## **AGENDA**

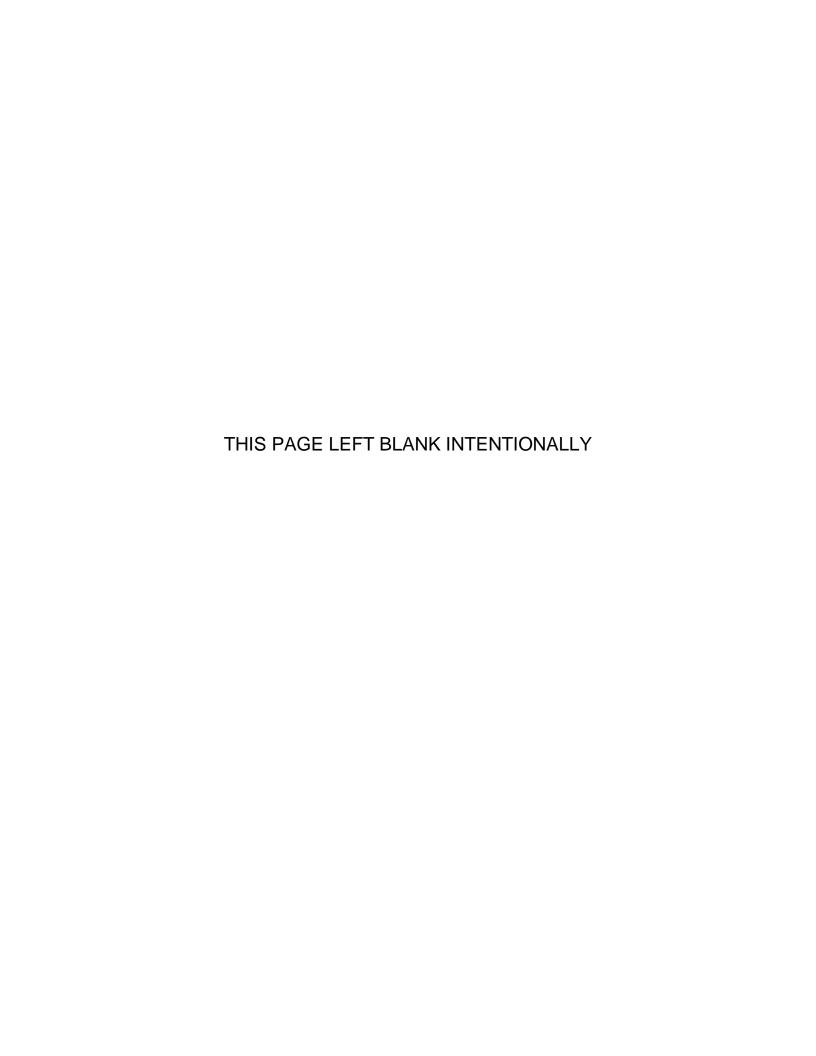
## COUNCIL WORKSHOP

Monday, June 20, 2016 6:00 p.m. Committee Room, Municipal Hall 355 West Queens Road, North Vancouver, BC

#### **Council Members:**

Mayor Richard Walton
Councillor Roger Bassam
Councillor Mathew Bond
Councillor Jim Hanson
Councillor Robin Hicks
Councillor Doug MacKay-Dunn
Councillor Lisa Muri





#### **District of North Vancouver**



355 West Queens Road, North Vancouver, BC, Canada V7N 4N5 604-990-2311 www.dnv.org

#### **COUNCIL WORKSHOP**

6:00 p.m.
Monday, June 20, 2016
Committee Room, Municipal Hall,
355 West Queens Road, North Vancouver

#### **AGENDA**

#### 1. ADOPTION OF THE AGENDA

#### 1.1. June 20, 2016 Council Workshop Agenda

Recommendation:

THAT the agenda for the June 20, 2016 Council Workshop be adopted as circulated, including the addition of any items listed in the agenda addendum.

#### 2. ADOPTION OF MINUTES

#### 3. REPORTS FROM COUNCIL OR STAFF

#### 3.1. Wildland-Urban Interface Fire Risk Management

p. 7-11

File No. 13.6770/Climate Change Adaptation

Recommendation:

THAT the June 8, 2016 report of the Section Manager – Public Safety entitled Wildland-Urban Interface Fire Risk Management be received for information.

#### 4. PUBLIC INPUT

(maximum of ten minutes total)

#### 5. ADJOURNMENT

Recommendation:

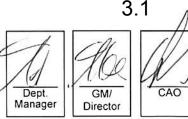
THAT the June 20, 2016 Council Workshop be adjourned.

