



PHD DISSERTATION DEFENSE

UNINTENDED CONSEQUENCES OF ENVIRONMENTAL POLICIES: THE CASE OF URBAN GROWTH CONTROLS



MATTHEW FIENUP

PhD Candidate, Bren School

Wednesday, November 15, 2017, 9:00 AM
Bren Hall 2436 (Dean's Conference Room)

Faculty Advisors: Andrew Plantinga, Sarah Anderson **Committee Member:** Doug Steigerwald

ABSTRACT When environmental policies do not control decision making on all margins, they can have the unintended effect of increasing a targeted externality as well as creating additional externalities. The first two chapters of this dissertation examine urban growth boundaries (UGBs) in Ventura County, California, among the most stringent growth controls in the nation. I begin by estimating a Regression Discontinuity model of land values. I find that the average discontinuity in land values along Ventura UGBs is the largest among existing studies. Next, I examine the effect of UGBs on agricultural land use decisions. While UGBs control extensive margin decisions—limiting the conversion of non-urban land to developed uses—they do not control intensive margin decisions, such as the level of intensity of agricultural production. I develop a simple theoretical model to demonstrate that UGBs create incentives for landowners to adopt more capital-intensive agricultural uses. I develop a panel data set on land use in Ventura County and neighboring Santa Barbara County (which did not adopt UGBs). Difference-in-differences estimates suggest that UGBs had a significant effect on agricultural intensification rates, particularly in the neighborhood of growth boundaries. The final chapter of this dissertation examines the economic returns to groundwater management.

BIO Matthew is the Executive Director of the Center for Economic Research and Forecasting (CERF) at California Lutheran University. He teaches courses in Econometrics and Environmental Economics in the school's Masters of Quantitative Economics program. His specialties are applied econometric analysis, the economics of land use, and environmental markets. Matthew's research examines the unintended consequences of urban containment policies. He is also the Chair of the Fox Canyon Water Market Group and was recently chosen by Fox Canyon Groundwater Management Agency to serve as exchange administrator for an innovative, first of its kind water market pilot program. Matthew returned to school to pursue his PhD after running a small business in Ventura County for more than a decade. His other specialties include California Natural History, technical rock climbing and photography. Matthew graduated summa cum laude from the Brooks Institute of Photography and has spent more than 15 years working as a professional climbing guide.

- To join the "bren-alerts" mailing list and receive announcements about Bren School news and events, go to bren.ucsb.edu/services/computing/bren-alerts.htm
- To see a list of currently scheduled Bren events, visit bren.ucsb.edu/news/all_events.htm
- For more information or for assistance in accommodating a disability, please contact [Aleah Van Woert](mailto:Aleah.Van.Woert@ucsb.edu)
- To find out how to support the Bren School, please contact [Lotus Vermeer](mailto:Lotus.Vermeer@ucsb.edu)