AUDITOR GENERAL FOR LOCAL GOVERNMENT

ACCESSIBILITY • INDEPENDENCE • TRANSPARENCY • PERFORMANCE

EMERGENCY
MANAGEMENT IN
LOCAL GOVERNMENTS
TOWN OF SIDNEY

An independent assurance audit carried out by the
Auditor General for Local Government of British Columbia

MESSAGE FROM THE AUDITOR GENERAL FOR LOCAL GOVERNMENT

To the Mayor and Council of the Town of Sidney:

I am pleased to present this performance audit report on the emergency management services in the Town of Sidney.

Our performance audits are independent, unbiased assessments, carried out in accordance with professional standards. They aim to determine the extent to which the area being examined has been managed with due regard to economy, efficiency and effectiveness.

We conducted this audit in accordance with the standards for assurance engagements set by the Auditing and Assurance Standards Board of the Chartered Professional Accountants of Canada and under the authority of the *Auditor General for Local Government Act*.

Local governments across British Columbia face a wide range of hazards. As providers of essential services, including protective services, drinking water, waste water and roads, local governments must effectively prepare for, respond to, and recover from emergency events, protecting the health and safety of their residents while minimizing damage to their property.

This report outlines our findings in assessing Sidney's emergency management. This report is not an audit of causes of past emergency events or an evaluation of previous emergency event responses.

Like many local governments, the Town of Sidney has identified a range of hazards and vulnerabilities. It is located in a seismic zone and is vulnerable to earthquakes, flooding stemming from the long-term impacts of rising sea levels and potentially the impact from a tsunami. The Town has a significant population of more vulnerable residents 65 years of age and older. Sidney is also an important regional transportation hub with the Victoria International Airport and ferry service nearby. Sidney relies on the Capital Regional District, another one of our auditees on this topic, for its drinking water and waste water services.

We were pleased to find that Sidney has had a significant focus on emergency management and had implemented practices which will assist the Town in addressing key risks as it relates to public safety and infrastructure. In particular, Sidney was proactive in its approach to prevention and mitigation and had developed a range of preparedness and response measures. In addition, Sidney took steps to ensure a strong level of cooperation and coordination with its stakeholders and regional partners.

Our report identifies areas where Sidney could improve on some of its good practices by addressing other aspects of emergency management and in particular, the fourth phase related to the recovery for some of its essential services.

I believe there is a great deal of information here that is relevant to the many other local governments across the province that also manage emergency services, especially given recent events such as flooding and wildfires.

I want to thank the Town of Sidney for your cooperation during the performance audit process and your action plan in response to our findings and recommendations.

Gordon Ruth, FCPA, FCGA
Auditor General for Local Government
Surrey, B.C.

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1. Local governments are a major part of British Columbia's public sector, providing a wide range of critical core services. Given the importance of these services, all local governments should take a comprehensive, coordinated and organized approach to emergency management.

2. Emergency management involves all levels of government, each of which needs emergency management plans. British Columbia's *Emergency Program Act* and the *Local Authority Emergency Management Regulation* set out emergency management requirements for local governments.

3. Under the Regulation, each local government is responsible for creating local emergency plans and guidelines setting out the priorities and means by which it will restore essential services following an emergency or disaster. In addition, the *Compensation and Disaster Financial Assistance Regulation* provides for compensation to the owners of lost or damaged property and disaster financial assistance to eligible claimants and local governments. We expect a local government to have effective emergency management plans and programs.

WHAT WE EXAMINED

4. The overall purpose of the audit was to provide an objective and independent assessment of the effectiveness of emergency management plans and programs in the audited local government.

5. Our specific audit objectives were to assess the alignment of the local government emergency management system with legislative requirements and to determine the level of statutory compliance for a local government's emergency management program.

6. We also examined the robustness of the organization's emergency management plans, programs and practices to determine whether they provide for a timely response to and management of the consequences of an emergency event. Finally, we assessed whether the local government has developed a business continuity management system containing the recovery procedures necessary to resume critical operations in the event of a disruption.

WHAT WE FOUND

7. Overall, the Town of Sidney has made good progress in developing its emergency management plans and programs. The Town complied with the requirements set out in the *Local Authority Emergency Management Regulation*, it developed an Emergency Response and Recovery Plan and a Business Continuity Plan supported by comprehensive risk assessment and business impact analysis.

8. For the Town of Sidney to improve its emergency management program, it should develop or enhance some of the key areas including: a strategic approach to emergency recovery and business continuity and its coordination with the emergency management; review and revision of emergency management plans and related documentation on a regular basis; staff awareness and training; regular exercises of all aspects of the emergency management program; and a performance measurement system.

9. We identified a number of specific opportunities to further strengthen and enhance Sidney's emergency management processes and practices in the report that follows.

GOVERNANCE

10. Sidney had an emergency management planning committee and assigned a qualified emergency program coordinator who supported planning and coordination of the Town's emergency management program. Sidney also established an emergency management executive committee to provide oversight and policy direction for its emergency programs. The executive committee operated on an ad hoc basis and lacked a formal meeting and reporting scheme.

11. While the Town's emergency program bylaw recognized business continuity as part of its emergency management program, Sidney had not established a governance structure, such as a business continuity management committee, to provide oversight and leadership of its business continuity management.

PLANNING AND RESOURCING

12. The Town had an emergency response and recovery plan that contained key statutory elements and was based on a comprehensive community risk assessment. In addition, Sidney had a business continuity plan supported by a comprehensive business impact analysis.

13. With the exception of the community risk assessment, the Town had not reviewed these plans since they were initially developed and had not developed a process for their regular review and revision to ensure continuous improvement of its programs and practices.

14. In addition, Sidney identified its essential services (including drinking water, roads, protective services and information technology) in its business continuity documentation, but had not developed specific recovery strategies detailing restoration steps and alternative ways to deliver essential services during and after an event and the associated resource requirements.

15. Sidney made arrangements with key stakeholders, partners and suppliers to support strong coordination of efforts in the delivery of key services such as emergency social services and search and rescue.

TRAINING AND AWARENESS

16. Sidney did not have a formal approach to identify emergency management and business continuity training requirements for staff. The Town was generally supportive of staff training, although emergency management training had largely focused on fire department personnel and there were no training activities for staff on business continuity.

17. The Town was proactive in promoting public awareness of emergency management and education through a range of activities and initiatives.

EXERCISING AND TESTING

18. Sidney organized regular exercises to familiarize staff with their assigned roles and tasks at an emergency operation centre. The Town also coordinated on emergency exercises with key response partners and stakeholders and held debriefing sessions.

19. Although earthquakes are identified as one of Sidney's major risks, there had not been a wide-area earthquake emergency exercise initiated or co-organized by Sidney within the region or the Saanich Peninsula.

20. Further, the Town did not conduct exercises to validate its business continuity strategies and did not test its business continuity plan and emergency management plan together.

CONTINUOUS IMPROVEMENT AND PERFORMANCE MEASUREMENT

21. Sidney was in the process of improving its emergency planning and management activities and had made some progress. The Town monitored emergency operation centre activation time during exercises and established a set of maximum allowable downtimes for restoring services. However, it lacked an approach to measure emergency management and business continuity performance and trends in a consistent manner.

Exhibit 1 – SUMMARY OF RECOMMENDATIONS

**EMERGENCY
MANAGEMENT**

**EMERGENCY
MANAGEMENT**

GOVERNANCE AND STATUTORY REQUIREMENTS

1. The Town of Sidney should enhance its governance of emergency management by:

- Improving its emergency program bylaw by adding business continuity management expectations and requirements

- Formalizing the emergency management executive committee's role in setting direction, budget and priorities for the emergency management program and overseeing the emergency planning committee

- Formally defining the primary role of the fire chief during an emergency event and communicating it to the emergency operation centre members and other relevant staff

- Taking steps to transition to the BC Emergency Management System and developing a more detailed emergency recovery plan

- Developing a process, including policy and procedures, to review and revise emergency management plans

- Implementing available emergency response management system functionalities to enhance both internal and external communications

- Developing an emergency social service action plan and regularly reporting results to the emergency planning committee

PLANNING

2. The Town of Sidney should strengthen its emergency management planning by:

- Considering a shared emergency program coordinator arrangement with its Peninsula Emergency Measures Organization partners to maximize emergency management resources

- Ensuring the obligations and priorities of the three municipalities are clearly described in its emergency response and recovery plan

- Developing recommended evacuation routes informed by reception centre locations and more specific guidance based on specific hazards and scenarios

RESOURCING

3. The Town of Sidney should ensure it is cost-effectively resourcing its emergency management function by:

- Tracking staff and volunteer time spent on emergency management and business continuity management activities

- Confirming that its cost recovery procedures will ensure that key financial information is adequately documented and providing training to finance staff that may be tasked with the cost recovery process

- Developing a list of financial assistance programs available to local governments to assist with emergency management

EMERGENCY MANAGEMENT

EMERGENCY MANAGEMENT

TRAINING

4. The Town of Sidney should improve its emergency management training by:

> ➤ Undertaking a formal approach to identifying staff training requirements, including a multi-year emergency management staff training plan

> ➤ Considering hosting of emergency management courses delivered by academic or similar institutions

EXERCISING AND TESTING

5. The Town of Sidney should engage in additional emergency management preparation activities by:

> ➤ Ensuring that debriefings are held after each exercise

> ➤ Preparing consistent documentation of exercise debriefings and sharing this documentation after joint exercises

> ➤ Consulting with its regional and sub-regional partners around the planning and conducting of wide-area earthquake exercises

MAINTENANCE AND CONTINUOUS IMPROVEMENT

6. The Town of Sidney should work to continuously improve its emergency management by:

> ➤ Acting on the recommendation of the 2014 Emergency Management Review and updating its emergency response and recovery plan by incorporating business continuity, mutual aid agreements and a list of services and resources available from Emergency Management BC

> ➤ Presenting the updated plan to staff to raise their awareness

7. The Town of Sidney should improve emergency management data collection and analyses and establish a performance measurement system that includes the monitoring of progress and regular reporting on results to Council and senior management

Exhibit 1 – SUMMARY OF RECOMMENDATIONS

BUSINESS CONTINUITY MANAGEMENT

BUSINESS CONTINUITY MANAGEMENT

GOVERNANCE

8. The Town of Sidney should improve its management of business continuity by:

> ❯ Establishing a governance structure that allows for oversight of business continuity management

> ❯ Assigning a coordinator to manage the business continuity plan and activities

BUSINESS CONTINUITY PLAN

9. The Town of Sidney should strengthen its business continuity planning by:

> ❯ Developing specific response and recovery strategies for its essential functions, including drinking water and roads

> ❯ Ensuring alignment with the Sidney RCMP detachment's recovery strategies

> ❯ Developing IT response and recovery plan(s), supported by formal strategies for information technology business continuity

> ❯ Developing a regular review and monitoring process for its related strategies and plans, and developing a test and exercise program for all elements of IT service recovery

REVIEW AND REVISION

10. The Town of Sidney should ensure the continuing accuracy and relevance of its business continuity documents by:

> ❯ Developing a process for the regular review and updating of its business continuity plan and related documents. The review should involve internal and external stakeholders

> ❯ Updating the names and contact numbers included in its business continuity plan at least semi-annually or more frequently as needed

> ❯ Reviewing its business impact analysis at least every three years, including consideration of risks associated with key external dependencies

TRAINING AND AWARENESS

11. The Town of Sidney should enhance staff knowledge of business continuity planning by:

> ❯ Developing a training plan to ensure staff are familiar with the requirements of business continuity

> ❯ Taking steps to promote staff awareness of the business continuity management system and plan

BUSINESS CONTINUITY MANAGEMENT

EXERCISING AND TESTING

12. The Town of Sidney should conduct business continuity exercises and testing by:

- ❯ Developing specific policy requirements and a process for regular, progressively-scaled business continuity exercises and testing

- ❯ Considering simultaneous business continuity plan and emergency management plan exercises in a comprehensive scenario requiring an emergency operations centre activation

PERFORMANCE MANAGEMENT

13. The Town of Sidney should improve data collection and analysis on its business continuity management and establish a performance measurement system that includes the monitoring of progress and regular reporting on results to Council and senior management

INTRODUCTION

22. Local governments are a major part of British Columbia's public sector. They provide critical core services such as land use control, drinking water and waste water services, roads and sidewalks, public safety and parks and recreation facilities. Given the importance of these services, all local governments should take a comprehensive, coordinated and organized approach to emergency management.

23. As part of the office of the AGLG's 2017/18 risk-based audit planning process, we identified emergency management as highly relevant and significant due to the operational, reputational and financial risks local governments may encounter in preparing for, responding to and recovering from a significant emergency event. A few examples of these risks include resourcing and capacity constraints that can affect a local government's ability to develop and implement comprehensive emergency management programs, low levels of awareness across organizations on emergency response measures and insufficient knowledge of procedures necessary for the effective and efficient recovery of essential services. These risks can negatively impact a local government's residents and the local economy.

24. This report presents the results of a performance audit conducted by the Auditor General for Local Government of British Columbia (AGLG) under the authority of the *Auditor General for Local Government Act*. The audit was performed in accordance with the standards for assurance engagements set out by the Chartered Professional Accountants of Canada (see the About the Audit section for more information).

