Evaluating the Social Learning Processes Involved in Developing Community-Informed Wildfire Risk Reduction Strategies in the Prince Albert Forest Management Area

Authors : Carly Madge, Melanie Zurba, Ryan Bullock

Abstract : The Boreal Forest has experienced some of the most drastic climate change-induced temperature rises in Canada, with average winter temperatures increasing by 3°C since 1948. One of the main concerns of the province of Saskatchewan, and particularly wildfire managers, is the increased risk of wildfires due to climate change. With these concerns in mind Sakaw Askiy Management Inc., a forestry corporation located in Prince Albert, Saskatchewan with operations in the Boreal Forest biome, is developing wildfire risk reduction strategies that are supported by the shareholders of the corporation as well as the stakeholders of the Prince Albert Forest Management Area (which includes citizens, hunters, trappers, cottage owners, and outfitters). In the past, wildfire management strategies implemented through harvesting have been received with skepticism by some community members of Prince Albert. Engagement of the stakeholders of the Prince Albert Management Area through the development of the wildfire risk reduction strategies aims to reduce this skepticism and rebuild some of the trust that has been lost between industry and community. This research project works with the framework of social learning, which is defined as the learning that occurs when individuals come together to form a group with the purpose of understanding environmental challenges and determining appropriate responses to them. The project evaluates the social learning processes that occur through the development of the risk reduction strategies and how the learning has allowed Sakaw to work towards implementing the strategies into their forest harvesting plans. The incorporation of wildfire risk reduction strategies works to increase the adaptive capacity of Sakaw, which in this case refers to the ability to adjust to climate change, moderate potential damages, take advantage of opportunities, and cope with consequences. Using semi-structured interviews and wildfire workshop meetings shareholders and stakeholders shared their knowledge of wildfire, their main wildfire concerns, and changes they would like to see made in the Prince Albert Forest Management Area. Interviews and topics discussed in the workshops were inductively coded for themes related to learning, adaptive capacity, areas of concern, and preferred methods of wildfire risk reduction strategies. Analysis determined that some of the learning that has occurred has resulted through social interactions and the development of networks oriented towards wildfire and wildfire risk reduction strategies. Participants have learned new knowledge and skills regarding wildfire risk reduction. The formation of wildfire networks increases access to information on wildfire and the social capital (trust and strengthened relations) of wildfire personnel. Both factors can be attributed to increases in adaptive capacity. Interview results were shared with the General Manager of Sakaw, where the areas of concern and preferred strategies of wildfire risk reduction will be considered and accounted for in the implementation of new harvesting plans. This research also augments the growing conceptual and empirical evidence of the important role of learning and networks in regional wildfire risk management efforts.

Keywords : adaptive capacity, community-engagement, social learning, wildfire risk reduction