January 1, 2019

MES Thesis Fund Committee
The Evergreen State College
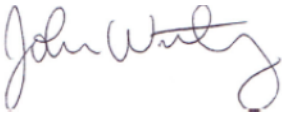Olympia, WA 98505

To the MES Thesis Fund Committee,

Please accept the attached materials as my application for a MES Thesis Fund award for 2019. I received credit for Case Studies and Thesis Design in Fall 2018. I have already started collecting data for the thesis work described in my thesis prospectus, and I expect to graduate in Spring 2019.

The goal of my thesis is to evaluate the effects of changes in climatic conditions and forest management in Washington State on forested habitat for dozens of wildlife species native to the Pacific Northwest. I am proposing to combine forest plot data I collected in June – October 2018 with an existing dataset from the U.S. Forest Service's Forest Inventory and Analysis Program, specifically 1,500 forest plots in Washington sampled during the period 2011-2017. I will build a model that associates specific forest management decisions (i.e. harvest and replanting) with market prices, biophysical characteristics of the plots, and climatic variables. The resulting model can be used to simulate changes on private forestlands under different climate change and carbon price scenarios from 2020-2100. I will then use published habitat associations of forest wildlife species with specific forest types (e.g. Douglas-fir, Ponderosa Pine, hardwoods) to calculate, for each species in their current range, the change in amounts of potential habitat based on the projected changes to forest types. The results from my thesis will help understand not just potential climate change effects (on forests and the wildlife that depend on them) but how carbon price policies might influence those outcomes. If some species are at greater risk of losing potential habitat, then wildlife managers can use this information in planning for climate change-related impacts.

I am requesting $350 to cover mileage expenses and supplies used in the field during data collection, as listed in the attached budget. Thank you for considering my application.

Yours,

John Withey

Member of the Faculty, The Evergreen State College