25. We conducted this audit under the theme "Protective Services" and the topic "Emergency Management". The purpose of the audit was to assess the effectiveness of emergency management practices within local governments, identify opportunities for improvement and highlight leading practices. This audit considered what local governments are required by legislation to have in place, as well as good practices that can add to the robustness of emergency management. In carrying out our work, we acknowledge the considerable differences that exist in size and cap-

acity across British Columbia's local governments. We take these differences into account in applying the measurement of our audit criteria.

26. We selected the Town of Sidney and three other local governments to be audited on this topic. These auditees were selected based on their varying size, geographic location, type and individual community characteristics, including the impact of potential hazards and risks facing each local government and its residents.

27. The other local governments we selected for audit on this topic were the Capital Regional District, the District of Mission and the Fraser Valley Regional District. We may conduct more audits on emergency management in the future, as this is an important service area for local governments.

28. We assessed Sidney's performance in managing its emergency management service (including plans related to the four phases—mitigation & prevention, preparedness, response and recovery), business continuity management and key elements such as governance, policies and procedures, communications, training and exercising and monitoring, reporting and updating.

29. Our findings are based on our review of documents related to the audit topic, interviews with the local government's staff, elected officials and others and analysis of relevant data and information.

EMERGENCY MANAGEMENT

30. Emergency management is a shared responsibility of all levels of government. British Columbia's *Emergency Program Act* and the *Local Authority Emergency Management Regulation* set out legislative directions on emergency management for B.C.'s local governments. Under the Regulation, each local government—including both municipalities and regional districts—is responsible for developing local emergency plans and guidelines.

31. Emergency Management BC was formed to be the provincial government's lead coordinating agency for all emergency management activities. It provides executive coordination, strategic planning and multi-agency facilitation. It strives to develop effective working relationships in an

increasingly complex emergency management environment.

32. Emergency Management BC works with local governments, First Nations, federal departments, industry, non-government organizations and volunteers to support all phases of emergency management.

33. Emergency Management BC has adopted the British Columbia Emergency Management System, which is a comprehensive framework that helps ensure a coordinated and organized approach to emergencies and disasters. The System is based on the four phases of emergency management: mitigation & prevention, preparedness, response and recovery, as shown in *Exhibit 2*.

Exhibit 2 – FOUR PHASES OF EMERGENCY MANAGEMENT SYSTEM

Source: Emergency Management BC web content

34. Given Emergency Management BC's leading role in the province, many of our audit criteria and related measurement are drawn from that agency's British Columbia *Emergency Management System* published in 2016 and *Emergency Management in BC: Reference Manual*, published in 2011.

MITIGATION & PREVENTION

35. Mitigation & prevention activities are intended to help local governments reduce the impact of an emergency incident on the health, safety and sec-urity of residents, as well as damage to property and the environment. Activities may include flood mapping and zoning restrictions, the building of flood dykes, berms and other physical barriers, forest fuel management and earthquake-proof construction of capital projects.

PREPAREDNESS

36. Preparedness includes actions taken in advance in order to be ready to respond to an emergency incident and manage its consequences. These may include emergency response plans, mutual assistance agreements, resource inventories and training, equipment and exercise programs.

RESPONSE

37. Emergency management response consists of actions taken during or immediately before or after an emergency incident to manage the impacts through activities such as evacuation, emergency public communication, search and rescue and emergency medical assistance. The goal is to minimize the human consequences associated with emergency incidents.

RECOVERY

38. Recovery following an emergency incident includes steps taken to repair or restore conditions to a minimum operating level and, over the longer term, to a state of normalcy through measures taken after an event. These measures may include return of evacuees, re-construction and repair of damaged structures, reviews and studies and financial assistance to affected individuals.

39. Robust emergency response and recovery planning and guidelines can improve response and recovery time and lessen the impact on a community in times of disaster. It is vitally important that these plans are carefully laid out and regularly updated.

40. Another key element in emergency management is business continuity management, which maximizes the availability of government services, programs and resources to help continue or restore services in the event of a major operational failure, emergency or disaster. We selected *ISO Chapter 22301 Business Continuity Management* as the authoritative source of audit criteria in this area.

OUR EXPECTATIONS

41. We expect a local government to incorporate seven key elements of an emergency management program into its plans and practices, including:

❯ **Governance and statutory requirements,** including the structures, systems and processes necessary to ensure the local government meets all legal requirements

❯ **Planning** with a focus on addressing major hazards and risks

❯ **Resourcing** that considers personnel and volunteers, facilities, equipment and supplies

❯ **Training** targeted to staff, key stakeholders and the public

❯ **Exercising and testing** of plans and procedures

❯ **Public and stakeholder engagement** designed to promote awareness and education

❯ **Maintenance and continuous improvement,** including the ongoing review and revision of the emergency management program

42. We also expect a local government to incorporate seven key elements of a business continuity management system into its plans and practices, including:

❯ **Governance** to support business continuity that includes leadership, commitment, objectives, policy and procedures

❯ **Business impact analysis** to understand the potential consequences of business disruptions faced by the local government

❯ **Business continuity planning** with recovery strategies that maximize the delivery of essential services and functions

❯ **Review and revision** with an emphasis on continuous improvement

❯ **Training and awareness** to ensure proficiency in business recovery practices and promote an understanding of everyone's involvement

❯ **Exercises and testing** to validate business recovery strategies and procedures

❯ **Performance measurement** to assess the effectiveness of the business continuity management system as a whole and the plan in particular

CONTEXT

TOWN OF SIDNEY

43. The Town of Sidney is on Vancouver Island, 26 kilometres north of Victoria. It is one of 13 municipalities and three electoral areas in the Capital Regional District. Sidney is located on the Saanich Peninsula, which extends north from Victoria. The Town is bordered to the west and south by the District of North Saanich and to the east and north by Haro Strait.

44. The Town of Sidney was incorporated as a village on September 30, 1952. Sidney's geographic area is 5.10 square kilometres. In 2016, Sidney's population was 11,672 which represented an increase of 4.4 per cent from 2011. Almost 41 per cent of Sidney's population was aged 65 years or older. There were just over 5,900 private dwellings in the Town.

45. As shown in *Exhibit 4*, Sidney's revenues and expenditures increased by nine per cent and six per cent respectively, between 2012 and 2016. The Town received various grant funding, ranging from $1.4 to $2.4 million annually from the federal, provincial and regional governments. This included approximately $5,000 in 2013 from the Province for the Town's emergency program. Aside from government grants, Sidney's revenue from other sources grew by 16 per cent during the 2012-2016 period.

Exhibit 3 – TOWN OF SIDNEY'S VISUAL FACTS

POPULATION

AREA 5.10 SQ KM
INCORPORATED 1952

11,672

Source: 2016 Census, BC Stats

Exhibit 4 – TOWN OF SIDNEY'S FINANCIAL SNAPSHOT

	2012	2013	2014	2015	2016	% CHANGE
Revenue*	$19,265,898	$18,770,024	$20,124,778	$20,436,456	$20,991,040	9%
Expenditure	$18,044,506	$17,912,714	$17,894,320	$18,392,981	$19,091,636	6%
Annual Surplus	**$1,221,392**	**$857,310**	**$2,230,458**	**$2,043,475**	**$1,899,404**	**56%**
*Gov't Grants in Revenue	$2,381,601	$1,683,762	$1,959,624	$1,367,563	$1,447,553	-39%
*Revenue Before Gov't Grants	$16,884,297	$17,086,262	$18,165,154	$19,068,893	$19,543,487	16%

*Note: * Government grants included federal, provincial and other levels (such as regional) government transfers.*
Source: Town of Sidney 2012-2016 annual financial statements

The Town of Sidney, like the rest of the Capital Region, is located in one of the most active seismic zones in North America, so earthquake ranks among the hazards of greatest concern.

LOCAL GOVERNMENT PROFILE

46. The Town of Sidney, like the rest of the Capital Region, is located in one of the most active seismic zones in North America, so earthquake ranks among the hazards of greatest concern. Earthquake threats include the Cascadia Subduction Zone off the west coast of Vancouver Island and shallower earthquakes near Georgia Strait and Puget Sound.

47. Although Sidney had no formally-designated floodplains, some areas were subject to localized flooding during heavy rainfall events. Additionally, the substantial shoreline increased the risks and impacts to the Town from tsunami, storm surges and maritime accidents. The coast was subject to tidal ranges that, when combined with storm conditions, could lead to localized shoreline flooding. In addition, climate change creates risks of shoreline flooding. The potential for nearby subduction earthquakes creates a tsunami threat to the community. A tsunami created elsewhere in the Pacific Basin would likely, at most, affect Sidney's lower-lying coastal areas, similar to a large winter storm.

48. Sidney is close to important transportation infrastructure for the region, including the Sidney/Anacortes Ferry Terminal, Victoria International Airport and Swartz Bay Ferry Terminal, which connect southern Vancouver Island to British Columbia's mainland and five of B.C.'s Gulf Islands. All docks and marinas are vulnerable to severe weather, storm surge, structural fire and tsunami events.

49. A major marine incident, involving a large ferry, could require support from the Town of Sidney and could result in short-term effects on local businesses. Sidney also has facilities with particular vulnerability to disaster events, such as parks, hotels and entertainment venues that may host a dense population at the time of an emergency.

50. Sidney has an industrial zone. Hazards from these areas include the potential for structural fire, with risk of release of hazardous materials and toxic smoke.

51. Other critical infrastructure in Sidney that may be vulnerable to seismic events includes telecommunications systems, a natural gas trunk system, electrical power service through high voltage lines and the potable water distribution system owned and operated by the Capital Regional District as well as 55 kilometres of water mains, valves and pumps owned by the Town.

52. Sidney also has a waste water system consisting of about 55 kilometres of gravity mains, 3.8 kilometres of force mains and 13 sanitary pump stations, as well as about 50 kilometres of storm drains and five kilometres of storm ditches along with one detention pond. The Town is also responsible for the operation and maintenance of 55 kilometres of roads and two pedestrian overpasses.

53. Other community facilities and services that could be affected by hazards include one public elementary school located in School District 63 (Saanich), one independent school and several small health centres and medical clinics.

54. The Sidney Fire Department provides fire prevention and protection services to the community. The department has seven career personnel on staff plus a contingent of 35 part-time volunteers.

55. The Town's main fire hall houses all fire apparatus, the town's emergency operations centre and equipment owned by the Peninsula Emergency Measures Organization (PEMO), which provides qualified volunteer support to residents during an emergency incident. The fire hall is vulnerable to earthquake damage.

56. At the time of the audit, the Town was building a new seismically "post-disaster"—rated community safety building, to house both fire and ambulance services. Upon completion, the new facility will ensure emergency services can be provided to residents in the aftermath of a moderate to severe seismic event. The Town intended to use the proceeds from the sale of the existing fire hall to cover some of the construction costs of the new building.

Sidney implemented an emergency mass notification system in 2016, which allows large-scale emergency notification through email, text messages and phone calls to its subscribers.

57. PEMO is supported by Sidney and other jurisdictions on the Saanich Peninsula. It provides emergency social services, search and rescue services, emergency communications and neighbourhood preparedness programs for Peninsula's local governments.

58. Emergency ambulance services are provided by British Columbia Ambulance Service. Ambulance personnel are dispatched through a regional dispatch centre in Victoria. B.C. Ambulance Service's paramedic services coordinate with Sidney Fire/Rescue for support and may activate regional or provincial support in large multi-casualty incidents.

59. The public may report an emergency by contacting Sidney Fire Department or the Sidney/North Saanich RCMP Detachment, which provides policing services to the community. The detachment also serves the District of North Saanich, four First Nations communities, the Capital Regional District unincorporated area of Willis Point and a provincial area consisting of 55 islands and a 55-kilometre section of the international border with the USA.

60. Sidney implemented an emergency mass notification system in 2016, which allows large-scale emergency notification through email, text messages and phone calls to its subscribers. Residents can register at the Town's website to be served by this system.

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

SUMMARY OF FINDINGS

61. The overall purpose of this audit was to provide an objective, independent examination of the Town of Sidney's emergency management services. Specifically, we set out to determine whether—during the period covered by the audit—the Town of Sidney:

➢ Had an emergency management system in alignment with legislative requirements

➢ Had emergency management plans that included activities necessary to respond to an emergency event in a timely manner and manage its consequences

➢ Had developed a business continuity management system containing the recovery procedures necessary to resume critical operations in the event of a disruption

62. The Town was successful in meeting most of our core expectations related to emergency management and complied with requirements set out in the *Local Government Emergency Management Regulation*. However, it did not have a strong approach to emergency recovery and business continuity management that would help ensure recovery of the community and critical operations in the event of disruption.

63. In this report we have presented the Town of Sidney's emergency management process and programs in two sections—emergency management and business continuity management. We reviewed various components of each section and identified existing good emergency management processes and practices as well as opportunities to strengthen and enhance others.

EMERGENCY MANAGEMENT

64. Sidney had generally made good progress in developing its emergency management. It had an emergency program bylaw, an emergency program coordinator, an emergency management executive committee and an emergency planning committee. The executive committee would benefit from a more structured operation with regularly scheduled meetings that are fully documented.

65. The Town had a comprehensive community risk assessment, focused on key community infrastructure and services and the potential hazards that posed risks to them. This is a good example of hazard and risk vulnerability analysis and the Town was proactive and innovative in its development of a set of mitigation and preparedness strategies intended to address these key hazards.

