SECTION 1: INTRODUCTION

In March 2021, B.A. Blackwell and Associates Ltd. was retained to assist the City of Coquitlam (Coquitlam) in developing a Community Wildfire Resiliency Plan, hereinafter referred to as the CWRP. This CWRP revisits areas assessed in Coquitlam's 2007 Community Wildfire Protection Plan (CWPP), but with a focus on integrating the updated Provincial Strategic Threat Analysis (PSTA), updated BC Wildfire Service (BCWS) fuel type mapping, and an improved wildfire threat analysis methodology, all with a focus on the seven FireSmart principles.

Recent wildfire disasters like those experienced in Slave Lake, Alberta (2011), Washington State (2014, 2015), Fort McMurray, Alberta (2016), BC (2017, 2018), and California (2017, 2018, 2020) all display the vulnerability of communities and the potential toll of wildfires on families, neighbourhoods, public health, and the economy of entire regions. These events, along with important advances in loss prevention programs, have spurred the need for greater consideration and due diligence with respect to fire risk in the wildland urban interface (WUI). CWRPs are an invaluable opportunity to proactively manage wildfire risk and increase community resilience to wildfire.

1.1 PLAN PURPOSE AND GOALS

The purpose of this CWRP is to identify and update the wildfire risk specific to the City of Coquitlam and the surrounding eligible WUI, to describe the potential consequences of wildfire to the community, and to examine options and strategies to reduce potential wildfire risks. This CWRP provides a reassessment of the level of wildfire risk to the City and provides a current and accurate understanding of the threats to human life, property, and critical infrastructure faced from wildfire. The goal of this CWRP is to provide the City with a framework to inform the implementation of specific actions and strategies to:

- 1) increase the efficacy of fire suppression and emergency response,
- 2) reduce potential impacts and losses to property and critical infrastructure from wildfire, and
- 3) reduce wildfire behavior threat within the community.

To help guide and accomplish the above strategies, this CWRP will provide Coquitlam with:

- 1) an updated assessment of wildfire risk to the community,
- 2) an updated assessment of values at risk and potential consequences from wildfire,
- 3) maps of fuel types and recommended areas for fuel treatments,
- 4) an updated assessment of emergency response capacity and community FireSmart status, and
- 5) options and strategies to reduce wildfire risk in the seven FireSmart disciplines: education, legislation and planning, development considerations, interagency cooperation, cross-training, emergency planning, and vegetation management.

¹ Wildland urban interface is defined as the presence of structures in locations in which conditions result in the potential for their ignition from flames and firebrands/embers of a wildland fire (National Fire Protection Association).

CWRPs are funded in BC by the Union of BC Municipalities (UBCM) under the Community Resiliency Investment (CRI) FireSmart Community Funding and Supports Program. As per funding requirements, this CWRP is completed according to the 2021 CRI template.

1.2 CWRP DEVELOPMENT SUMMARY

The planning for this CWRP was based on applying the City of Coquitlam's municipal boundaries as the project's area of interest (AOI). From this, the associated eligible wildland-urban interface, (referred to afterwards in this document as the WUI) was mapped to derive the plan's focus area. The WUI represents a one-kilometer buffer around areas with a structure density of 6+ structures / km² within the AOI. See Map 1: Coquitlam CWRP AOI and WUI for additional details.

The CWRP development process consisted of four general phases:

1. Consultation

Key players were assembled to form Coquitlam's Community FireSmart Resiliency Committee (CFRC). The CFRC for Coquitlam includes the key planners and responders involved in Coquitlam's local FireSmart initiatives, wildfire resiliency planning, and wildfire and emergency response management. The CFRC is further described in Section 5.4.

Meetings were planned to obtain information on wildfire risk mitigation initiatives currently in place or completed, review existing plans, policies, bylaws, and current resources, identify areas of concern and vulnerabilities, and to determine priorities and potential mitigation strategies. Members of the CFRC were consulted at the onset of the project planning phase via questionnaires and a virtual meeting, and on an ongoing basis throughout plan development. The CFRC was integral in the CWRP review process and approval.

Information sharing took place with First Nations identified through the consultation area database regarding the locations of potential fuel treatments and to identify any potential cultural values at risk requiring protection.

2. Review of Relevant Plans and Legislation

All municipal, regional, and provincial bylaws, policies, plans, and guidelines were reviewed, and sections within that are relevant to the CWRP are identified (Section 2).