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### **REPORTS**

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AGI	ENDA INFORMATION	
☐ Regular Meeting	Date:	
	Date: June 20, 2016	_ \ \ \dagger



# The District of North Vancouver REPORT TO COUNCIL

June 10, 2016 File: 13.6770

**AUTHOR**: Fiona Dercole

Section Manager, Public Safety

SUBJECT: Wildland-Urban Interface Fire Risk Management

#### REASON FOR REPORT:

To provide an update to Council on the status of implementing the recommendations in the Community Wildfire Protection Plan.

#### SUMMARY:

The District's Climate Change Adaptation Strategy identified wildfire as the top threat related to climate change - due to longer, drier and warmer summers. In addition to the direct damage caused by wildfires, steep terrain is very vulnerable to landslides and debris flows post-fire. Several District divisions, along with external stakeholders, have been working collaboratively to implement the recommendations in the 2007 Community Wildfire Protection Plan (CWPP). Substantial progress has been made in emergency planning, policy development, public communication initiatives and fuel treatment projects. 36 of the 38 recommendations are now complete, with the exception of the ongoing operational fuel treatment projects and the development of a post-fire rehabilitation plan. Staff will be applying to the Strategic Wildfire Prevention Program for a CWPP update in 2017.

#### BACKGROUND:

The District's CWPP was prepared by BA Blackwell & Associates in 2007. The plan contains an assessment of fuel types and assets exposed to wildfire hazard across the District, and a set of recommendations aimed at reducing wildfire risk to people, infrastructure and the environment, with the focus on areas along the wildland-urban interface (WUI) zone. The recommendations within the CWPP are organized into the following categories: communication and education, structure protection, training, emergency response, vegetation management and post-fire rehabilitation. In May 2007, District Council received the CWPP and directed Staff to develop an implementation plan. In June 2011 Council received an update on CWPP implementation progress.

#### **EXISTING POLICY:**

Tree Protection Bylaw 7671, 2012
Tree Work in the District Corporate Policy

Official Community Plan: Schedule B, Wildfire Hazard Development Permit Area, 2012

June 15, 2016 Page 2

#### ANALYSIS:

The District's Climate Change Adaptation Strategy identified that projected increases in the frequency and severity of wildfires as a result of longer, drier and warmer summers is a top threat to the District due to climate change. Invasive species are also anticipated to become more prevalent with climate change, which will decrease forest health and result in the forest being more susceptible to a rapidly spreading wildfire. Post-fire, steep terrain is highly vulnerable to landslides and debris flows due to increased runoff as a result of a lack of forest canopy.

The 2007 CWPP provided 38 recommendations for wildfire mitigation, preparedness, response and recovery. District Staff and external stakeholders have worked collaboratively to implement the recommendations in the following areas:

#### 1. Structure Protection

The Wildfire Development Permit Area (DPA) was adopted by Council in 2012 as part of Schedule B in the District's Official Community Plan. The Wildfire DPA includes a requirement for a qualified professional forester with a specialty in wildfire risk management to prepare a wildfire hazard report that makes recommendations about fire risk reduction measures related to construction practices, building materials, access/egress, defensible space, and vegetation management on private property. A post-construction follow up assessment by a qualified professional is also required. Since adoption of the bylaw, 113 homes in the Wildfire DPA have been constructed to be resilient to wildfire.

The District's water model is being analysed to identify hydrants and system components that are best suited to be utilized for wildfire response. The analysis is considering water supply, water delivery volumes/pressure, and pumping capacity. The water towers and pump stations are now more resilient because the surrounding areas have been treated.

#### 2. Vegetation (Fuel) Management

The CWPP identified 70 hectares (Ha) of high risk fuel types. Following the successful fuel management pilot project at Grousewoods and operational fuel management surrounding five District water towers and pump stations, 33 Ha have now been treated through cost-sharing opportunities with UBCM. An additional 17 Ha have been submitted for treatment in 2016-2017, pending UBCM approval. The fuel treatments are typically effective for 10-15 years before they need to be revisited.

The Strategic Wildfire Prevention program is funded by the Province of BC and administered by UBCM. Grants are available for wildfire mitigation projects. The cost-sharing agreement varies but the District has typically received approximately 70% funding for the fuel treatment projects. The fuel treatment work is aimed at establishing a contiguous shaded fuel break along the wildland-urban interface of the municipality.

#### 3. Emergency Response

In the event of a wildland urban interface fire, the District has planned for a cooperative and coordinated response with Metro Vancouver Watershed Protection (Metro), BC Coastal Fire and District of West Vancouver (DWV). Multiagency fire response command

structures have been discussed and agreed upon through a series of tabletop and full scale exercises. The goals of the most recent exercise in May 2016 included practising multi-agency unified command and testing communication on multiple radio frequencies and air to ground. Excellent working relationships between agencies are developed through planning for these exercises and through the North Shore Interface Fire working group.