66. The Town had a local emergency response and recovery plan that adopted the BC Emergency Response Management System and focused on the emergency response phase. The recovery phase was only briefly introduced in the document and Sidney had not developed further recovery-related guiding documents such as a community damage estimate or assessment for an earthquake scenario.

67. The Town had not reviewed its emergency response and recovery plan nor its business continuity plan since these plans were prepared. It had not established a requirement or process for regular review and revision of them to ensure continuous improvement.

68. The Town had an emergency management budget developed as part of its annual budget, however, it did not track staff and volunteer time spent on key emergency and response functions, making it difficult to estimate costs associated with it.

69. The Town was supportive of emergency management training, although this largely focused on fire department personnel and not on town hall staff. Sidney had not developed a more formal approach to identifying staff training requirements.

70. The Town organized emergency operations centre setup exercises at least semi-annually. There had not been a wide-area earthquake exercise involving Sidney and its regional or subregional response partners.

71. The Town was part of a wide network of key emergency response partners and stakeholders, resulting in strong and well-established emergency management coordination and communication. Sidney was proactive in identifying collaborative arrangements with neighbouring municipalities,

Overall, the Town had made good progress and is well positioned to continue strengthening its emergency planning and management activities.

with the goal of enhancing its emergency mitigation and prevention, preparedness, response and recovery activities.

72. Overall, the Town had made good progress and is well positioned to continue strengthening its emergency planning and management activities. At the time of the audit, Sidney had not developed a performance measurement approach aside from monitoring emergency operations centre activation time during setup exercises.

BUSINESS CONTINUITY MANAGEMENT

73. Sidney did not have a strong focus on business continuity management and lacked a framework to support it. The Town did not have a governance structure to demonstrate oversight. There was no specific individual assigned to manage the business continuity plan and no regularly planned meetings to discuss business continuity management.

74. The Town developed a comprehensive business impact analysis document that drove recovery processes outlined in its business continuity plan. Sidney's business continuity plan followed the incident command system where the activated emergency operations centre manages both the emergency management and business continuity plans after a major incident. This creates a risk that staff may be overwhelmed during an incident and their prioritized roles and responsibilities might not be clear.

75. While Sidney identified essential functions that must continue in case of an emergency event (for example, water, roads, policing, information technology), it did not have specific, formal recovery plans and strategies for these services.

76. Sidney's business continuity plan policy required that the chief administrative officer keep the plan updated through an annual review process. This is a good practice. However, the Town had made only two relatively minor revisions to the plan, which did not include re-assessment of business requirements or revisions to the business impact analysis and other supplementary annexes.

77. The Town had not arranged training activities on business continuity and had not developed a systematic training plan and schedule to familiarize staff with the requirements of the business continuity plan and their roles and responsibilities. In addition, the Town had never exercised its business continuity plan since it was developed in 2009.

78. Sidney had key performance targets for the "maximum allowable downtime" for restoring essential and non-essential services, but the targets had not been updated and the Town had not evaluated its ability to meet them.

LOOKING AHEAD

79. To more effectively deliver its emergency management service and be better prepared for any future disruption events, Sidney should continue improving its emergency planning and management practices. In addition, Sidney should take a more strategic and cohesive approach to business continuity management and strengthen its current processes and practices. The recommendations presented in this report are intended to assist the Town in making these improvements, thereby strengthening its position as a well-prepared local government.

Local governments are required to have processes to establish priorities for the restoration of essential services, including the identification of critical infrastructure.

GOVERNANCE AND STATUTORY REQUIREMENTS

80. We expect a local government to comply with the statutory requirements set out in the *Emergency Program Act* and *Local Authority Emergency Management Regulation.* We expect them to set policy direction and guidance on their emergency management program and establish an emergency management organization, such as a committee or a sub-committee, to develop and implement emergency plans and other emergency preparedness, response and recovery measures.

81. Legislative requirements include the development of an emergency plan outlining preparedness, response and recovery activities based on the local area's risk profile. We expect a local government to have identified and defined those processes and activities that will ensure emergency management is planned and delivered in an integrated and coordinated way.

82. The legislation also requires local governments to have processes that ensure plans are regularly reviewed and updated as appropriate and have procedures in support of emergency response exercising and training, emergency management resourcing, activation of the plan and emergency notification.

83. Local governments must have strategies to manage potential evacuations as well as resources and support for the coordination and provision of food and lodging, clothing, transportation and medical services to those affected by an emergency incident.

84. Finally, local governments are required to have processes to establish priorities for the restoration of essential services, including the identification of critical infrastructure.

EMERGENCY MANAGEMENT BYLAW

85. The Town of Sidney had an emergency program bylaw, implemented in 2008, that addressed the Regulation's emergency management requirements. The bylaw set out emergency management functions and supported governance of this program.

86. While the bylaw referenced business continuity management, the Town lacked specific requirements or expectations supporting business continuity governance and there were gaps in the governance of business continuity management, which are discussed later in this report.

EMERGENCY MANAGEMENT COMMITTEES

87. The Town had both an emergency management executive committee and an emergency planning committee.

88. The executive committee consisted of the mayor, one council member, the chief administrative officer and the emergency program coordinator, whose role was established to provide oversight and policy direction for the Town's emergency management.

89. This committee operated on an ad hoc basis. Its meetings were neither regularly scheduled nor structured to necessarily identify priorities relating to the emergency planning committee. It also lacked structure in the form of formal agendas, minutes or monitoring of follow-up actions. Such elements can enhance overall oversight and accountability for emergency management activities.

90. The emergency planning committee had terms of reference and was made up of senior staff, a councillor and the RCMP detachment commander. Committee members met regularly to discuss Sidney's emergency program, including risk mitigation approaches, training and exercises, learnings from past incidents, coordination with other parties and other emergency planning activities such as emergency operations centre planning and equipment.

EMERGENCY PROGRAM COORDINATOR

91. Sidney Council appointed the fire chief as Sidney's emergency program coordinator. The chief had an emergency management certificate through the Justice Institute of BC and was trained as a firefighter, paramedic and in hazardous materials incident response, although the Town relied on the regional district for hazmat response. The coordinator also served as alternate director of the emergency operations centre. We were

advised that the fire chief and the deputy fire chief shared a common understanding of separation of their duties to avoid dual roles when a serious fire occurs that also requires an emergency operations centre (EOC) activation. This expectation had neither been discussed with other EOC members, nor formally documented and communicated to all relevant staff.

RISK ASSESSMENT

92. The Town had a comprehensive community risk assessment conducted in 2007 and updated in 2014. This was used to drive Sidney's emergency response planning measures. This risk assessment is discussed in further detail later in this report.

EMERGENCY PLAN

93. Sidney had a local emergency response and recovery plan, developed in 2013. The plan contained key elements such as:

➢ Emergency operations centre activation criteria and steps

➢ Procedures around authority to declare a local state of emergency and notify the public

➢ Emergency operations centre divisions and functions, roles and responsibilities

➢ Guidelines for personnel and key response partners

➢ An evacuation plan

The contents of this plan are discussed later in this report.

94. Sidney's emergency response and recovery plan adopted the BC Emergency Response Management System and focused on the emergency response phase. The recovery phase, such as the Town's responsibility for community disaster recovery was only briefly introduced in the document.

95. The Town had not developed further recovery-related guiding documents such as a community damage estimate or assessment for an earthquake scenario. Sidney had not developed recovery strategies for its essential functions, which are discussed in more detail later in this report.

96. The Province has encouraged local governments to make a transition from the BC Emergency Response Management System to the newer BC Emergency Management System, which covers all four phases of emergency management, including recovery. In 2016, Emergency Management BC published a guidebook called *British Columbia Emergency Management System* to promote adoption of the BC Emergency Management System across the province. Sidney staff told us that the Town recognized the need to transition to the new system, and its representative supported the provincial transition by serving on the *BC Emergency Management System* steering committee.

PERIODIC REVIEW PROCESS

97. Sidney had not reviewed its emergency response and recovery plan or its business continuity plan since these plans were prepared in 2013 and 2009 respectively. The Town had not established a requirement or process for regular review and revision of them to ensure continuous improvement in Sidney's emergency management program and practices.

EMERGENCY NOTIFICATION

98. In conjunction with the District of North Saanich, Sidney implemented an emergency response management system in 2016, including an emergency mass notification system, provided through a Canadian service provider. The system allowed for two-way messaging with subscribers, including emergency operations centre members and Town staff. The system had additional functionality Sidney had not yet used, including a role call module for various user groups such as emergency social services volunteers.

99. Town staff told us that they regularly tested the emergency response management system since its inception and addressed operational issues that arose. Sidney's promotion of public awareness through the system is discussed further in this report.

Exhibit 5 – EMERGENCY SOCIAL SERVICES

Emergency social services is a provincial-scale program delivered at the local level across B.C. It is an important component of local emergency plans, focused on providing people affected by an emergency with basic survival needs. The program also assists in family reunification and sharing important information updates. The Province supports local governments in developing an emergency social services program though Emergency Management BC.

Emergency social services can be initiated following a small, localized event (Level 1), a significant event impacting more than 12 people (Level 2) or a major emergency involving a large-scale evacuation (Level 3). Emergency social services are typically provided for a 72-hour period.

To enhance the effectiveness of its emergency social services program, a local government should have an overall strategy in place, including preparedness, response and recovery components. There should be an operating budget, a director responsible for coordinating activities, a core group of volunteers, an identified reception centre and group lodging locations, mutual aid agreements with surrounding local governments to assist as required, as well as memoranda of understanding with local service providers for basic services such as food, lodging, equipment and medicine.

Following an event, a debriefing should be conducted and any necessary documentation should be completed and forwarded to the Emergency Management BC emergency social services office.

More information can be found on the Emergency Management BC website.

Source: EMBC web contents

100. In addition to the system, Sidney identified other emergency public warning options in its evacuation plan. These include the use of commercial radio broadcasts and television, first responder vehicles with sirens, loudspeakers and announcements on the Town's website, through the fire department's Twitter account and others.

EMERGENCY SOCIAL SERVICES

101. Sidney's emergency social services program was delivered through the Peninsula Emergency Measures Organization (PEMO). *Exhibit 5* shows how the program worked.

102. The program had a volunteer director with support from the PEMO administrator who, at the time of the audit, was Sidney's fire chief. The emergency social services team consisted of 30 trained and active volunteers.

103. An external consultant carried out a gap analysis of the emergency social services program in 2017. The Town staff told us that all recommendations arising from that analysis were under consideration, with the goal of implementation. During our audit, the Town had not yet developed an action plan to address those recommendations.

PRIORITIZATION OF ESSENTIAL SERVICES RESTORATION

104. Sidney identified essential services such as drinking water, roads and protective services and their priorities for restoration and recovery. The Town documented this information in its business continuity plan, which followed an incident command system model. In this model, the director of the affected department leads business continuity efforts in the same way an incident commander is in charge of a response to an emergency.

105. The Town also identified its critical infrastructure (see *Exhibit 6* for a definition of this term), which included information technology assets as well as three buildings: the town hall, fire hall and the public works building. None of the three buildings were seismically hardened, which presented significant risks to Town operations, although Sidney did outline response steps in its emergency response and recovery plan that lessen the impact of an emergency incident. The Town's business continuity and service restoration strategies are further discussed later in this report.

Exhibit 6 – CRITICAL INFRASTRUCTURE

Local governments should determine in advance those assets they consider to be critical infrastructure. These are the assets needed to provide services throughout an emergency. There are nationally-recognized types of critical infrastructure: those necessary to provide drinking water, food, transportation, health, energy and utilities, telecommunications and information technology, safety, government, finance and manufacturing.

Emergency Management BC has developed a tool to facilitate local governments' assessment of assets. By using this tool, a local government will enhance its overall awareness of its critical infrastructure, associated relationships with key players, how critical each asset truly is and what opportunities may exist to strengthen its robustness. This will result in a more resilient community across all four phases of emergency management.

The tool and associated guides and aids can be found on Emergency Management BC's website.

Source: EMBC web contents

RECOMMENDATION 1

The Town of Sidney should enhance its governance of emergency management by:

➤ Improving its emergency program bylaw by adding business continuity management expectations and requirements

➤ Formalizing the emergency management executive committee's role in setting direction, budget and priorities for the emergency management program and overseeing the emergency planning committee

➤ Formally defining the primary role of the fire chief during an emergency event and communicating it to the emergency operation centre members and other relevant staff

➤ Taking steps to transition to the BC Emergency Management System and developing a more detailed emergency recovery plan

➤ Developing a process, including policy and procedures, to review and revise emergency management plans

➤ Implementing available emergency response management system functionalities to enhance both internal and external communications

➤ Developing an emergency social service action plan and regularly reporting results to the emergency planning committee

Sidney's community risk assessment is a good example of hazard and risk vulnerability analysis.

EMERGENCY MANAGEMENT

PLANNING

106. We expect the Town of Sidney to have comprehensive emergency plans based on a current hazard, risk and vulnerability analysis. These plans should outline the roles and responsibilities of all key participants and the Town should ensure that staff have a high level of awareness of those roles and responsibilities. We expect these plans to include a range of preparedness, response and recovery measures designed to guide key participants. Further, the plans should clearly outline emergency information and communication protocols and systems.