3. Identification of Values at Risk and Wildfire Risk Assessment

The identified values at risk are described in Section 3.2 and concepts of wildfire threat and risk are elaborated on in Section 3.2.7. The wildfire threat to Coquitlam was assessed through a combination of the following approaches:

- Natural fire regime and ecology,
- Provincial Strategic Threat Analysis, and

Local wildfire threat assessment.

4. Developing an Action Plan

An effective wildfire risk reduction action plan (including leading and participating entities, a timeframe for action/completion, metric for success, and estimated cost and/or hours to complete) was developed considering a full range of activities relating to the following seven FireSmart disciplines:

- Education (Section 5.1)
- Legislation and Planning (Section 5.2)
- Development Considerations (Section 5.3)
- Interagency Cooperation (Section 5.4)
- Cross-training (Section 5.5)
- Emergency Planning (Section 5.6)
- Vegetation Management (Section 5.7)

The following next steps are a suggested route towards operationalizing the recommendations detailed in this CWRP:

- 1. The CFRC should continue to meet periodically, as needed to coordinate the fulfillment of this report's recommendations (consider annually or bi-annually, before or during the fire season per recommendation in Table 23).
 - a. Meetings could include some or all of the parties identified in Section 5.4.
- 2. The first meeting could be held in 2022. Consider identifying recommendations to allocate resources to and pursue funding for in the next UBCM CRI funding intake at this time.
 - a. A meeting schedule and a CFRC meeting chair for 2022-2024 could be established at this time.
 - b. Consider meeting well in advance of the UBCM CRI application deadline (typically early fall).
 - c. One party within the CFRC should be responsible for coordinating and completing CRI funding and compiling final reporting annually or as needed. One application can be sent in on behalf of the municipality each program year.
 - d. Continued meetings of the CFRC would be a suitable venue to identify if additional support is needed to fulfill the targeted recommendations.
 - i. Additional support might be required in order to coordinate activities that will bridge more than one funding year (i.e., prioritizing, prescribing and supervising implementation of vegetation management; coordinating plan and policy review) or that require more time and resources currently available to any one CFRC member (e.g., potentially some FireSmart education recommendations).
 - ii. Consultant support or a term contract salary could be incorporated into the UBCM CRI application accordingly.
- 3. In subsequent meetings, members from different departments could share information about actions taken to fulfill recommendations.

a. Documentation of the status of CWRP recommendations could be compiled and maintained alongside these meetings.

SECTION 2: RELATIONSHIP TO OTHER PLANS AND LEGISLATION

Wildfire can affect all aspects of a community. As a result, there are many plans that relate to this CWRP. The intent of this section is to review all municipal, regional, and provincial bylaws, policies, plans, and guidelines and identify any sections that are relevant to wildfire emergency planning and response.

2.1 LOCAL AUTHORITY EMERGENCY PLAN

Coquitlam's emergency preparedness and response is guided by higher level emergency management legislation such as the provincial Emergency Program Act.² The Emergency Program Act describes the various roles and administrative duties of the province and local governments with regards to emergency organization, the implementation of higher-level emergency plans, the processes of declaring a state of emergency, and coordinating post-disaster relief programs and assistance.

In 2016, the citywide Disaster Response Plan was published, which is authorized by the *Emergency Program Bylaw* (see Section 2.4), and provides municipal staff with guiding principles for emergency planning, response, and recovery. The Disaster Response Plan is broad in scope, and is supplemented by additional department emergency plans and hazard-specific plans. Emergency planning is further discussed in Section 5.6.

2.2 LINKAGES TO OTHER CWPPS / CWRPS

City of Coquitlam Community Wildfire Protection Plan (2007)³

In 2007, B.A. Blackwell & Associates completed a Community Wildfire Protection Plan for the City of Coquitlam. Most of the recommendations (21 of 28) made in the 2007 CWPP have been completed as the result of several key initiatives undertaken by the City. This CWRP recommends actions to expand and enhance these initiatives.

Key wildfire risk reduction initiatives (and location of follow-up discussion in this CWRP):

- Strengthening municipal policies and bylaws related to fire prevention (Section 5.2).
- Increasing communications about seasonal fire danger changes and fire risk. (Section 5.1)
- Increasing online communications about wildfire threat and mitigation strategies. (Section 5.1)
- Implementing a wildfire development permit area. (Section 5.3)

² British Columbia Provincial Government, 2020. Emergency Program Act. Retrieved from: https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/00_96111_01

³ City of Coquitlam (B.A. Blackwell & Associates). (2007). City of Coquitlam Community Wildfire Protection Plan.