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Jon Jacobsen* (jacobsen@math.hmc.edu), CA, **Yu Jin**, , Canada, **Hannah McKenzie**, , Canada, and **Mark Lewis**, , Canada. *R_0 analysis of a spatiotemporal model for stream populations.* Preliminary report.

We consider a framework for studying population persistence in spatiotemporal models based on an infinite dimensional analogue of the basic reproductive number r_0 used in structured population models. We consider applications in the context of population persistence in streams. (Received March 05, 2011)