107. These plans should outline activities, including safety inspections, land use controls and restrictions, fuel management, emergency operations centre arrangements, emergency contact lists, backup sites, emergency notification processes and evacuation plans. They may also include hazard-specific protocols and procedures. Further, we expect Sidney's plan to address earthquake and flooding risks.

108. We also expect to see mutual aid agreements and/or memoranda of understanding with stakeholders and relevant parties in support of emergency preparedness, as well as response and recovery activities. These plans should include a high degree of coordination with the regional district and neighbouring municipalities. Of particular significance, they should include an emergency social services strategy integrated into the emergency management program and focused on meeting the essential needs of residents affected by an emergency.

HAZARD AND RISK VULNERABILITY ANALYSIS

109. Sidney had a comprehensive community risk assessment, which was completed in 2007 and updated in 2014. The document was based on Emergency Management BC's hazard and risk vulnerability assessment process, which is described in *Exhibit 7*. The assessment focused on key community infrastructure and services and the potential risks that posed to them.

Exhibit 7 – HAZARD AND RISK VULNERABILITY ANALYSIS

In British Columbia, local governments are required by law to prepare emergency plans reflecting their assessment of the relative risk of occurrence and the potential impact on people and property of the emergencies or disasters that could affect all or any part of their area.

A hazard and risk vulnerability analysis helps a local government to make risk-based decisions around managing vulnerabilities, preventing or mitigating risks and hazards and preparing for, responding to, and recovering from a hazardous incident. It is used to anticipate risks and help save lives and property, reduce damage and quicken a community's recovery following an emergency.

Hazard and risk vulnerability analysis involves gathering risk information such as floodplain maps or major industries, identifying associated hazards, analyzing risks based on likelihood and consequence, formulating risk reduction measures, consulting with the community and developing action plans or mitigation projects that address or reduce the risk.

Where possible, mitigation projects should be incorporated into overall planning and day-to-day operations of the local government. To ensure its ongoing effectiveness, a hazard and risk vulnerability analysis should be updated at least every two to three years or following any significant changes in the community.

More information on hazard and risk vulnerability analysis can be found on the Emergency Management BC website.

Source: EMBC web contents

The emergency response and recovery plan outlined the Town's authority and provided guidelines for emergency response and recovery functions.

110. Sidney's community risk assessment is a good example of hazard and risk vulnerability analysis. It is comprehensive, considering local demographic and geographic features as well as previous emergency incidents in or near the town.

111. The Town's risk assessment identifies earthquake, tsunami, flooding during heavy rainfall, urban fire and hazardous materials leaks and spills as the greatest hazards. To mitigate and prepare for these hazards, Sidney was proactive and innovative in its development of a set of mitigation and preparedness strategies intended to address these key hazards. These approaches are shown in *Exhibit 8*.

EMERGENCY PLAN

112. Sidney used its risk assessment to inform the Town's emergency response measures outlined in its local emergency response and recovery plan, which was developed in 2013. The plan included key elements required by provincial law and was in alignment with the Town's hazard and risk vulnerability analysis.

113. The emergency response and recovery plan outlined the Town's authority and provided guidelines for emergency response and recovery functions, including coordination with external parties. It contained a comprehensive set of specific functions checklists for key municipal positions as well as hazard-specific plans with response procedures for all key hazards.

114. We noted that Sidney's plan did not refer to the emergency services offered by PEMO. It also lacked emergency operations centre forms and templates, which could provide more effective guidance and information on the response and recovery activities.

EMERGENCY OPERATIONS CENTRE

115. An emergency operations centre is "a facility where key personnel can gather to coordinate, plan, and manage overall response activities."[1] Sidney designated its primary emergency operations centre to be at its town hall, with a secondary centre at its public works building, which was considered the most seismically resilient building among the ones owned by the town.

Exhibit 8 – TOWN OF SIDNEY'S MITIGATION AND PREPAREDNESS STRATEGIES

HAZARD/RISK	MITIGATION / PREPAREDNESS APPROACHES TAKEN	HAZARD/RISK	MITIGATION / PREPAREDNESS APPROACHES TAKEN
Seismic and Earthquake	The Town was constructing a new community safety building, which is more seismically resilient.	Tsunami	Tsunami risk zone mapping was obtained from the Regional District to inform urban planning.
Hazmat in Industrial Area	Regular inspections and emergency exercises were conducted.	Fire	A senior fire safety plan was created to help senior residents prevent and prepare for fire incidents. Along with fire inspections, educational presentations on fire protection were provided to public groups including schools, care facilities and local businesses.
Flooding	Flood mapping and materials on a sea level study were reviewed, and a Council policy on construction at low elevations was passed. A sea level rise plan was in preparation.	Human Disease (e.g. epidemic)	A hazard-specific response plan was shared with and reviewed by Vancouver Island Health Authority.

Source: Town of Sidney emergency planning documents

116. A new community safety building, designed with full consideration of emergency operations centre physical requirements and seismic risks, was expected to be completed in 2018. The Town intended to use that building as its primary emergency operations centre. We were advised that staff were rotated through emergency operations centre sections during setup exercises, a process that promoted understanding and awareness of the centre's roles and responsibilities.

117. Both Sidney's primary and secondary emergency operations centres were equipped and furnished. The Town maintained key files, including emergency operations centre layout, sectional materials, response goals and plan at the primary emergency operations centre (in both electronic and hard copy form) and at the secondary centre (just in hard copy form).

118. The Town regularly checked its emergency operations centre supply inventory and discussed refill options at emergency planning committee meetings. Staff told us that the Town planned to upload its emergency response and recovery plan and annexes to the mobile devices of key emergency planning staff to enhance its emergency response.

119. Sidney had amateur radio systems installed at its primary emergency response centre for both voice and data communications within the Capital Region and the province. Although the message speed and data exchange volume capabilities of these radio systems are less than more advanced technologies such as the internet, cellphone and satellite services, amateur radio remains an important communication tool during an emergency. Sidney's amateur radio signals and functions were regularly tested by PEMO and the test results were reported at its meetings.

COORDINATION

120. Sidney was part of a wide network made up of key emergency response partners and stakeholders, resulting in strong and well-established emergency management coordination and communication.

121. This network included the Capital Regional District and other municipalities within it through the Local Government Emergency Planning Advisory Committee and the Regional Emergency Coordinators Advisory Committee. Other partners included the municipalities of Central Saanich and North Saanich through PEMO, the RCMP, Emergency Management BC, Victoria Airport Authority, Vancouver Island Health Authority, senior care facilities and Saanich School District.

122. Communication across the network included updates and planning of exercises as well as public awareness efforts and sharing of educational materials. In some cases, Sidney had mutual aid agreements and memoranda of understanding with these stakeholders to support coordination efforts. Overall, representatives across the network considered the working relationship with Sidney to be collaborative and positive.

123. Sidney also participated in Capital Region Emergency Service Telecommunications (CREST), an organization providing emergency radio communications to over 50 emergency response agencies in the region, including police, fire and ambulance services.

124. The Town was active in developing signed memoranda of understanding with suppliers of food, lodging, fuel and buses for transportation during an emergency. These were sound preparatory steps and a good practice for mitigating risks to effective response.

125. Sidney was a member of PEMO, a tri-municipal body made up of Sidney and the Districts of North Saanich and Central Saanich. PEMO was co-funded by the three municipalities and mandated to provide four services across the region: emergency social services, a neighbourhood emergency preparedness program, a communications program and a search and rescue program.

126. The joint effort was coordinated by the three municipal fire chiefs, who rotated on an annual basis in providing administrative direction and coordination. Overall, PEMO was a good example of an effective shared service arrangement.

Sidney was proactive in identifying collaborative arrangements with neighbouring municipalities with the goal of enhancing its emergency mitigation and prevention, preparedness, response and recovery.

Exhibit 9 – TOWN OF SIDNEY'S COLLABORATION WITH OTHER MUNICIPALITIES

The Sidney Fire Department participated in a number of mutual aid agreements, for example, with North Saanich, Central Saanich, the Victoria Airport Authority Fire Service and others.

On average, the Sidney Fire Department responded to or requested mutual aid from its partners 12 to 16 times per year. This included requests to attend structure fires, automatic aid for high risk structures and aircraft in distress calls.

Central Saanich, North Saanich and Sidney fire chiefs met approximately six times each year to discuss topics related to fire response and to Peninsula Emergency Management Organization (PEMO) services.

Annually, PEMO held five scheduled operations meetings, which included the fire chiefs, directors from each jurisdiction and other staff to review and discuss PEMO's operations.

Numerous training opportunities were shared amongst the three Saanich Peninsula fire departments, including standpipe training, wildland operations, officer-specific training, hazardous materials training and ladder truck operations.

Peninsula fire departments also coordinated participation at emergency management events such as the Peninsula Emergency Management Fair and Victoria Airport Authority disaster response scenarios.

The Sidney Fire Department also engaged the RCMP detachment and BC Ambulance Service in event planning and relevant training. It participated in training opportunities provided through its membership in the Greater Victoria Fire Chiefs Association and the Capital Regional District's local government emergency planning advisory committee.

The tri-municipalities agreed to expand automatic aid to structure fires coinciding with wildfire deployments from peninsula departments.

127. Building on this model, Sidney and its nearby municipalities may wish to create a shared emergency planning coordinator arrangement to maximize emergency management resources across the area. If this occurs, obligations and priorities for the three municipalities must be clearly described within each organization's emergency response and recovery plan.

128. Sidney was proactive in identifying collaborative arrangements with neighbouring municipalities with the goal of enhancing its emergency mitigation and prevention, preparedness, response and recovery. Examples of collaboration with other municipalities on emergency management are outlined in *Exhibit 9*.

EVACUATION PLAN

129. Sidney had a generic evacuation plan as an annex to its emergency response and recovery plan. It included general guidelines such as a decision tree to help assess various scenarios. In addition, the Town had a large population of seniors and partnered with seniors care homes to develop evacuation plans to address risks to this more vulnerable population. Care home providers also had mutual aid agreements to assist with evacuation during an emergency.

130. Further, the regional district mapped flooding and tsunami risk zones and Sidney identified reception centres as part of its emergency response measures. The risk zone mapping and designation of reception centre destinations may be useful in developing recommended evacuation routes and evacuation guidance customized to specific scenarios. This could enhance Sidney's current evacuation plans.

RECOMMENDATION 2

The Town of Sidney should strengthen its emergency management planning by:

- Considering a shared emergency program coordinator arrangement with its Peninsula Emergency Measures Organization partners to maximize emergency management resources
- Ensuring the obligations and priorities of the three municipalities are clearly described in its emergency response and recovery plan
- Developing recommended evacuation routes informed by reception centre locations and more specific guidance based on specific hazards and scenarios

RESOURCING

131. We expect a local government to take steps to ensure its emergency management program is adequately resourced in terms of staffing and budget. In Sidney, we expect to see an annual operating budget and financial management policies and procedures, including cost recovery.

132. Sidney had an emergency management budget developed as part of its overall annual budget process. As shown in *Exhibit 10*, emergency management expenditures increased over recent years. Significant increases in contract fees in 2015 and 2016 were due to more staff training, mainly in the form of Justice Institute of BC courses.

133. Sidney staff participated in PEMO's regular meetings and also spent time on administration and other emergency planning activities. The Town did not track staff time spent on emergency management or business continuity management activities. Sidney relied on volunteer help for a number of key emergency planning and response functions through PEMO, such as search and rescue and emergency social services, as well as its fire-protection service. The Town did not track volunteer time spent on emergency management or business continuity management activities, however, as per staff the Town is able to obtain this information from PEMO, if required.

134. Because the Town did not track time spent on these activities, it is unclear how much time emergency planning and response staff and volunteer members spent and what the associated costs were. This hampers the Town's ability to fully understand the resources devoted to emergency management services and to assess the need for potential additional staffing, in particular, that associated with the emergency program coordinator function.

135. Sidney's emergency operations centre had a finance and administration section, with one finance chief and support or backup finance personnel. Finance and administration functions were outlined in the emergency response and recovery plan and included time management, procurement, compensation and claims and cash accounting. All of these functions help ensure key financial activities are adequately resourced during emergency operations centre activation.

136. Under the Province's *Emergency Program Act* and the *Compensation and Disaster Financial Assistance Regulation*, the Town may be eligible for financial assistance to offset response and recovery costs incurred during and following an emergency event, providing there is sufficient supporting information. Sidney's emergency response and recovery plan outlined detailed procedures to guide the cost recovery process. Staff told us that Sidney did not experience a major emergency event during the period covered by the audit, so did not need to apply for cost recovery. As a result, it is difficult to fully assess the Town's procedures for cost recovery.

137. The Town has, in the past, successfully applied for federal and provincial emergency management funding, primarily under programs that are no longer active. Sidney's emergency response and recovery plan contained funding application guidelines that were not regularly reviewed and updated as necessary. For example, a list of active provincial financial assistance programs could be separately developed to provide background information and better guide an application process.