Cross training occurs between DNVFRS, DWV, Metro and provincial crews to enable working seamlessly together toward a common goal. DNVFRS maintain a sprinkler protection unit (SPU), a wildland fire trailer and a Compressed Air Foam System (CAFS) response vehicle, available for mutual aid response if required. Additional CAFS response vehicles and SPUs are available in the region. Annual training for all DNVFRS personnel occurs in-house and is led by members that have a background in wildland firefighting.

District Park Rangers and Arborists are trained to S-100 standards and maintain some basic wildland fire response equipment such as water bladders, portable pumps, PPE. Parks crews would work in a support role to DNVFRS and are primarily utilized for mop up after the fire, and to provide wildfire prevention education in parks.

District-wide evacuation strategies are being refined. The North Shore is part of a local government working group reviewing provincial evacuation processes, to ensure consistent messaging, pictograms to assist with multi-lingual challenges, and the use of smartphones to conduct, track and monitor evacuation notification status. This technology was exercised during Operation Dry Lightning 2 in May for 650 DNV homes. The three North Shore municipalities have also identified potential access/egress locations, large vehicle turnarounds and key locations for traffic management and evacuee mustering.

#### Rehabilitation

Staff are in the early stages of developing the scope for a post-fire rehabilitation plan, based on priorities established in the *Forest Ecosystem Mapping and Framework for Ecosystem-based Management Report* (B.A. Blackwell, 2010) and a Master's thesis prepared by a Forestry student entitled *Post Fire Forest Restoration Strategy on the North Shore: An Exploration of the Issues* (Muhammed Israr, 2015). This outstanding action item is estimated to cost approximately \$20,000.

#### 5. Communication and Education

Ongoing communications and education promote awareness of the interface fire risk to residents and businesses. Wildfire hazard maps are available on GeoWeb in the Hazards application, along with public access to the CWPP and FireSmart educational information. Staff are available for media interviews and an educational video is currently under development.

In late 2016, the District will be applying to UBCM for a grant to update our CWPP to reflect the work that has been accomplished and re-evaluate fire risk due to climate change.

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#### Timing/Approval Process:

Completion of the full 70Ha of operational fuel treatments, post-fire rehabilitation plan and CWPP update are anticipated by the end of 2018, pending successful grant and budget approvals.

#### Concurrence:

Community Forester, Parks, District Fire & Rescue Services, Planning, Permits & Bylaws, Finance and North Shore Emergency Management concur with this report.

#### Financial Impacts:

Funds for the District's share of the 2016 project application for operational fuel treatments are included in the Natural Hazards 2016 budget. The remaining fuel treatment projects for 2017/2018 and the post-fire rehabilitation plan will be referred to the budget planning process. Long-range financial planning should consider provisions for an annual operational fuel treatment program to revisit areas 10-15 years post-treatment.

#### Liability/Risk:

Completion of recommendations outlined in the CWPP reduces liability by demonstrating an ongoing work plan toward wildfire risk reduction.

#### Social Policy Implications:

Understanding, communicating and managing wildfire risk is integrated with community values of recreation, environmental protection, public safety and sustainability.

#### **Environmental Impact**:

Operational fuel treatment projects demonstrate the ecosystem restoration benefits and wildfire risk reduction in forests. This will pay long-term dividends and reduce the possibility of environmental impacts associated with wildfire.

#### Public Input:

Community meetings are held prior to each operational fuel treatment project, and have been supported. Residents are generally aware of natural hazards associated with living in a mountainous forested environment and are prepared to share in the stewardship of our natural assets. The public was consulted on five different occasions via the OCP consultation process with regards to the Wildfire Development Permit Areas. Staff refined the DPAs based on community input before Council adopted Schedule B in 2012.

#### Conclusion:

Much work has been accomplished through collaboration, creativity, leveraging funding opportunities and community support. The District has demonstrated capacity to build resilience to protect people, infrastructure, environmental and recreational assets from wildfire, and is considered a leader in municipal government in mitigating and preparing for wildland-urban interface fires.

June 10, 2016

Respectfully submitted,

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Fiona Dercole Section Manager, Public Safety

	REVIEWED WITH:	
☐ Sustainable Community Dev.	☐ Clerk's Office	External Agencies:
☐ Development Services	☐ Communications	Library Board
☐ Utilities	☑ Finance	☐ NS Health
☐ Engineering Operations	☐ Fire Services	RCMP
Parks	□ ITS	☐ NVRC
□ Environment	☐ Solicitor	☐ Museum & Arch.
☐ Facilities	☐ GIS	Other:
☐ Human Resources	Real Estate	

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