

REVIEW OF: “AN OVERVIEW OF METHODS FOR INCORPORATING WILDFIRES INTO FOREST PLANNING MODELS”

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Literature reviews are always very challenging and the fact that this one is based on a conference presentation inflicts even more constraints on its author. The author reviews the literature pertaining to how fire or the likelihood that part of a forested landscape might burn has been incorporated into forest management planning models.

The large number of publications focusing on the problem is testimony to its importance and the author has provided a good overview of the topic, subject of course, to time (presentation) and space (corresponding journal page) constraints.

The manuscript itself is reasonably well written and I have no serious concerns, but the author might wish to consider the following comments, the incorporation of some of which might improve the manuscript at some cost in terms of space. I leave it to the author and editor to judge how to balance those two conflicting factors.

Page 1 line 6

The term “spatially recognizing” is awkward jargon and I suggest that sentence be re-written.

Page 6, para 2, line 11

I realize most people believe “Further, losses from wildfire can destabilize local economies that are dependent on a stable supply of un-burned timber” but I am skeptical that this happens very often. If you want to leave this in I suggest you cite sources to document that.

Page 2, para 3 line 1:

I understand what you are trying to say but I am not sure the word “sophisticated” is appropriate. Perhaps “complex” or some other more appropriate word?

Methodological or Temporal?

The author has, for the most part, used a methodological rather than a temporal framework to organize his thoughts. I realize it is difficult to decide how to proceed but if you choose to organize methodologically, I suggest you consider dealing with specific methodologies in the order in which they first

appeared. For example, on page 2, para 4, line 2, the authors cite Reed and Errico (1986) and their use of LP. On page 4, para 5, line 2 they later discuss Van Wagner's (1979) seminal simulation work on the topic. The authors should consider discussing simulation methods before they discuss LP methods.

Page 2, para 2 I think the description of the Reed and Errico (1986) model can be simplified so it can be more easily understood by readers that have not already studied it. The phrase, "iterative state updating procedure", for example, is not very helpful or informative.

Stochastic Programming:

The discussion of stochastic programming needs to be re-organized and better written. Gassman (1989) was the first to use that approach and although he developed an SP model, he definitely did not develop the method. Moll and Chinneck (1992) may have had elements of stochastic programming in it – I am not sure. Boychuk and Martell (1996) was a stochastic programming model. The last sentence in para 1 on page 4 – "Ultimately, this too was designed as a Model II problem, yet termed 'stochastic programming.'" is not correct.

Page 6, para 2:

Early on - in the abstract – the author says he will focus on "forest planning" models which, for the most part, are timber harvest scheduling models. The TELSA, VDDT and especially the Keane et al. (2006) article (page 5, para 4, line 2) and other ecosystem simulation models are very much the "tip of the iceberg" of a vast number of ecological models that the author understandably chose not to cover in his limited time and space. Not sure if you should exclude these or point to some literature review of "fire focused" ecosystem models?