Exhibit 10 – TOWN OF SIDNEY'S ANNUAL EMERGENCY MANAGEMENT EXPENDITURES

	2012	2013	2014	2015	2016	5-YR% CHANGE
PEMO Funding	$16,500	$16,500	$16,500	$16,500	$16,500	0%
EOC Equipment and Supplies	$5,837	$2,577	$3,453	$2,204	$4,532	-22%
Contracts - for training and consultation, etc.	$8,060	$10,841	$8,996	$13,617	$16,396	103%
Emergency Response Management System Licensing fee	$ -	$ -	$ -	$ -	$6,500	N/A
Total	**$30,397**	**$29,918**	**$28,949**	**$32,321**	**$43,928**	**45%**

Note: ERMS licensing fee was not applicable before 2016, when Sidney implemented the system.
Source: Town of Sidney financial records

Exhibit 11 – JUSTICE INSTITUTE OF BC EMERGENCY MANAGEMENT TRAINING

The Justice Institute of BC's School of Public Safety offers training programs that can assist local government officials responsible for emergency management to effectively prepare for, respond to and recover from emergency incidents.

The Justice Institute works closely with local governments in the provision of training focused on emergency operations centre activities, incident command, health, emergency social services, business continuity management and search and rescue team activities. It also can provide specialized emergency management training tailored to a local government's particular needs.

Numerous emergency management training courses are sponsored by Emergency Management BC, and in many cases, training can be delivered on site and may be at no charge to the local government.

Source: JIBC and EMBC web contents

138. In addition, Emergency Management BC administers a strategy to advance support for local authority emergency management programs. The strategy includes assistance from that agency to local governments across B.C., in the form of training, guidance, toolkits and attendance at local events and workshops.

RECOMMENDATION 3

The Town of Sidney should ensure it is cost-effectively resourcing its emergency management function by:

➤ Tracking staff and volunteer time spent on emergency management and business continuity management activities

➤ Confirming that its cost recovery procedures will ensure that key financial information is adequately documented and providing training to finance staff that may be tasked with the cost recovery process

➤ Developing a list of financial assistance programs available to local governments to assist with emergency management

TRAINING

139. We expect local governments to have emergency plans that include opportunities for the training of emergency planning committee and emergency operations centre members, volunteers and key stakeholders such as the local health authority, school district officials and key industry,

business and non-profit agency representatives. In particular, there should be a training budget in support of a training plan, along with documented training activities, including training certifications of emergency operations centre members.

140. Further, local governments should have a training component targeted to the general public with the goal of raising community awareness of essential preparedness, response and recovery actions they should take in the event of an emergency.

141. In Sidney, staff generally acknowledged that Council was supportive of emergency management training, although this was largely focused on fire department personnel. While town hall staff generally expressed interest in receiving emergency management training, the Town had not developed a more formal approach to identify staff training requirements, including for emergency operations centre lead staff. Such an approach could lead to a multi-year staff training plan on emergency management.

142. Typically, Emergency Management BC coordinates annual Justice Institute of BC courses (see *Exhibit 11*) and local governments have the ability to apply for one or two seats. Hosting these courses enables the organizer to increase the number of seats available to them. Given the popularity of emergency management courses, even when the courses are not sponsored by Emergency Management BC, the hosting organization could offer remaining seats to other attendees on a cost recovery basis.

Exhibit 12 – GENERAL TRAINING REQUIREMENTS ON EMERGENCY MANAGEMENT

All emergency operations centre personnel and their alternates should consider training on emergency management that includes the following Justice Institute of BC courses:

➤ *Introduction to Emergency Management (online)*

➤ *Incident Command System 100 (online)*

➤ *Emergency Operations Centre Essentials (2 day)*

The emergency operations centre management team, section chiefs and their alternates may have the above courses, plus the following courses, depending on their role:

➤ *Operations and planning section chiefs—add Emergency Operations Centre Operations and Emergency Operations Centre Planning (one day each)*

➤ *Logistics and finance section chiefs—add Emergency Operations Centre Logistics and Finance (one day each)*

➤ *Information officer, information team, municipality spokespersons - Information Officer course (2 day)*

Depending on roles, additional training includes the following courses:

➤ *Incident Command System 200, 300 and 400 (this training is intended for site responders and is more operational and tactical, whereas emergency response centre training is more strategic)*

➤ *Introduction to Emergency Social Services*

➤ *Emergency Social Services Reception Centre Operations*

➤ *Evacuation Planning*

Elected officials, new or existing, should consider the following training, at a minimum:

➤ *Introduction to Emergency Management*

➤ *Emergency Management for Elected Officials and Executives*

143. General training requirements for emergency management are described in *Exhibit 12.*

144. PEMO volunteers were provided training for their specific roles. Both emergency social services and search and rescue team leaders told us that they believed training was well supported by PEMO. This is a good practice, as it keeps volunteer members motivated and actively involved.

RECOMMENDATION 4

The Town of Sidney should improve its emergency management training by:

➤ Undertaking a formal approach to identifying staff training requirements, including a multi-year emergency management staff training plan

➤ Considering hosting of emergency management courses delivered by academic or similar institutions

Sidney organized emergency operations centre setup exercises at least semi-annually.

Exhibit 13 – EMERGENCY PLAN EXERCISING

Because emergency incidents are largely unpredictable, it is important for local governments to progressively exercise or test their plans on a regular basis in order to build robustness of plans and increase the confidence of emergency management personnel.

Exercising can occur in various formats:

➤ *Discussion-based activities such as table-top exercises familiarize participants with plans, procedures and responsibilities and can inform new plans and plan revisions*

➤ *Operations-based drills tend to be focused on the functionality of specific activities, such as a building evacuation drill or a hazardous material containment drill*

➤ *Full scale exercises typically involve multiple stakeholders and are designed to exercise "boots on the ground" responses to a wide-scale emergency incident*

Exercises should be geared to the local government's current hazard, risk and vulnerability assessment and focused on incidents considered high risk in terms of likelihood and consequence. Exercises should also be scaled progressively in order to increase their complexity and challenge.

Source: EMBC educational materials

EXERCISING AND TESTING

145. The exercising and testing of an emergency plan is critical to an effective and efficient emergency response (see *Exhibit 13*). We expect local governments to have procedures to support regular exercising of plans. We also expect local governments to occasionally conduct or participate in exercises that involve all key stakeholders such as provincial and federal government officials, surrounding communities, police and ambulance personnel, representatives of major industry and key suppliers, First Nations and volunteers.

146. Additionally, we expect local governments to conduct debriefings following exercises, leading, where appropriate, to revisions to their emergency plans. Good practice is progressively-scaled exercising to strengthen awareness and relevance.

147. Sidney organized emergency operations centre setup exercises at least semi-annually and measured the time taken to set-up, with the goal of progressively reducing it. Staff told us that they became familiar with their assigned roles and tasks through these exercises. Further, staff expressed interest in participating in additional table-top exercises based on various scenarios.

148. Sidney coordinated with key partners and stakeholders on other emergency exercises:

➤ BC Ambulance Service, RCMP, neighbouring local governments and Victoria Airport Authority were invited to a large scale emergency operations centre exercise led by the Town in 2013

➤ An annual hazardous material exercise was conducted at a high-risk chemicals operation located in Sidney

➤ A mock evacuation drill with a transportation service provider was held at seniors assisted care facilities in 2016

➤ The Town regularly participated in emergency exercises organized by the Victoria Airport Authority

149. Sidney held debriefing sessions after some, but not all, of these exercises to discuss what went well and opportunities for improvement.

150. In addition, PEMO regularly held emergency social services and search and rescue exercises, sometimes in coordination with other provincial teams. Exercise scheduling and experiences were shared during PEMO's regular meetings.

Sidney developed a strong volunteer program and practised ongoing volunteer recruitment and retention.

151. As discussed above, Sidney coordinated with its regional or sub-regional response partners on emergency trainings and exercising activities through a number of emergency management networks, such as the Local Government Emergency Planning Advisory Committee.

152. As previously stated, earthquake ranks among the hazards of greatest concern for Sidney. However, neither the Town nor PEMO had held a wide-area earthquake exercise to address this major risk. Such an exercise could be co-organized with other local governments or partners within the Capital Region, and would enable Sidney to test its mutual aid agreements and memoranda of understanding. All key partners we interviewed expressed an interest in participating in this type of exercise.

RECOMMENDATION 5

The Town of Sidney should engage in additional emergency management preparation activities by:

➤ Ensuring that debriefings are held after each exercise

➤ Preparing consistent documentation of exercise debriefings and sharing this documentation after joint exercises

➤ Consulting with its regional and sub-regional partners around the planning and conducting of wide-area earthquake exercises

PUBLIC AND STAKEHOLDER AWARENESS AND EDUCATION

153. As part of their emergency management programs, local governments should create opportunities that promote public and stakeholder awareness. These could include website information, pamphlets, emergency preparedness week events, newsletters and newspaper advertising.

154. Websites should also provide alerts, updates and information during and after an emergency incident. Further, local governments should have an emergency notification system designed to provide residents with emergency alerts.

155. Local governments should also organize focused engagement initiatives for stakeholders that strengthen their roles in emergency mitigation, preparedness, response and recovery. Local governments should have a strategy to identify and manage a core group of volunteers who may be involved in key response and recovery activities during and following an emergency.

156. Overall, the Town was actively involved in public and stakeholder engagement and organized a range of initiatives intended to raise awareness levels. Sidney had an emergency preparedness education link on its website entitled "Prepare-yourself." The website, was intended to provide updates during an emergency.

157. The fire department's Twitter feed, a booth at the summertime Thursday night market and cinema advertisements are other tools they used to engage the public. Sidney also held an annual Emergency Preparedness Expo, a public educational event on emergency preparedness, in partnership with Emergency Management BC and the Local Government Emergency Planning Advisory Committee. More information on public awareness and preparedness is outlined in *Exhibit 14*.

158. Along with its PEMO partners, Sidney developed a strong volunteer program and practised ongoing volunteer recruitment and retention. Examples of this included its volunteer-led emergency social services program, search and rescue, communication and neighbourhood preparedness programs.

159. Sidney's mass notification system, the emergency response management system, was relatively new and the Town worked actively to increase its number of subscribers. At the time of the audit, there were 1,240 subscribers, each of them typically a household, or in some cases, an entire seniors care home. Awareness of the system was promoted through night market booths, cinema advertisements, a sign at the Town's main road entrance and reminders on utility bills. The Town was aiming for 4,000 subscribers, which would capture the majority of Sidney's population.

Exhibit 14 – PUBLIC AWARENESS AND PREPAREDNESS

Emergency management experts have traditionally said that residents should be prepared to be self-sufficient for up to 72 hours following an emergency event. More recently, these experts have suggested that people should plan to be on their own for a full week, with some experts saying two weeks may be more realistic in the aftermath of a wide-area emergency such as a catastrophic earthquake.

During such an event, first responders will be fully occupied with saving lives and protecting property, government officials will be busy restoring essential services such as water, roads and other critical infrastructure and consumer outlets for groceries, gasoline and pharmaceuticals are likely to face shortages as the region recovers.

To properly prepare, residents need to understand the potential hazards facing their community, such as earthquake, tsunami, floods and wildfires. And they must take steps to manage the risks. Simple preparations can include:

> *Making a telephone list of important family, medical, business and emergency numbers*

> *Proofing the home to minimize damage*

> *Building a grab'n'go bag containing a few essential items*

> *Having an emergency kit including food, water and basic medical supplies in a location that can be readily accessible following an event*

More information on emergency preparation is available on Emergency Management BC's website.

Source: EMBC web contents

COUNCIL ENGAGEMENT

160. One member of Sidney Council sat on the emergency planning committee and the emergency management executive committee. The mayor was briefed by the chief administrative officer on emergency management as needed as well as annually as part of a year-end discussion.

161. Staff told us that general information on the Town's emergency management and business continuity plan was included in the educational packages provided to Council at the beginning of their term. Further, Council members were briefed on key emergency management items as they arose, including:

> Findings and recommendations from a 2014 emergency management review prepared by Royal Roads University students

> Mutual aid agreements on emergency management

> Planning and construction of the new community safety building

> Concerns relating to rising sea level, flood controls and safety considerations in urban planning

> Annual emergency management budget request

Overall, Sidney had made progress on and was improving its emergency planning and management activities.

MAINTENANCE AND CONTINUOUS IMPROVEMENT

162. We expect local governments to adhere to the principles of continuous improvement. As part of their oversight role, councils and boards should ensure procedures are in place and followed for the regular review of emergency plans following exercising and testing. Further, lessons learned following emergency incidents should be reflected in those plans and incorporated into operational actions.

CONTINUOUS IMPROVEMENT

163. Overall, Sidney had made progress on and was improving its emergency planning and management activities.

164. The Town was reviewing and updating its emergency response and recovery plan for the first time. Sidney had implemented several key recommendations from the 2014 emergency management review, including the hazard, risk and vulnerability assessment update, a focus on evacuation of the seniors and raising business continuity plan awareness amongst the business community.

165. The review recommended additional elements to be incorporated into the emergency response and recovery plan, such as business continuity, mutual aid agreements and a list of services and resources available from Emergency Management BC. Staff told us that these elements, along with learnings since 2013, were expected to be incorporated by the Town into the next version of the plan.

166. The hazard, risk and vulnerability assessment was last updated in 2014 and was expected to be reviewed again in 2018. Staff told us that Sidney planned to review and update the assessment every three years although the Town had not set out such a requirement in policy. In addition, internal emergency contact lists were updated semi-annually. External emergency contacts were being updated as part of the emergency response and recovery plan review.

PERFORMANCE MANAGEMENT

167. Local governments should consider evaluating and measuring the effectiveness and efficiency of their emergency management activities. By monitoring its progress, a local government can take a more strategic approach and focus on continually improving its processes.

