
USE OF A HUMAN DISTURBANCE MODEL TO ASSESS IMPACTS OF ANTHROPOGENIC DEVELOPMENT ON WILDLIFE

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In an effort towards developing consistent and reliable methods for addressing the impacts of subdivision development and other anthropogenic disturbances on wildlife, I developed a GIS model to predict the extent and magnitude of human-caused disturbance. The model estimates cumulative disturbance from point and linear sources, produces output at a fine scale to provide comparisons of different development configurations, and allows variability of input parameters depending on the species of interest. Output can be used for a standalone analysis or used in conjunction with habitat models to assess reductions in habitat quality or connectivity value resulting from human disturbance. Examples of model output are presented to illustrate how the model has been previously used in the planning and assessment processes and how it can also be used to assess impacts of energy development.