



City of Richmond

Report to Committee

**To:** Community Safety Committee  
**From:** Suzanne Bycraft  
 Manager, Emergency & Environmental Programs  
**Re:** Emergency Planning - Program Status

**Date:** September 30, 2005  
**File:** 09-5125-01/Vol 01

**Staff Recommendation**

That the report from the Manager, Emergency & Environmental Programs, dated September 30, 2005, regarding "Emergency Planning – Program Status", be received for information.

Suzanne Bycraft  
 Manager, Emergency & Environmental Programs  
 (3338)

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<b>ROUTED TO:</b>		<b>CONCURRENCE</b>		<b>CONCURRENCE OF GENERAL MANAGER</b>	
Engineering .....		Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>
Roads & Dykes .....		Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>
<b>REVIEWED BY TAG</b>		YES	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>
			<i>efb</i>		
<b>REVIEWED BY CAO</b>		YES	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>
			<i>[Signature]</i>		

## Staff Report

### Origin

At their September 6, 2005 meeting, Council directed staff to report to the Community Safety Committee with a general update on the status of the emergency plan, including dredging, dyking and emergency social services (ESS).

This report provides an update on the City's emergency planning efforts, including ESS. The issue of dredging and dyking is addressed in a separate report from the Engineering Department.

### Analysis

The City has made considerable progress in advancing its emergency management program in the last several years. There are many elements to this program so not all will be captured in this report. We have provided a status update of the Emergency Plan and Emergency Social Services Program, as well as highlighted current projects and challenges, and those areas of our program which require further development. Given that the impetus for this referral resulted from the recent flooding in New Orleans, we have also briefly addressed the flooding threat for Richmond.

### Emergency Plan/Emergency Social Services Status Update

The emergency plan document is not yet completed, but the key elements of the plan are in place. In stating this, it is important to note that the plan itself will not contain detailed solutions to manage every potential hazard. Rather, the plan will help us get organized as quickly as possible to help manage the effects of those hazards. The most important thing about an emergency plan is to have a designated location for managing the response, ensuring a clear emergency reporting structure is in place, key contact numbers are readily available, and staff are regularly trained in their emergency response roles. This is addressed by the following:

- ***Emergency Operations Centre (EOC)*** – a facility at the Works Yard has been designated for managing response operations. The Engineering Inspector's offices will be converted to an EOC in the event activation is required.
- ***Bylaw 7898*** – establishes the emergency reporting structure. Council establishes policy and a designated group of city and agency officials will manage the City's response, headed by the Chief Administrative Officer.
- ***Emergency Communications Directory*** – a listing of phone numbers for City officials, key city staff and agencies, including regional, provincial, federal and utility agencies is maintained on a regular basis.
- ***Resource Directory*** – a listing of potential equipment and resources, which could be required in an emergency, is in place.
- ***Training & Exercises*** – regular emergency management training sessions are offered to staff with designated roles in an emergency. Tabletop exercises are conducted

occasionally with staff, and tabletop and practise exercises are conducted periodically with volunteers.

- ***Emergency Social Services Program*** – There is a comprehensive plan in place which designates Community Centres as reception centres to help re-unite families and provide basic services, i.e. food, clothing and temporary shelter to displaced persons. This program is supplemented by a group of 125 volunteers who are trained and actively engaged in planning activities related to this program. These volunteers meet regularly and are actively involved in further development of the program in areas such as Pet Services, Communications, Exercises, Community Awareness, Operations/Logistics, and the Personal Disaster Assistance Team, which is regularly dispatched to assist displaced persons from fire or police emergencies, etc.

Parks and Recreation & Cultural Services staff have considerable roles in operating the reception centres, along with our volunteers, in an emergency. To date, we have trained 70 city staff. Training in other related areas, such as rapid damage assessment, media relations and more in-depth training in specific roles and responsibilities is planned.

Emergency Management staff are also working with Parks, Recreation & Cultural Services on the Volunteer Management Steering Committee, which is looking at further advancing and streamlining volunteer management within the City.

Other areas of the emergency management program which are well established are programs designed toward building community resiliency. This includes our community awareness programs, such as community presentations, information brochures, participation at special events and a comprehensive website. Emergency Management staff are also working with SUCCESS in providing Emergency Personal Preparedness presentations in both Cantonese and Mandarin. Our outreach program also includes providing preparedness presentations and information to the business community.