168. Performance measurement supports planning, informs decision-making and helps demonstrate accountability. It makes it possible for a council and senior management to take oversight of services beyond budgeting and reviewing reports describing accomplishments.

RECOMMENDATION 6

The Town of Sidney should work to continuously improve its emergency management by:

➢ Acting on the recommendation of the 2014 *Emergency Management Review* and updating its emergency response and recovery plan by incorporating business continuity, mutual aid agreements and a list of services and resources available from Emergency Management BC

➢ Presenting the updated plan to staff to raise their awareness

RECOMMENDATION 7

The Town of Sidney should improve emergency management data collection and analyses and establish a performance measurement system that includes the monitoring of progress and regular reporting on results to Council and senior management.

Exhibit 15 – EXAMPLES OF EMERGENCY MANAGEMENT PERFORMANCE INDICATORS

Emergency Mitigation & Prevention

➤ *Frequency and regularity of the review and updating of the hazard, risk and vulnerability assessment*

➤ *Annual cost of emergency mitigation & prevention-related activities such as a fire prevention campaign and inspections*

Emergency Preparedness

➤ *Number of emergency planning committee meetings per period*

➤ *Number of reviews and updates of emergency management plans based on hazard, risk and vulnerability assessment per period, including supplementary emergency plans for all critical services*

➤ *Number of emergency operations centre refresher training sessions and emergency exercises conducted per year to validate the emergency plan*

➤ *Annual cost of emergency preparedness-related activities such as community awareness, engagement, direct and indirect training*

Emergency Response

➤ *Number of incidents responded to per year and number of response evaluations and revisions*

➤ *Cost of emergency response activities, including staff and volunteer time, equipment and supplies*

Emergency Recovery

➤ *Cost of emergency recovery-related activities, including staff and volunteer time, equipment and supplies*

➤ *Total cost per incident, including response and recovery costs*

Note: This list is not comprehensive and local governments are encouraged to define their own.

169. To assist with this, a set of performance indicators that are both process and outcome-oriented should be defined, regularly monitored and results assessed and reported. A set of potential performance indicators on emergency management is introduced in *Exhibit 15*.

170. At the time of the audit, Sidney had not developed a performance measurement approach, aside from monitoring emergency operations centre activation time during setup exercises.

Overall, the Town of Sidney did not have a strong focus on a business continuity management system.

BUSINESS CONTINUITY MANAGEMENT

171. Business continuity management is a holistic framework to manage risks and the potential impacts that threaten a local government's business continuity and provides a process for building resilience within the organization. It is a key element of emergency management, enabling a local government to continue operations in the face of a major disaster.

172. Business continuity management does not eliminate risks, but instead manages them by preparing for potential business interruption through risk solutions, documented plans, staff familiarization through training and exercises and a culture of continuous improvement.

GOVERNANCE

173. We expect local governments to support business continuity and to have in place components of a business continuity management system, including a set of objectives and measures, an organizational structure, policy and procedures for conducting risk analysis and business impact analysis and regular exercising and updating of business continuity plan(s) and any supplementary documents.

174. Overall, the Town of Sidney did not have a strong focus on a business continuity management system. It lacked a framework to support business continuity management. In 2009, the Town developed a business impact analysis and a business continuity plan with general policy and objectives, but it did not establish a governance structure—a business continuity management committee or sub-committee of the emergency planning committee—to demonstrate leadership and a commitment and to ensure adequate resourcing for business continuity activities.

175. Further, Sidney did not have a specific individual assigned to manage the business continuity plan, there were no regularly planned meetings held to discuss the plan and there was no process in place to ensure the plan was regularly exercised, reviewed and updated.

176. The Town had not experienced a major emergency requiring both an emergency operations centre activation and recovery from a

service interruption since 1996. Considering this and the absence of any regular exercising of the plan, there was a risk that the documented business continuity procedures may not be effective and staff may not be aware of their roles and responsibilities after a major service interruption.

RECOMMENDATION 8

The Town of Sidney should improve its management of business continuity by:

- ❯ Establishing a governance structure that allows for oversight of business continuity management

- ❯ Assigning a coordinator to manage the business continuity plan and activities

BUSINESS IMPACT ANALYSIS

177. We expect local governments to have a business impact analysis as a supporting document for its business continuity plans. This analysis should assess relative risks and the potential impacts on operations and evaluate the organization's business processes. Such an analysis determines critical functions of the local government that must continue if an emergency event triggers an interruption.

178. Within the analysis, each department should be examined to identify the core services for which it is responsible, the resources needed to support those services and the impacts of interruption. A business impact analysis should be updated at least every three years to ensure its currency and the relevancy of the steps necessary to restore critical operations after a disaster, including services, assets and personnel.

179. Sidney's business impact analysis was a comprehensive document that drove recovery processes outlined in its business continuity plan. The analysis was developed in 2009 as a supporting document for the Town's business continuity plan. The analysis identified temporary measures and resources that may be needed to continue services following an interruption event.

180. Sidney's business impact analysis examined each department's functions and core services, the resources needed to support these functions and the impacts of interruption. This informed the Town's identification of essential functions that had to continue in case of an emergency event.

BUSINESS CONTINUITY PLAN

181. We expect local governments to have a business continuity plan that sets out how the organization will resume its critical services following an interruption. The plan should include resource requirements, critical internal and external dependencies and documented recovery procedures. It should be updated at least annually to ensure effectiveness. In addition, we expect local governments to develop comprehensive recovery strategies for the continuity of essential services.

182. Sidney's business continuity plan was developed in 2009 based on the business impact analysis developed in the same year. The Town used several basic principles to guide its development:

➤ Informing others (elected officials, staff and public)

➤ Focusing on essential services

➤ Using alternative resources

➤ Acknowledging interdependencies among departments

183. To facilitate recovery from service disruptions, one of the plan's annexes provided a set of checklists for each department that identify clear steps and processes to help the Town become operational as soon as possible after an event.

184. Within the plan, certain functions were identified as essential services, as shown in *Exhibit 16*.

Exhibit 16 – TOWN OF SIDNEY'S ESSENTIAL FUNCTIONS

ESSENTIAL TOWN FUNCTIONS	RESPONSIBLE DEPARTMENT
Inform residents and general public and respond to enquiries	Corporate Services
Provide fire suppression services	Fire / Rescue
Provide daily policing of municipality, including safety of motorists and prisoner management	RCMP
Maintain roads and water services	Public Works
Manage voice communications and information services	Information Services
Support the Town's emergency response operations, as required	Chief Administrative Officer and Administration
	All Departments

185. The Town identified three levels of service disruption:

➤ A level 1 incident is where one department is impacted

➤ A level 2 incident involves multiple departments

➤ A level 3 incident involves all departments and the community

186. Business continuity plan activation followed incident command system principles, where the director of each affected department leads business continuity efforts in the same way that an incident commander is in charge of response to an emergency.

187. In the incident command system, business continuity planning occurs after the event. The incident command system provides flexibility to manage the restoration of essential functions after assessing incidents and identifying requirements. Level 2 and 3 incidents are complex, as they involve multiple departments and level 3 incidents also involve the community. For levels 2 and 3, coordinating efforts, managing scarce resources and identifying roles and responsibilities are essential and these activities must happen quickly to restore functions.

The Town lacked specific, formal recovery plans for several of its essential services

Exhibit 17 – EXAMPLES OF BUSINESS CONTINUITY STRATEGIES FOR ROADS

Examples of business continuity strategies for roads include:

➤ *Identifying critical roads and bridges and mapping alternatives for critical roads*

➤ *Maintaining up-to-date maps of construction projects that may impact emergency response*

➤ *Establishing mutual aid agreements with adjacent municipalities and private companies for restoring roads after an emergency*

188. Sidney's emergency management plan and business continuity plan followed the same system, with the activated emergency operations centre managing both plans after a major incident. This creates a risk that staff may be overwhelmed during an incident and their prioritized roles and responsibilities might not be clear. Additionally, the Town lacked specific, formal recovery plans for several of its essential services, which identify the resource requirements and alternative ways to deliver the services.

189. Sidney's approach to recovery of water, road, policing and information technology essential services are described in detail above.

WATER

190. The Town depended on the Capital Regional District for its potable water supply. There was no response and recovery plan for Sidney's drinking water services.

191. Sidney had two active wells located within municipal boundaries that could be potential alternative sources of water. However, the quantity of the water available from them is not known and the water quality is not regularly tested. The Town also had a water tank stored in its public works yard that could serve as a short-term source of small amounts of potable water, however, Sidney had no documented procedures to facilitate the distribution of water.

ROADS

192. Road maintenance can be an urgent need when snow, debris, or damage to transportation routes impedes other municipal services, such as fire suppression. Impacts of service interruption could include traffic congestion and temporary loss of economic activity. The Town lacked a formal recovery plan for its roads.

Good business continuity strategies for roads are introduced in *Exhibit 17*.

POLICING

193. The officer in charge of the Sidney-North Saanich RCMP Detachment was a member of the emergency planning committee, where the Town's business continuity matters were occasionally discussed.

194. Staff told us that Sidney's deputy fire chief had reviewed the RCMP detachment's business continuity plan, however, this was only a high-level review. There were no other formal steps taken by the Town and RCMP to ensure coordination and alignment between the two plans.

VOICE TELECOMMUNICATIONS AND INFORMATION TECHNOLOGY

195. The Town had some arrangements for IT business continuity, however, the approach was high level and not fully documented.

196. The Town established priorities for recovering its IT services and determined maximum allowable downtime of 12 hours for each of its critical IT services. It was not clear how these IT services and priorities were identified and whether there were any gaps between the Town's continuity requirements and its IT business continuity priorities. In addition, the criteria and determination of the 12 hour maximum allowable downtown was not clearly linked to the Town's continuity requirements and priorities, including essential services as noted earlier in the report. Whether this downtime is reasonable was difficult to ascertain as this has not been reviewed or updated since 2009.

197. Local governments should have business continuity strategies designed and built into their telecommunications and information technology services to support their overall business continuity objectives. Sidney identified alternate resources for its IT services; for example, personnel, facilities, office equipment, communications,

Sidney had not developed a formal IT response and recovery plan to manage potential IT disruption.

hardware and a few others. However, this was done at a high level and not supported by detailed and documented analysis.

198. Local governments should have documented plans to manage potential disruptions, maintain continuity of IT services and recover critical services if they are interrupted. Smaller local governments may have a single document covering all activities to recover IT services for their entire operations, while larger local governments may have several plans, each addressing the details around recovering a particular element of their IT services. Furthermore, local governments should review and update their IT-related continuity strategies and plans to ensure that they remain current.

199. Sidney had not developed a formal IT response and recovery plan to manage potential IT disruption.

200. Local governments should test and exercise all elements of IT service recovery as appropriate to their size, complexity and business continuity management scope. The Town did not develop a formal progressive testing and exercising regime that would build toward a full simulation of a real incident and consider all aspects of its end-to-end IT service delivery after an interruption.

RECOMMENDATION 9

The Town of Sidney should strengthen its business continuity planning by:

- ❯ Developing specific response and recovery strategies for its essential functions, including drinking water and roads.

- ❯ Ensuring alignment with the Sidney RCMP detachment's recovery strategies

- ❯ Developing IT response and recovery plan(s), supported by formal strategies for information technology business continuity

- ❯ Developing a regular review and monitoring process for its related strategies and plans, and developing a test and exercise program for all elements of IT service recovery

REVIEW AND REVISION

201. We expect local governments to regularly review and revise their business continuity plans to ensure information is up-to-date and that the plan is based on recent risk and policy requirements. We also expect local governments to use lessons learned from exercises/tests and review of best practices in their revision of business continuity plans.

202. Sidney's business continuity plan policy required that the chief administrative officer keep the plan updated through an annual review process, which is regarded as good practice. The policy also stated that all department directors should periodically update the business impact analysis and continuity checklists pertaining to their departments.

203. The Town had made two revisions, one in 2009 after the plan's initial development and one in 2017. These revisions did not include re-assessment of business requirements or revisions to the business impact analysis and other supplementary annexes.

204. Sidney had not updated the impact analysis to reflect the risks associated with dependence on current external suppliers (for example, the emergency notification system, which was provided by an external company and depended on a particular internet service provider). The lack of a regular review process may reduce the effectiveness of the business continuity plan and the Town's ability to effectively recover from service interruptions.

RECOMMENDATION 10

The Town of Sidney should ensure the continuing accuracy and relevance of its business continuity documents by:

➤ Developing a process for the regular review and updating of its business continuity plan and related documents. The review should involve internal and external stakeholders

➤ Updating the names and contact numbers included in its business continuity plan at least semi-annually or more frequently as needed

➤ Reviewing its business impact analysis at least every three years, including consideration of risks associated with key external dependencies

TRAINING AND AWARENESS

205. We expect local governments to support business continuity management by providing regular training to employees on business continuity activities and ensuring that employees are aware of their roles and responsibilities.

206. Sidney's business continuity plan indicated that the chief administrative officer may arrange training and exercises for staff members to familiarize them with their roles and responsibilities during an emergency, to ensure that staff maintain systems and equipment in a constant state of readiness and to validate all aspects of the plan. These training and practice opportunities could include snow days, power outages, server crashes and other ad hoc opportunities to enhance preparedness for business interruption.

207. However, staff told us that the Town had not arranged training activities on business continuity and had not developed a systematic training plan and schedule to familiarize staff with the requirements of the business continuity plan and their roles and responsibilities. Further, several of the Town's departmental directors were not involved in the 2009 development of the plan or the business impact analysis and were unaware of the criteria for selecting essential services and the maximum allowable recovery downtimes.

RECOMMENDATION 11

The Town of Sidney should enhance staff knowledge of business continuity planning by:

➤ Developing a training plan to ensure staff are familiar with the requirements of business continuity

➤ Taking steps to promote staff awareness of the business continuity management system and plan

EXERCISES AND TESTING

208. Local governments should test their business continuity plan recovery strategies and exercise them regularly to train staff, validate recovery time objectives and identify gaps in procedures. Exercises should be based on relevant scenarios and progressively scaled to be increasingly challenging. Results should be reviewed and reported to those providing oversight of business continuity, in addition to applying the lessons learned.

209. Sidney's business continuity plan stated support for exercising and testing, but the Town had not exercised the plan since its 2009 development. Sidney had never tested its business continuity plan and emergency management plan together, despite the fact that both used the incident command system and both specified the same emergency operations centre.

RECOMMENDATION 12

The Town of Sidney should conduct business continuity exercises and testing by:

➤ Developing specific policy requirements and a process for regular, progressively-scaled business continuity exercises and testing

➤ Considering simultaneous business continuity plan and emergency management plan exercises in a comprehensive scenario requiring an emergency operations centre activation

Exhibit 18 – **GOOD PRACTICE:** ASSISTING LOCAL SMALL BUSINESSES WITH THEIR BUSINESS CONTINUITY PLANS

Sidney worked to raise public awareness of business continuity. The Town recognized that the survival of small businesses is crucial to the local economy and community following a disaster. As a result, Sidney implemented a program in 2017 to help small businesses develop business continuity plans and identify key resources and needs to ensure their businesses continue after a disaster.

The goal of the program was to introduce, educate and assist Sidney businesses to create and maintain business continuity plans. The Town developed a template and guidelines to assist. Sidney also provided a phone number for small businesses to contact for assistance.

Small businesses could refer to the Emergency Preparedness for Industry and Commerce Council for additional guidance on business continuity planning.

Source: Sidney web contents

PERFORMANCE MEASUREMENT

210. The measurement of performance is a cornerstone of sound governance and stewardship. Local governments should consider evaluating and measuring the effectiveness and efficiency of their business continuity activities. To assist with this, a set of performance indicators that are both process and outcome-oriented should be defined, regularly monitored and results should be assessed and reported.

211. Sidney had key performance indicator targets for the "maximum allowable downtime" for restoring essential and non-essential services as part of business continuity planning. The maximum allowable downtimes were grouped and prioritized based on when the services needed to be restored after the business continuity plan was activated (within 12 hours, seven days, four weeks, or three months).

212. The targets had not been updated since the 2009 development of the business continuity plan and the Town had not evaluated its ability to restore essential services within the maximum allowable downtimes. As a result, it was not clear whether Sidney could achieve this performance target.

RECOMMENDATION 13

The Town of Sidney should improve data collection and analysis on its business continuity management and establish a performance measurement system that includes the monitoring of progress and regular reporting on results to Council and senior management.

ABOUT THE AUDIT

The overall objective of this performance audit was to obtain reasonable assurance that the Town of Sidney has effective emergency management plans and programs in place.

213. The office of the AGLG complies with the independence requirements, other ethical requirements and rules of professional conduct of Chartered Professional Accountants of British Columbia applicable to the practice of public accounting and related to assurance engagements and the standards of conduct of the B.C. Public Service.

214. This audit was performed in accordance with the standards for assurance engagements set out by the Chartered Professional Accountants of Canada in the CPA Handbook—Assurance and Value-for-Money Auditing in the Public Sector, PS 5400, PS 6410, PS 6420, Canadian Standard on Assurance Engagements 3001—direct engagements. Additionally, the AGLG applies Canadian Standards on Quality Control, CSQC 1.

OBJECTIVE

215. The overall objective of this performance audit was to obtain reasonable assurance that the Town of Sidney has effective emergency management plans and programs in place.

PERIOD COVERED BY THE AUDIT

216. The audit covered the most current emergency management plans and programs. We reviewed the period from January 2012 to December 2016 for any financial data and trend analysis. When relevant, any significant events subsequent to the audit period were also considered. We completed our examination work in September 2017.

AUDIT SCOPE AND APPROACH

217. The audit included a review of the Town of Sidney's performance in managing its emergency management (including plans related to the four phases: mitigation & prevention, preparedness, response and recovery), business continuity management and key elements such as governance, policies and procedures, communications, training and exercising and monitoring, reporting and updating.

218. The audit did not include an investigation of causes of past emergency events or an evaluation of previous emergency event responses, however, any post-event learnings and how they were reflected in current plans were examined.

219. To carry out the audit, we designed detailed audit procedures that we used to obtain sufficient and appropriate audit evidence. We also reviewed documents related to the audit topic, interviewed internal and external stakeholders, and analyzed relevant data and information.

AUDIT CRITERIA

220. Performance audit criteria define the expectations against which we assessed the local government's performance. We identify our criteria before we begin assessing a local government. We intend them to be reasonable expectations for the local government's management of the area being audited in order to achieve expected results and outcomes. Current legislation and regulations serve as an authoritative source of criteria for this audit.

221. Below are the criteria we used to assess the local government:

Objective 1 - The local government has an emergency management system in alignment with legislative requirements.

➤ The local government has prepared a local emergency plan that describes how to prepare for, respond to and recover from emergencies and disasters based on the risk profile of its jurisdictional area (hazard, risk and vulnerability analysis).

➤ The local emergency plan has provisions for establishing and managing the emergency response team members, training, procedures for allocation of resources, procedures for implementing the plan, emergency notifications, coordination of food, clothing, shelter provision, etc., and priorities for restoring of essential services.

➤ The local government has established and maintained a local emergency organization (internal and external) to develop and implement emergency plans and other preparedness, response and recovery measures for emergencies and disasters.

- The local government has developed a clear process for periodic review and revision of the local emergency plan and carried out this process.

- The local government has prepared an evacuation plan to coordinate providing food, clothing, shelter, transportation and medical services to those impacted by emergencies.

- The local government has established and maintained an emergency training and exercise program.

Objective 2 - The local government has emergency management plans that include activities necessary to timely respond to and manage the consequences of an emergency event.

- The local government provides organizational support for emergency management, including policy direction and resource planning and allocation (facility, finance and human resources).

- The local government has a committee comprised of local government personnel, agency representatives and designated volunteers responsible for emergency management and has established working relationships with these key stakeholders including having plans, agreements, exercises and tests, and joint training.

- The local emergency plan covers the designation, roles and functions and condition requirements of an emergency operations centre (EOC), the response activities at the EOC and team member training and deployment (human resource management) during an emergency event.

- Response and recovery guidelines reflect the risks and hazards assessed, and outline key actions in the response process, from the activation of the EOC, response activities at the EOC, mobilization and declaration of a state of local emergency to evacuation steps.

- The local emergency plan covers emergency information management requirements, including the roles and responsibilities of an emergency information officer and appropriate spokespersons, communication means and requirements for all key parties, information distribution and controls at each response and recovery step.

- The local government has the infrastructure and capacity to establish and maintain a volunteer strategy for emergency activities and to manage volunteers.

- The local government has an emergency social services strategy.

- Educational materials on emergency management are provided to raise public awareness.

- Emergency management team members are provided adequate training.

- The local emergency plan has been exercised and tested with related parties in frequency and scale appropriate to the local government's size, capacity, risk and impact assessment and prioritization results.

- The local emergency plan reflects up-to-date policy requirements, lessons learned from past incidents, exercises / tests and best practices.

- The local government is aware of the support outlined in the provincial strategy issued by Emergency Management BC in 2015, *"A Strategy to Advance Support for Local Authority Emergency Management Programs"*.

- The local government has necessary controls (bylaws, protocols, policies and procedures) for the financial management for its emergency planning.

- The local government has developed clear frameworks to ensure the clarity of roles and responsibilities between the local government and Emergency Management BC.

Objective 3 - The local government has developed a business continuity management system which contains the recovery procedures necessary to resume critical operations in the event of a disruption.

➤ The local government has assessed the needs of an organizational business continuity management system (BCMS) and set its scope expectation and objectives, such as risks and uncertainties covered services and boundaries, in consideration of interests of key stakeholders, legislative requirements and organizational vision and mission.

➤ Organizational support for BCMS is demonstrated, such as leadership, employee awareness and policy support.

➤ Business continuity risks and impacts are evaluated, prioritized and updated regularly.

➤ Resource requirements for BCMS, including financial, physical and human resources have been identified and allocated.

➤ Business continuity processes (including response and restoration structure and procedures) are developed based on risks assessed, and roles and responsibilities for all involved parties within or outside of the local governments are identified.

➤ Business continuity policy and procedural requirements are implemented, and roles and responsibilities are communicated to all related parties within and outside the organization.

➤ Controls are in place to ensure BCM information and documents are organized, accessible, reliable and up to date.

➤ Business Continuity Plans (BCPs) are regularly tested and exercised to ensure feasibility and effectiveness.

➤ BCMS is reviewed, evaluated and reported regularly to ensure effectiveness and compatibility with policy, information system requirements and other emergency plans.

➤ The BCP reflects lessons learnt, best practices such as alternative site arrangement, and is subject to continuous monitoring and improvement.

T O W N   O F   S I D N E Y

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February 14, 2018

Gordon Ruth, FCPA, FCGA
Auditor General for Local Government
201-10470 152nd Street
Surry, BC V3R 0Y3

Dear Mr. Ruth,

On the behalf of the Town of Sidney, thank you for the opportunity to provide comments on the Proposed Final Audit Report "Emergency Management in Local Governments". The report was presented to Mayor and Council in-camera, on February 13, 2018 where it was considered and approved.

We are pleased that the Audit process is nearing completion and wish to extend our thanks to the entire Auditor General for Local Government (AGLG) team for the respectful and efficient manner in which they conducted their work. This was particularly appreciated given the requested advancement of the Town's Audit investigation period resulting from the summer wildfires in B.C.'s interior.

The Town of Sidney is extremely proud of its work in providing its residents with a comprehensive and robust emergency management program. Given the challenges confronting smaller local governments, both in terms of resources and competing priorities for the provision of expected levels of service in all areas, we believe that the Town has been proactive and responsible in its approach to emergency management.

Overall, the Town is pleased with the Audit's findings and believe them to reflect positively on the Town of Sidney with respect to the work that has been done to date on emergency planning. We appreciate the AGLG's recognition of these efforts. We also acknowledge and understand the areas of our emergency program and practices that can be improved upon. To that end, our leadership team have prepared a comprehensive action plan to address the key findings and recommendations contained in the report. This plan will be implemented over the next few years so as to ensure that the Town of Sidney maintains its strong commitment to further improving its emergency planning and management activities.

In conclusion, we thank the AGLG for what we believe to be a balanced and fair Audit report and we sincerely hope that other municipalities can utilize and benefit from this information to enhance their emergency management program and practices.

Sincerely,

Mayor Steve Price

TOWN OF SIDNEY ACTION PLAN

AGLG RECOMMENDATION	STEPS TAKEN	RESOURCES NEEDED	RESPONSIBLE	TARGET DATE
EMERGENCY MANAGEMENT — GOVERNANCE				
1. The Town of Sidney should enhance its governance of emergency management by:				
❯ Improving its emergency program bylaw by adding business continuity management expectations and requirements ❯ Formalizing the emergency management executive committee's role in setting direction, budget and priorities for the emergency management program and overseeing the emergency planning committee	Will review Sidney Emergency Planning Bylaw 1936, amend as necessary, and provide Draft Terms of Reference for the Emergency Management Executive Committee.	Staff Time	Fire Department / Administration	Q3, 2018
❯ Formally defining the primary role of the fire chief during an emergency event and communicating it to the emergency operation centre members and other relevant staff	Update ERRP section 5.03 EOC Personnel to reflect a definite role of Fire Chief during an emergency. Present updated information at EPC meeting and distribute to staff.	Staff Time	Deputy Fire Chief	Q3, 2018
❯ Taking steps to transition to the BC Emergency Management System and developing a more detailed emergency recovery plan	2.2, BCERMS Levels needs updating, then communicated to staff.	Staff Time	Fire Department	Q4, 2018
❯ Developing a process, including policy and procedures, to review and revise emergency management plans	As outlined in bylaw 1936, section 1.5 Responsibility for the Plan in the Emergency Response and Recovery Plan, and in the EPC Terms of Reference, the EPC is responsible for this. The next step is to take this required responsibility and formalize a process to see these revisions accomplished. This could be done by updating the Committee/ Commissions/ Boards Policy and Procedures to include the EPC as a recognized established committee and include the Terms Of Reference.	Staff Time	Administration	Q3, 2018
❯ Implementing available emergency response management system functionalities to enhance both internal and external communications	This includes ERMS merge with North Saanich and Central Saanich under Peninsula Emergency Measures Organization. Creation of EOC specific level call out cohorts a tiered response on ERMS specific to the event. Recommendations from PEMO Communications Report are being discussed among three municipal IT Managers to improve interoperability and acquiring BC Emergent satellite devices.	Staff time	Fire Chief	Q4, 2018

