Please join us for our next Energy and Environmental Economics and Policy Seminar:

Wednesday, November 28th, 2018 12:00 – 1:15PM 157 Hosler

Local-Scale Contributions in Dynamic Top-Down Conservation Planning

KAILIN KROETZ RESOURCES FOR THE FUTURE

Paper Abstract

Within the systematic conservation planning literature, authors have paid significant attention to the negative conservation impacts of local land use decisions, while positive impacts (e.g. local referenda and private philanthropic donations that preserve land of conservation value) have received less consideration. We show theoretically and empirically that when there is spatial overlap between development threat and local land conservation, the development threat may be mitigated by land preservation efforts, and planners may achieve efficiency gains through accounting for both types of land use processes when selecting sites to conserve. Furthermore, gains are likely to be largest when the degree of local conservation efforts vary among higher-threat sites. Using county-level data from the United States on predicted future land development and predicted local referenda setting aside



land of conservation value, we use a sample average approximation approach to estimate that efficiency gains through accounting for both development threats and local conservation efforts can be greater than gains associated with incorporating cost heterogeneity into site selection. Furthermore, we show that the sites selected for conservation differ depending on whether these competing processes are accounted for.

A **light lunch** will be provided. We hope to see you all there!

Kate Zipp and Joel R. Landry EEEP Seminar Coordinators