Our comprehensive Dangerous Goods Spill Response Plan is actively used when responding to dangerous goods related incidents.

### **Current Projects and Challenges**

Key current projects underway include:

- ***Training & Exercise*** – Emergency Management staff regularly organize Emergency Operations Centre and other related emergency management training for various City staff. Exercises are held as part of this training and/or tabletop exercises are conducted for various groups. Greater focus on emergency exercises would be beneficial, but is not currently practical due to the degree of effort required in planning and delivery. Funding for a consultant to assist in this area has been included in the 2006 budget submission.
- ***Communications/Public Notification*** – A review of the City's communications vulnerabilities was recently completed. This review led to a number of recommendations to help provide backup communications in an emergency, including the purchase of satellite phones and portable radios as well as a number of other recommendations for

providing greater communications security/redundancy. This will be an on-going process over the next several years. A key recommendation arising from this study was to implement a public notification system for advising the public of an impending emergency or disaster. Funding requests for the notification system and other communications enhancements has been identified in the 2006 budget submission.

- ***CBRN Planning*** – Planning for a potential chemical, biological, radiological or nuclear incidents is currently in progress. In light of the recent London bombings, the scope of this project has been expanded to include “explosives” incidents.
- ***Pandemic Flu Planning*** – Responsibility for this issue lies mainly with the regional health authority. However, the City has some responsibilities to support their planning, i.e. through designation of potential vaccination sites, or temporary facilities to house sick individuals due to hospital overflow. Staff are currently preparing a City plan which would support the overall regional pandemic influenza plan. Issues which may also need to be addressed in a pandemic include establishing priorities for continuity of local government due to potential staff illnesses, etc.
- ***Emergency Information Plan*** – Management of information to the public in an emergency or disaster is critical – not only to ensure the community is provided with the information they need, but also to ensure the response efforts being undertaken by the City are understood. This work is currently underway, and Council recently supported a UBCM funding application to help support its development. A small amount of funding has been included in the 2006 budget submission to complete the portion of the work that is expected to carry over into 2006.
- ***Maintaining Currency of Information*** – There is a considerable amount of administrative effort required in keeping telephone and supplier lists current, tracking training needs, maintaining current supplies within the Emergency Operations Centre, managing requests from the public for services and information, updating prepared plans, etc. Additional level funding has been included in the 2006 budget submission for a clerical support position to do this work. To date, we have hired temporary staff to perform this work. However, there is clearly an on-going need for this work and a regular full-time position is required.
- ***Emergency Response*** – In addition to undertaking the planning work described in this report, Emergency Programs staff regularly respond to emergency incidents where evacuations are involved and where logistical support is required for first response agencies, i.e. structure fires, spills, police incidents (drug labs), etc. Our role in a major event would be much broader. The response and associated follow up actions interrupt our focus on plan development, making this process take longer. This is simply a reality given the nature of the work.
- ***Committee Involvement*** – The Emergency Management office works with various emergency response agencies via the Emergency Planning Committee. We are further involved in the Regional Emergency Planning Committee and Joint Emergency Liaison

Committee in investigating and pursuing initiatives with regional focus. We also liaise regularly with the Provincial Emergency Program.

### **Emergency Program Development Areas**

The following are areas of the Emergency Program which require further development:

- ***New Emergency Operations Centre/Backup Facility*** – as we have worked to model our Emergency Plan to conform to provincial standards (the BC Emergency Response Management System), we have come to realize that our current area at the City Works Yard, i.e. the Inspectors' Offices, is small and does not contain sufficient equipment to manage a large event over a sustained period. To address this, a new EOC facility has been included in the scope of the new Community Safety Building. We also currently lack a designated back-up facility for our EOC. One option would be to have the current facility serve as a backup once the new EOC is established.
- ***Evacuation Planning*** – We do not currently have an evacuation plan, and work done to date on this issue is limited to the establishment of disaster response routes. This is an area that requires development. A funding request to advance this work in 2006 has been included as part of the budget submission process.
- ***Hazard, Risk and Vulnerability Assessment*** – The City has not undertaken a comprehensive hazard assessment. Instead, we have relied on information obtained from specific studies, i.e. dyke studies, water study, flood management strategy, etc. In addition, the City's Emergency Planning Committee has identified the following potential threats for planning purposes: aircrash, flooding, earthquake, severe weather, CBRN (chemical, biological, radiological and nuclear incidents), dangerous goods spills, medical – pandemic/epidemic, and a sanitary breach. There are no immediate plans for a comprehensive assessment, but this issue may need to be further explored as we develop and advance our program.
- ***Disaster Debris Management*** – The Joint Emergency Liaison Committee has developed a debris planning template which can be customized by local jurisdictions. We have been unable to advance on this project due to planning priorities, however, are looking into submitting a grant application to advance this work in 2006.
- ***Business Continuity Planning*** – The Finance Division has done some work on identifying information technology based functional priority areas, including identifying actions to provide backup systems. Continued focus in this area will be required on an on-going basis. In addition, the scope will need to be expanded to include recovery for City functions which are not strictly information technology based. These include those City services which the community relies on to aid in their economic recovery, i.e. rapid issuance of permits to help businesses rebuild as quickly as possible, city infrastructure, etc. This is a very important area, as the City's overall economic recovery is reliant on the City restoring critical infrastructure and services in a rapid fashion to enable businesses and residents to recover quickly. A businesses chance of survival decreases markedly with each day of downtime.

- ***Departmental Emergency Plans*** – This should be an area of future focus. Departmental Plans will help to provide more specific information to departments on priority areas of response and recovery as it relates to the overall Emergency Plan. The Emergency Management Office assists to the degree possible in priority areas, e.g. we are currently working with Public Works Operations to develop an operational and response procedure for addressing flooding associated with heavy rainfall events.

### **Flooding Threat for Richmond**

The recent flooding in New Orleans raised concerns about flooding issues in Richmond. Richmond is similar to New Orleans in that we are a dyked community, but, Richmond is different in two key ways – Richmond is approximately 1 metre above sea level under normal conditions. We are only below sea level at high tide. Additionally, hurricanes do not pose a hazard for our area. The key flooding concerns for Richmond are:

1. High water levels pressuring the dyke in East Richmond due to Spring freshet, and
2. Dyke compromised due to earthquake

These are two very different threats that would require different operational approaches. In the case of high water due to freshet, we would have advance notice of potential concern, similar to what occurred in 1999. In this instance, we have some pre-warning and undertake additional measures such as increased monitoring of water levels, increased frequency of dyke patrols, build up our response supplies such as sand bags and rip rap, etc., ensure that supplier and equipment resource lists are current, implement measures to add further stability to the dyking infrastructure if required, notify the public of the situation, etc.

In the case of an earthquake, the EOC would be opened up with designated staff reporting and Council would be assembled as the policy group. A damage assessment of the City would be undertaken of all critical infrastructure, including the dyking system to determine if there has been any breaches or slumps along the dyke due to soil failure. The response here is quite different depending on tidal conditions. If the situation occurs at low tide, immediate measures would be taken to facilitate temporary repairs to the dyking infrastructure. If at high tide, measures would be taken to try to create a temporary containment barrier. In the worst case scenario, this would not be possible and water would flow in. Water levels would then recede as the tide lowers and measures would then be undertaken to secure the area where the dyke failure occurred.

There would be much more activity and steps involved in a major response operation such as this. The above is intended to provide a quick snapshot of the general approach that would be used relating to the dyking infrastructure. It should also be noted that Richmond undertakes considerable measures to ensure its dyking and drainage infrastructure is sound by undertaking structural studies, ensuring regular monitoring and upgrades are undertaken, and by having comprehensive construction standards in place.

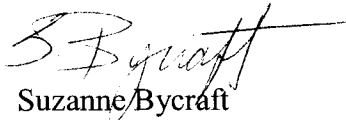
**Financial Impact**

This report has no direct financial impact. Funding needs to advance emergency planning work have been identified in the 2006 budget process.

Emergency Programs staff actively seek out federal and provincial grants to assist in plan development work. Since 2001, we have received over \$280,000.

**Conclusion**

There are many elements to the City's emergency program. Considerable progress has been made, but continued and sustained effort is required to maintain what has been developed as well as to advance in those areas requiring further work. New and emerging threats, coupled with changing dynamics in our community, require that our planning efforts remain flexible to meet the community's needs.



Suzanne Bycraft  
Manager, Emergency & Environmental Programs  
(3338)

SJB: