

An assessment of prescribed burns in National Parks and their impacts on landscape

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Abstract: Prescribed burning has quickly risen in popularity with land managers over the last few decades. It is hailed as a beneficial tool that will not only prevent wildfires, but also improve community safety, protect economic assets, and restore natural ecosystems. Government agencies, like Parks Canada, are therefore eagerly integrating prescribed burning into their management plans to establish a natural balance in our protected spaces. Despite the many factors that are considered before prescribing a burn, there is always a chance that the fire will get out of control or behave unpredictably. Fire experts tend to claim that despite this chance, the benefits of a prescribed burn far outweigh the risks. A broad array of studies have been done that cover the many elements that make up a landscape and evaluate the various methods by which prescribed burns were implemented. While many of these studies have shown promising ecosystem benefits related to prescribed burns, others highlight the gaps in our understanding regarding the many other resulting impacts throughout a landscape. Prescribed burns have helped to regenerate certain species but often at the cost of others. In areas where initial findings proved the benefits, later studies showed that unless burning continued the landscape returned to its pre-burned state. Understanding of the implications of prescribed burning is incomplete. As the frequency of extreme weather events increases and with climate change altering seasonal patterns, the risks and negative impacts associated with prescribed burns could worsen. We need to decide if the risks associated with prescribed burns are worth the potential catastrophic losses of our nation's last bastions with environmental protection.