FOGGING) FOR NUISANCE MOSQUITO CONTROL** • Adulticiding will be used as a last resort in the event that the combination/timing of environmental conditions (rain, warm temperatures) reduces the effectiveness of the larviciding measures. • Adulticiding will be undertaken, if necessary, to alleviate unacceptably high levels of nuisance mosquitoes. • According to Health Canada, Malathion remains the preferred insecticide for the control of adult mosquitoes, and will continue to be used for the purpose of the City of Winnipeg's adulticiding program. • When adulticiding for nuisance mosquitoes, the City of Winnipeg will continue to respect buffer zones. Concerned public can register with the Insect Control Branch to ensure no fogging occurs within 100 metres of their personal residence. • Enhanced communication will occur via news media, press releases, the Bug Line, and the Insect Control website (www.bugline.com) on a daily basis in order to keep the public well-informed as to the expected location of fogging. • **Action by: City of Winnipeg**		Additional appropriation if adulticiding required, per City policy.	No cost

* *Provincial contribution contingent on the level of response needed for West Nile Virus; not expected to exceed amount shown.*			
STRATEGY	**COST**	**CITY FUNDING**	**PROVINCIAL FUNDING**
• **EMERGENCY ADULTICIDING (FOGGING) FOR WEST NILE VIRUS WITHIN WINNIPEG** • In the event of a health emergency whereby the City of Winnipeg and the Province of Manitoba believe it to be in the best interests of public health protection, a ministerial order may be issued which will require fogging of the entire city, irrespective of buffer zones. **The number of rounds would be dependent on virus activity.** • The Province of Manitoba has established contingency funds which will be available to the municipality, based on a 75/25 cost sharing model, in the event of a West Nile Virus threat.	$85,000 per round	$21,250 per round (25%) REQUIRES COUNCIL APPROVAL CONTINGENT UPON PROVINCIAL COST-SHARING, WHICH IS AVAILABLE BASED UPON AN ASSESSED RISK TO HUMAN HEALTH FROM WEST NILE VIRUS	$63,750 * per round (75%)
• The Province of Manitoba and the City of Winnipeg will explore the feasibility of alternative shelter arrangements if deemed necessary for concerned residents during neighbourhood mosquito adulticiding, in the event that the Province of Manitoba declares a health emergency related to West Nile Virus. • **Action by: Winnipeg Regional Response Team / City of Winnipeg**		TO BE DETERMINED.	
• **IMPROVED PUBLIC EDUCATION AND COMMUNICATION** • Purpose: To ensure consistent, clear and timely public information, and to develop joint communication plans. • Establishment of an intergovernmental communications sub-committee of the Regional Response Team. ▪ **Community Conversations:** The Winnipeg Regional Response Team will be holding community forums to provide an overview of the 2003 strategy for mosquito control. This will also be an opportunity for the community to share its feedback. Community forums will be held over a 2-3 day period during the month of June, in several geographic areas of the city.			The Province will be committing significant funds for public education regarding West Nile Virus.
• Insect Control Communications Assistant (seasonal) for: ▪ Media Request Management – scheduled regular news briefings ▪ Improving Bug Line staff response time to public inquiries ▪ Enhancing website, including more frequent information updates ▪ Developing and distributing communication materials (FAQ sheets, brochures, community bulletins). • **Action by: Sub-Committee of Winnipeg Regional Response Team / Province of Manitoba / Winnipeg Regional Health Authority / City of Winnipeg**	$145,000	$145,000 REQUIRES COUNCIL APPROVAL	

