Interactive comment on “The cumulative effects of forest disturbance on streamflow in a large watershed in the central interior of British Columbia, Canada” by M. Zhang and X. Wei

Anonymous Referee #1

Received and published: 16 May 2012

General comments The paper presents an interesting examination of the hydrologic impacts of multiple forest stressors (logging, fire, insect infestation) on streamflow. The methods employed are sound, as is the interpretation of the study results. Nevertheless, the paper would benefit from thorough editing, and I have made suggested wording changes directly on the paper. I also think that the overall quality of the Figures could be improved (e.g. larger axis titles, more distinct lines and symbols).

Specific comments Page/line 2862/26 The study by Talbot and Plamondon (2002) was conducted in Quebec, not in British Columbia as stated in the text. 2863/14-18 Is there also a category for MPB and fire? 2865/24-25 “It has been recognized as the best temperature-based potential evaporation estimation method by many hydrologists” – is that the case for British Columbia? 2865/25 Equation 1 – how is \( w \) derived? 2866/16 The “CUSUM control chart” needs to be explained. 2870/19 Where is the Tocaintins River located? Figure 1 A scale for the Baker Creek watershed is needed. Figure 4 Legend – I suggest using “logging” rather than “Logging” throughout Figure 5 Why are there 2 separate Figures here? The top panel could be deleted, and the Figure caption would have to be worded accordingly.

Please also note the supplement to this comment:

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 9, 2855, 2012.