AGLG RECOMMENDATION	STEPS TAKEN	RESOURCES NEEDED	RESPONSIBLE	TARGET DATE
EMERGENCY MANAGEMENT — GOVERNANCE *continued*				
❱ Developing an emergency social service action plan and regularly reporting results to the emergency planning committee	Will follow recommendations outlined by PEMO ESS GAP Analysis written by Claire Fletcher in July 2017. At this time have begun interviewing ESS members to gauge interest levels, identify concerns and address issues. Will engage NS and CS Emergency Program Coordinators as this is a PEMO function.	Staff Time / Outside Agency Input	Fire Department	Q4, 2018
EMERGENCY MANAGEMENT — PLANNING				
2. The Town of Sidney should strengthen its emergency management planning by:				
❱ Considering a shared emergency program coordinator arrangement with its Peninsula Emergency Measures Organization partners to maximize emergency management resources	Peninsula Emergency Program Co-ordinators have engaged in discussions regarding this opportunity. Funding and governance must be supported by all three municipalities in order to make this feasible.	Peninsula Emergency Program Coordinators, Peninsula elected officials.	Fire Chiefs, Elected officials	2025
❱ Ensuring the obligations and priorities of the three municipalities are clearly described in its emergency response and recovery plan	Must be a task undertaken under the guise of PEMO.	Emergency Program Coordinators (EPC), consultants	EPC's	2020
❱ Developing recommended evacuation routes informed by reception centre locations and more specific guidance based on specific hazards and scenarios	Incorporate the regional district flood maps and tsunami risk zones into ERRP, as well as reception centre locations. With these considerations in mind, develop evacuation routes specific to hazards and scenarios.	Sidney EPC	Sidney Fire & PEMO ESS	Q4, 2018
EMERGENCY MANAGEMENT — RESOURCING				
3. The Town of Sidney should ensure it is cost-effectively resourcing its emergency management function by:				
❱ Tracking staff and volunteer time spent on emergency management and business continuity management activities	Sidney Fire and PEMO functional units volunteer times is tracked precisely. Time has always been tracked but with creation of volunteer tax credit for emergency services, all time has been logged. Tracking of non-emergency Town staff participation in emergency operations center training will be a Q2 task.	Staff Time	Fire Chief	Q2, 2018

AGLG RECOMMENDATION	STEPS TAKEN	RESOURCES NEEDED	RESPONSIBLE	TARGET DATE
EMERGENCY MANAGEMENT — RESOURCING *continued*				
❯ Confirming that its cost recovery procedures will ensure that key financial information is adequately documented and providing training to finance staff that may be tasked with the cost recovery process	Cost recovery procedures have been an integral part of past training exercises, and current staff are comfortable with these procedures. Additional documentation and training will be undertaken to ensure newer staff will be able to quickly understand and follow required procedures.	Staff Time	Finance Department	Ongoing
❯ Developing a list of financial assistance programs available to local governments to assist with emergency management	Amend ERRP with appendices of financial assistance programs. Staff will research and develop a list of financial assistance programs that are accessible to the Town.	These are always changing, and staff are adept at finding new programs as they become available.	Fire Chief & Fire Admin assistant	Q2, 2018
EMERGENCY MANAGEMENT — TRAINING				
4. The Town of Sidney should improve its emergency management training by:				
❯ Undertaking a formal approach to identifying staff training requirements, including a multi-year emergency management staff training plan	Staff have applied for a grant to bolster staff training. This grant, if awarded, would sanction 20 town staff to participate in 3 Emergency Management courses (Introduction to Emergency Operation Centres, Introduction to Emergency Management, EOC Essentials). Staff will be selected on position, experience, and proximity to the EOC. This will act as a foundation to build a staff emergency management training plan.	Funding, Staff Time	Chief Administrative Officer / Fire Chief	Q1, 2019
❯ Considering hosting of emergency management courses delivered by academic or similar institutions	Town will be hosting the above mentioned courses if successful with grant.	Funding, Staff Time	Fire Department	Q2, 2019
	Town is hosting EOC Applied Training through the Justice Institute of BC at Sidney Fire Hall June 19 2018.	No Further Resources Needed	Fire Department	Q2, 2018
EMERGENCY MANAGEMENT — EXERCISES AND TESTING				
5. The Town of Sidney should improve its emergency management training by:				
❯ Ensuring that debriefings are held after each exercise	Have contracted Smart Risk Control to facilitate an exercise that will practise the Business Continuity Plan. This exercise is inclusive of a debrief and After Action Planning meeting. These skills and tools will be carried forward for future exercise plans.	Consultant Time, Staff Time	Fire Chief	Q4, 2018

AGLG RECOMMENDATION	STEPS TAKEN	RESOURCES NEEDED	RESPONSIBLE	TARGET DATE
EMERGENCY MANAGEMENT — EXERCISES AND TESTING *continued*				
➤ Preparing consistent documentation of exercise debriefings and sharing this documentation after joint exercises	Will use tools and skills gathered from Business Continuity Plan exercise to provide foundation for future documentation. Documentation will be shared through LGEPAC and as requested.	Consultant Time, Staff Time	Fire Department	Q1, 2019
➤ Consulting with its regional and sub-regional partners around the planning and conducting of wide-area earthquake exercises	Hold a seat at LGEPAC Meetings.	Staff Time	Deputy Fire Chief	Completed
EMERGENCY MANAGEMENT — MAINTENANCE AND CONTINUOUS IMPROVEMENT				
6. The Town of Sidney should work to continuously improve its emergency management by:				
➤ Acting on the recommendation of the 2014 Emergency Management Review and updating its emergency response and recovery plan by incorporating business continuity, mutual aid agreements and a list of services and resources available from Emergency Management BC	Have consulted Smart Risk Control to update Business Continuity Plan. Upon completion of this, staff will collect additional information requiring updates (Mutual aid agreements, resource acquisition lists) and update ERRP. Sidney has had mutual aid agreements with its closest neighbours for many years.	Consultant Time, Staff Time	Fire Chief & Fire Department Administrative Assistant	Q1, 2019
➤ Presenting the updated plan to staff to raise their awareness	Will present at an EPC meeting and update staff.	Staff Time	Management of each Department	Q2, 2019
7. The Town of Sidney should improve emergency services data collection and analyses and establish a performance measurement system that includes the monitoring of progress and regular reporting on results to Council and senior management	To develop a performance management system to include progress monitoring on; • HRVA updates • BCP updates • ERRP updates • Prevention / public education related costs • EOC refresher training • Exercises These performance evaluations will then be presented at EPC and forwarded to Council.	Staff Time	Fire Department	Q1, 2019

AGLG RECOMMENDATION	STEPS TAKEN	RESOURCES NEEDED	RESPONSIBLE	TARGET DATE
BUSINESS CONTINUITY MANAGEMENT — GOVERNANCE				
8. The Town of Sidney should improve its management of business continuity by:				
❯ Establishing a governance structure that allows for oversight of business continuity management	To develop a sub-committee of the Emergency Planning Committee devoted to Business Continuity Planning. Objectives of committee will focus around updates, exercises, and revisions as necessary. Sub-Committee to lead updates to Business Continuity Plan and Business Impact Analysis.	Staff	Chief Administrative Officer	Q3, 2018
❯ Assigning a coordinator to manage the business continuity plan and activities	Under Review	Staff	Chief Administrative Officer	Q3, 2018

AGLG RECOMMENDATION	STEPS TAKEN	RESOURCES NEEDED	RESPONSIBLE	TARGET DATE
BUSINESS CONTINUITY MANAGEMENT — BUSINESS CONTINUITY PLAN				
9. The Town of Sidney should strengthen its business continuity planning by:				
❯ Developing specific response and recovery strategies for its essential functions, including drinking water and roads	Brian Robinson meeting with Lowen Hydrogeology Consulting and Wellmaster Pumps to identify Town's requirements to have the two identified active wells in the municipality identified as emergency water sources.	Pending report & recommendation by consultant	Chief Administrative Officer Manager of Public Works and Parks	Q3 Meeting Feb. 8 2018 will provide insight
	Requirement to map critical roads and alternative routes.	Staff	Engineering Department	
❯ Ensuring alignment with the Sidney RCMP detachment's recovery strategies	EPC has identified the need for RCMP, Fire, BCAS, and Public Works to review and coordinate emergency plans. RCMP Staff Sergeant and Deputy Fire Chief have met and reviewed emergency response/ recovery plans. Will focus on larger audience inclusive of BCAS and Public Works.	Staff Time	Deputy Fire Chief	Q3, 2018
❯ Developing IT response and recovery plan(s), supported by formal strategies for information technology business continuity	The Town has been working on recovery strategies for several years now, as part of its hardware / software acquisition plans. These strategies will be formalized and documented over the next 2 years, as the final pieces of the strategy are put in place. Recovery testing and offsite storage and recovery are key components of our strategy. The Town of Sidney environment follows all industry best practices. Well established products from Microsoft and other major vendors make for a very standard environment. This environment lends itself to disaster recovery efforts in the event third party Vendors are required to assist in the recovery. Any competent IT consulting firm would be able to recognize and work with all line-of-business (LOB) systems within the Town's IT infrastructure.	Staff, Consultant	IT Department	Q4, 2019
❯ Developing a regular review and monitoring process for its related strategies and plans, and developing a test and exercise program for all elements of IT service recovery	Regular review and monitoring will follow once the above strategies are in place. A test exercise will follow.	Staff, Consultant	IT Department	Q1, 2020

AGLG RECOMMENDATION	STEPS TAKEN	RESOURCES NEEDED	RESPONSIBLE	TARGET DATE
BUSINESS CONTINUITY MANAGEMENT — REVIEW AND REVISION				
10. The Town of Sidney should ensure the continuing accuracy and relevance of its business continuity documents by:				
❯ Developing a process for the regular review and updating of its business continuity plan and related documents. The review should involve internal and external stakeholders	As suggested in steps taken for recommendation #8, the EPC sub-committee objectives will focus around updates, exercises, and revisions as necessary. Sub-Committee to lead updates to Business Continuity Plan and Business Impact Analysis. External stakeholders have already been involved through the Sidney Fire Department's rollout of business continuity advice to the area's business community.	Staff	Chief Administrative Officer	Q3, 2018
❯ Updating the names and contact numbers included in its business continuity plan at least semi-annually or more frequently as needed	On a semi-annual basis, contacts will be reviewed in all emergency plan documents (ERRP, BCP, EOC files). To develop a maintenance schedule for twice a year.	Staff	Fire Department Administrative Assistant	Q2, 2018
❯ Reviewing its business impact analysis at least every three years, including consideration of risks associated with key external dependencies	Have contracted Smart Risk Control to update HRVA and the BIA.	Consultant Time	Chief Administrative Officer	Q4, 2018
BUSINESS CONTINUITY MANAGEMENT — TRAINING AND AWARENESS				
11. The Town of Sidney should enhance staff knowledge of business continuity planning by:				
❯ Developing a training plan to ensure staff are familiar with the requirements of business continuity	Have contracted Smart Risk Control to facilitate an exercise that will practise the Business Continuity Plan. This exercise is a scenario that mocks the Town hall building being uninhabitable for at least six weeks. This exercise will aid in devising a training plan for staff going forward based on the After Action Report.	Consultant Time, Staff Time	Chief Administrative Officer	Q4, 2018
❯ Taking steps to promote staff awareness of the business continuity management system and plan	Exercising the Business Continuity Plan, as referred to above, will start the process of engaging staff.	Staff Time	Chief Administrative Officer	Q4, 2018

AGLG RECOMMENDATION	STEPS TAKEN	RESOURCES NEEDED	RESPONSIBLE	TARGET DATE
BUSINESS CONTINUITY MANAGEMENT — EXERCISES AND TESTING				
12. The Town of Sidney should conduct business continuity exercises and testing by:				
❯ Developing specific policy requirements and a process for regular, progressively-scaled business continuity exercises and testing	To define key performance indicators, develop a performance maintenance plan and review, revisions, and exercise as required.	Staff Time	Chief Administrative Officer	Q1, 2019
❯ Considering simultaneous business continuity plan and emergency management plan exercises in a comprehensive scenario requiring an emergency operations centre activation	Have contracted Smart Risk Control to facilitate an exercise that will practice the Business Continuity Plan. This exercise is a scenario that mocks the Town hall building being uninhabitable for at least six weeks. The EOC will be activated and a formal debrief will occur.	Consultant Time, Staff Time	Chief Administrative Officer & Fire Chief	Q4, 2018
BUSINESS CONTINUITY MANAGEMENT — PERFORMANCE MANAGEMENT				
13. The Town of Sidney should improve data collection and analysis on its business continuity management and establish a performance measurement system that includes the monitoring of progress and regular reporting on results to Council and senior management	Have contracted Smart Risk Control to facilitate an exercise that will practice the Business Continuity Plan. This exercise will aid in devising a performance management plan. This plan will identify gaps in procedures and staff training. Results of this plan will be reviewed and regularly reported at EPC meetings and forwarded to Council.	Staff Time	Chief Administrative Officer	Q1, 2019

AGLG CONTACT INFORMATION

STAY CONNECTED WITH THE AGLG

The AGLG welcomes your feedback and comments. Contact us via email *info@aglg.ca,* our website at *www.aglg.ca* or follow us on Twitter *@BC_AGLG.*

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