* *Provincial contribution contingent on the level of response needed for West Nile Virus; not expected to exceed amount shown.*			
STRATEGY	**COST**	**CITY FUNDING**	**PROVINCIAL FUNDING**
• **TEAAM PILOT PROJECT (Targeted Environmental Action Against Mosquitoes)** • Purpose: A community-based initiative delivered by a Student Employment Program would explore the effectiveness of environmentally friendly focused measures as a means to reduce mosquitoes in targeted pilot project neighborhoods. The focus of the project will be targeted strategies aimed at reducing potential sources of mosquito breeding within neighbourhoods. • The two pilot neighbourhoods are Wolseley and Garden City. These two neighbourhoods were selected based on the fact that: ▪ they have a range of known mosquito breeding sites which are larvicided each year; ▪ they have been established for a long time and therefore have a higher likelihood of backyard items which may collect water; ▪ they provide a manageable sample size of 2000-2500 single family dwellings; ▪ Wolseley, in particular, has expressed interest in pursuing environmentally friendly approaches to mosquito control. • **A Student Employment Program will be identified and requested to submit a proposal for funding to deliver this initiative. The funding will be provided on a 50/50 cost-sharing basis between the City of Winnipeg and the Province of Manitoba.** • The project will include: ▪ **Door-to-door Home Audit:** A proposed 8-week project that includes yard inspections and evaluations for potential mosquito breeding sites. Project staff to provide advice, suggestions and solutions as well as personal protection information. ▪ **Back-yard Clean-Up Initiative:** A proposed 8-week project to provide assistance to the elderly and low-income people with issues such as repairing and installing screens, as well as moving old tires and debris, filling in low-lying areas, etc. ▪ **Project Evaluation:** An evaluation will be carried out to determine if the project succeeded in reducing potential mosquito breeding sites on private property. • **Action by: The Pilot Project will be facilitated by the Winnipeg Regional Response Team.**	Est. $150,000	Est. $75,000 (50%) REQUIRES COUNCIL APPROVAL. MATCHING PROVINCIAL FUNDS HAVE BEEN APPROVED BY THE PROVINCE.	Est. $75,000 (50%)

In 2003 the City of Winnipeg will pursue intergovernmental discussions with respect to longer term strategies, as noted below:

Blueprint for Action – Longer Term Strategies	
PROPOSED STRATEGY	**EXPLANATION**
Expanded Larviciding Program	• Secure commitment from the Province and surrounding municipalities for $1 million annually, on an ongoing basis, for the expanded larviciding program within the Capital Region (2004 and beyond).
Source Reduction and Water Management	• Development of a source reduction and water management plan for Winnipeg in collaboration with the City of Winnipeg, the Province of Manitoba, businesses, private industry, etc.
Research	• A "blue ribbon" research panel will be established to provide advice relative to the most effective and environmentally sensitive mosquito control methods. • In 2003 requests will be initiated to Health Canada and Manitoba Conservation for necessary approvals to carry out research re use of pesticides such as hormone briquettes, pyrethrums, etc., for testing beginning in 2004.

FINANCIAL IMPACT:

The funds for the following strategies are contingent upon the level of response that will be needed for West Nile Virus as the summer of 2003 progresses. Actual amounts spent will be processed after the fact through an additional appropriation.

- Enhanced and Targeted Larviciding for West Nile Virus within Winnipeg ($50,000)
- Emergency Adulticiding (Fogging) for West Nile Virus within Winnipeg ($21,250 per round, as required)

The following are estimated maximum costs; actual amounts spent will be processed after the fact through an additional appropriation.

- Improved Public Education and Communication ($145,000)
- TEAAM (**T**argeted **E**nvironmental **A**ction **A**gainst **M**osquitoes) Pilot Project (estimated $75,000)

IN PREPARING THIS REPORT THERE WAS CONSULTATION WITH, AND CONCURRENCY BY:

- EPC Secretariat – Environmental Coordinator
- Legal Services Division, Corporate Services Department
- Manitoba Health
- Manitoba Inter-governmental Affairs
- Winnipeg Regional Health Authority

THIS REPORT SUBMITTED BY:

Prepared by: Kelly Goldstrand, Manager
Community Resource, Protection & Safety Services
Community Services Department

File No.

Appendix 1

Winnipeg West Nile Virus Response Planning

