

Living with Fire

My unique position in my family and community
addressing wildfire as a soon-to-be landscape designer.

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Wildfire has been on my mind ever since I was seven and saw the 2003 news coverage of the wildfire ravaging Kelowna. I remember my mom calling her friends to see if they were alright, the distinct burn of smoke in the air, and the nervous feeling looking up at the mountains as if they would suddenly erupt in flames.

I spent my summers growing up at my grandparents' cottage outside of Nelson, BC. Over the years, fire has become more frequent during the summer months. My father struggles with poor air quality, and it has made traveling during July and August difficult in recent years. Just ten years ago, July had no smoke; now, orange hazy skies are almost certain.

Two years ago, a fire came within a kilometer or two of the cottage. It would have likely reached us if it "had not been for a change in the wind that pushed it back up the mountain," according to my uncle. That incident has got me wondering about the future risk at the property. It is a few acres with an orchard of 100-year-old apple trees, a meadow, and a mixed forest of aspens, ponderosa pine, snowberry, and thimbleberry. A 15m field separates us from the forest that we hope would



Kelowna burns in 2003.

act as a firebreak. The cottage is embedded in the landscape, with many trees well within the “intermediate zone” where no trees should be, according to FireSmart BC. Fuel in the form of deadwood and brush litters the forest floor. My family has put some work into manually clearing it out, but it’s a major job that requires continuous upkeep.

When asked about what we should do to prepare for a fire, there has been a lack of consensus among our extended family who jointly share the property. My cousin’s partner is a manager with BC Wildfire and advised that we remove all trees around the cottages within 10 meters in accordance with FireSmart BC guidelines. However, our memories are embedded in those trees, and they define the space surrounding them. The two cedars in the yard are my two most favorite trees in the world. Removal of 10 meters of trees would be a dramatic change, but the alternative appears to be gambling with losing it all.

As I reflect on this challenge, I know my experience is not isolated. Millions of people globally are faced with the same looming dread and grief as they watch their landscapes, and sometimes their homes, succumb to flames. As a soon-to-be landscape designer, I find myself in a unique position within my family and in my community to respond to this challenge using my knowledge of hardscape, plants, and design.

FireSmart BC has outlined a set of design guidelines for adapting to fire, but it does little in helping develop a responsive design. According to the guide, a FireSmart property has a mix of hardscape, mown lawn, and fire-resistant perennials and shrubs between 1.5m and 10m around a building. Deciduous trees define the area beyond to 30m, and conifers are to be avoided or spaced 3m apart.¹

This one-size-fits-all approach does not account for the nuances of different sites and localities. BC is comprised of fourteen biogeoclimatic zones,

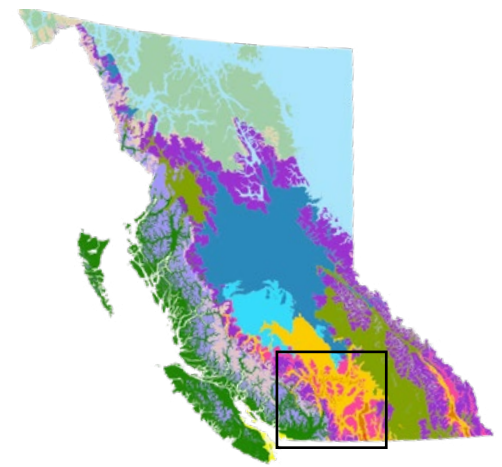
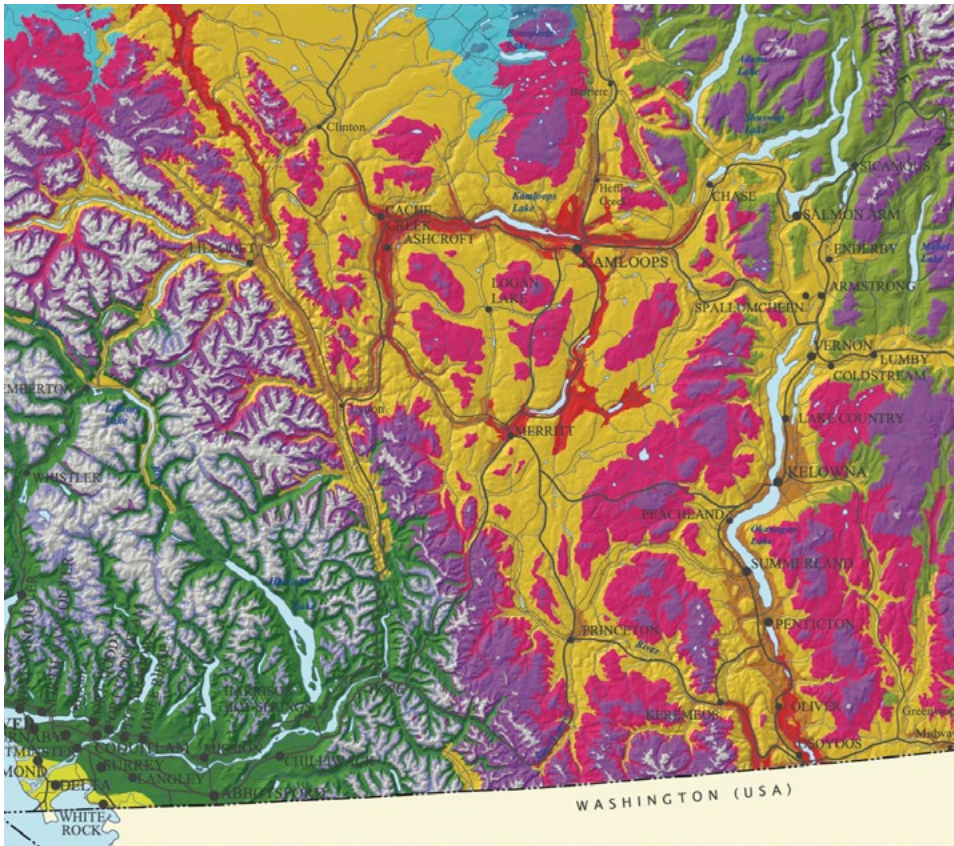


