Considerations for Practitioners in Light of Recent Fire Seasons

ONCE AGAIN 2015 was an eventful fire season with numerous high profile fires that inflicted damage on important environmental, social, and economic values in BC. In total over 1,800 fires burned over 300,000 hectares. Looking at the last fifteen years, this year was the 6th most serious fire season (2003, 3004, 2009, 2010, 2014, and 2015) where the province has experienced a heavy fire load, with large expenditures in fire suppression, and large areas burned.

Over the past two decades, we have started to better understand the long-term impacts of fire suppression on our forests. Specifically in dry ecosystems of the southern interior, we have seen increased densities (ingrowth) in forest stands and encroachment of trees into our grassland ecosystems. Increases in stand density have resulted in increased levels of insect attack and disease in these stands, creating additional fuel that is drier and more vulnerable to fire. At the broader landscape level, long-term fire suppression contributed to the Mountain Pine Beetle outbreak through an increase in the area of older lodgepole pine that were more susceptible to the beetle attack. Due to all of these factors, large areas of the province now require some form of ecosystem restoration.

As highlighted in the media, many of these fires were human caused, both from carelessness and accidental ignitions. Unfortunately many people have a poor understanding of the consequences of starting a wildfire, particularly in a dry summer like 2015, where the probability of an accidental wildfire was high. This summer's drought was even more significant in that it impacted many low risk fire areas in coastal BC, including northern Vancouver Island and the central coast.

> "As working biologists and people who spend portions of our summers in the field, it is important to understand the implications of fire risk (the probability and consequence of starting a fire), both from the perspective of our individual responsibilities and the responsibilities of those whom we represent in our day-to-day activities."

In British Columbia, wildfire management is governed by the *Wildfire Act* and Regulation. Aside from the general duty to report a wildfire, there are a number of specific responsibilities and liabilities that we should understand and be aware of, as professionals. When working with vehicles and power equipment in forested areas, it is good practice to have a hand pump tank and one hand tool for each individual working at a site. There are also specific requirements for fire extinguishers when using all-terrain vehicles (ATVs) and chain saws. Additionally, there are specific requirements during periods of high fire danger, where specified high risk activities are restricted. As professionals, it is important to be aware of these activities, and to inform either your employer and/or your clients if they are not complying with the *Act* or Regulation. For details on these activities please refer to the appropriate statutes:

1) http://www.bclaws.ca/civix/document/id/complete/statreg/04031_01

2) http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/11_38_2005

Working within previously burned areas poses many hazards, especially when an overstory of dead trees remains after a fire. Over time the roots and butts of the dead trees decay and these trees will fall over. During significant wind events, it is advisable to stay out of these types of areas altogether. If working in previously burned areas, know when a fire has affected the area and look for clues that indicate overstory susceptibility to blowdown. If individuals are uncertain or uncomfortable about the overstory hazard, they should engage a certified danger tree assessor to identify hazards. CM

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