The kitchen garden and orchard at our cottage.



FireSmart BC recommends removing all trees within 10m.

1 “FireSmart BC Begins At Home Guide.”



Above:
Biogeoclimatic zones of BC.

Left:
Map of the fire-resistant
Bunchgrass (red) & Ponderosa
Pine (gold) biogeoclimatic
zones in Southern BC.

each with its own unique plants.² Ponderosa pine, for example, characterizes the fire-resistant ponderosa pine zone in the southern interior of BC, from Williams Lake to Osoyoos and in the East Kootenays from Invermere to the US border. Because of its resistance, the FireSmart BC rule against conifers may not apply. While FireSmart BC guidelines are valuable in promoting general fire-resilience, they do not explain the complexity of plant selection and how plants can be used as protectors.

The discourse around plants and their role in accelerating fire fails to recognize the impacts of *mesophication*. This phenomena occurs when fire suppression creates cooler, shadier conditions that favor fire-sensitive species, while fire-adapted plants decline. As a result, these new fire-sensitive ecosystems burn hotter and stronger than ones before and put communities at risk.³ This misunderstanding pushes a partially-correct

2 "About BEC and BGC Units."

3 Nowacki and Abrams, "The Demise of Fire and 'Mesophication' of Forests in the Eastern United States."

narrative. A more accurate statement would be that *invasive, fire-sensitive plants* are accelerating wildfire. Conversely, native, fire-adapted plant species protect communities from intense wildfire. Preventing forest fires is not possible, nor has it been a successful strategy, as demonstrated over the past century of fire bans. We must live with fire, and fire-tolerant ecosystems are the key to doing so, as proven by First Nations since time immemorial.

Understanding this distinction helps design professionals create landscapes that respond to their context, enhance local biodiversity, and are optimized for site conditions. By restoring native fire-dependent open lands—like Garry oak meadows on Vancouver Island and ponderosa pine-bunchgrass savannas in the southern interior—landscape architects can help reduce the severity of wildfires and keep communities safe. These strategies show how, when used wisely, plants are essential protectors of the environment, preventing the devastation that unmitigated fires cause.



Fire-resistant Bunchgrass ecosystem at Spotted Lake in Osoyoos.

Landscape architects are uniquely positioned to bridge the gap between the growing awareness of wildfire risk and the protection plants can provide. The Getty Museum is an excellent example of how fire-resistant planting can protect from wildfire risks. By transitioning its landscape to fire-resistant species like oak and sagebrush, the museum effectively created a buffer which helped prevent the Palisades Fire from reaching the building.⁴ Regionally, California's wildfire-prone landscapes have seen a shift toward utilizing native, drought-tolerant, fire-resistant plants like manzanita and sagebrush to create defensible spaces around homes and communities. By reducing the presence of invasive, fire-prone species such as eucalyptus and invasive grasses and replacing them with native plants, these communities are better equipped to handle the future wildfire seasons.

As landscape architects our plant knowledge and design skillset is well suited to confront this challenge. But, we also have a role to play

4 "Fighting Fire at the Getty Villa Museum."

in addressing the emotional component of this crisis. My family demonstrates how difficult these decisions can be to make. As designers we have the ability to make space for difficult conversations, listen, and then present pragmatic, beautiful solutions for the future.

I plan on having these conversations with my family to imagine how we can preserve the landscape we cherish while adapting to the realities of wildfire risks. In the future, I hope to incorporate my understanding of fire-adapted ecosystems into my design practice, offering solutions that balance environmental protection, aesthetic beauty, and the safety of those who live and work in fire-prone areas. I invite you to do the same. -SK

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