
Anthony (Toby) O'Geen

Soil Resource Specialist in Cooperative Extension
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EDUCATION

- Ph.D., 2002. University of Idaho, Soil Science (Hydrology emphasis)
Dissertation: Assessment of hydrologic processes across multiple scales in soil/paleosol sequences using environmental tracers
- M.S., 1998. Washington State University, Soil Science (Entomology emphasis)
Thesis: Faunal paleoecology of late Quaternary paleosols on the Columbia Plateau
- B.S., 1994. California Polytechnic State University, Soil Science
Thesis: Effects of deep tillage on organic carbon content of forest soils

RESEARCH EXPERIENCE

- Soil Resource Specialist in Cooperative Extension (7/2011-present): UC Davis
- Associate Soil Resource Specialist in Cooperative Extension (7/2007-6/2011): UC Davis
- Assistant Soil Resource Specialist in Cooperative Extension (10/02 to 6/2007): UC Davis

TEACHING & OUTREACH EXPERIENCE

Instructor

- Soils land use and the environment SSC 118 UC Davis (Spring 2011 to present)
- Field Investigations in Soil Resources UC Davis (Summer 2004, 2009, & 2013)
- Soil Development and Classification University of Idaho (Spring 02)
- Introductory Soils Laboratory University of Idaho (Spring & Fall 99-01)
- Soil and Site Evaluation University of Idaho (99-02)

Websites & Apps

- D.E. Beaudette and A.T. O'Geen, SoilWeb: <http://casoilresource.lawr.ucdavis.edu/soilweb/>
- M. Walkinshaw, D.E. Beaudette and A.T. O'Geen, Soil Properties: <http://casoilresource.lawr.ucdavis.edu/ca-soil-properties/>
- M. Walkinshaw, D.E. Beaudette and A.T. O'Geen Series Extent Explorer: <http://casoilresource.lawr.ucdavis.edu/see/>
- M. Walkinshaw, M. Saal, A.T. O'Geen Soil Agricultural Groundwater Banking Index: <http://casoilresource.lawr.ucdavis.edu/sagbi/>

PROFESSIONAL SOCIETIES

- Soil Science Society of America
- Professional Soil Scientists Association of California
- California chapter American Society of Agronomy

PUBLICATIONS

- O'Geen, A.T., M.B.B. Saal, H. Dahlke, D. Doll, R. Elkins, A. Fulton, G. Fogg, T. Harter, J.W. Hopmans, C. Ingels, F. Niederholzer, S. Sandoval Solis, P. Verdegaal and M. Walkinshaw. 2015. Soil suitability index identifies potential areas for groundwater banking on agricultural lands. *California Agriculture* 69:75-84.
- Brauer, N., J.J. Maynard, R.A. Dahlgren, A.T. O'Geen, 2015. Fate of nitrate in seepage from a restored wetland receiving agricultural tailwater. *Ecological Engineering*. 81:207-217.

- O'Geen, A.T. and Bianchi, M. 2015. Using wetlands to remove microbial pollutants from farm discharge water. UC ANR publication # 8512.
- Roche, L.M., A.T. O'Geen, A. M. Latimer, D.J. Eastburn, 2014. Montane meadow hydrogeology, plant community and herbivore dynamics. *Ecosphere*. 5(12):150. <http://dx.doi.org/10.1890/ES14-00173.1>
- Maynard, J.J., R.A. Dahlgren and A.T. O'Geen, 2014. Autochthonous and allochthonous carbon cycling in a eutrophic flow-through wetland. *Wetlands*. 34:285-296.
- Beaudette, D.E., R.A. Dahlgren, A.T. O'Geen, 2013. Terrain-shape indices for modeling soil moisture dynamics. *Soil Science Society of America Journal*. 77:1696-1710.
- Liles, G.C., D.E. Beaudette, A.T. O'Geen and W.R. Horwath, 2013. Developing predictive soil C models for soils using quantitative color measurements. *Soil Science Society of America Journal*. 77:2173-2181.
- Beaudette, D.E., P. Roudier, A.T. O'Geen, 2013. Algorithms for quantitative pedology: A toolkit for soil scientists. *Computers and Geosciences*. 52:258-268.
- Chow, A.T., F.J Diaz, K.H. Wong, A.T. O'Geen, R.A. Dahlgren, P.K. Wong. 2013. Photochemical and bacterial transformations of disinfection by-product precursors in water. *JEQ*. 42:1589-1595.
- Hopmans, J.W., R.C. Bales, A.T. O'Geen, C.T. Hunsaker, D.E. Beaudette, P.C. Hartsough, A. Malazian, P. Kirchner and M. Meadows, 2013. Response to comment on "soil moisture response to snowmelt and rainfall in a Sierra Nevada mixed-conifer forest. *Vadose Zone Journal*. doi:10.2136/vzj2012.0004r
- Maynard, J.J., A.T. O'Geen, R.A. Dahlgren, 2012. Quantifying spatial variability and biogeochemical controls of ecosystem metabolism in a Eutrophic Flow-Through Wetland. *Ecological Engineering*. 47:221-236.
- O'Geen, A. T. 2012. Soil Water Dynamics. *Nature Education Knowledge* 3(6):12
- McCullough, A.T. O'Geen, M.L. Whiting, D.A. Sarr and K.W. Tate, 2012. Quantifying the consequences of conifer succession in aspen stands: decline in a biodiversity-supporting community. *Environmental Monitoring and Assessment*. 184: DOI 10.1007/s10661-012-2967-4.
- Diaz, F.J., A.T. O'Geen and R.A. Dahlgren, 2012. Agricultural pollutant removal by constructed wetlands: Implications for water management and design. *Agricultural Water Management*. 104:171-183.
- Swarowsky, A., R.A. Dahlgren, and A.T. O'Geen, 2012. Linking subsurface lateral flowpath activity with stream flow characteristics in a semiarid headwater catchment. *Soil Science Society of America Journal*. 76:532-547.
- Smukler, S. M., O'Geen, a. T., & Jackson, L. E. 2012. Assessment of best management practices for nutrient cycling: A case study on an organic farm in a Mediterranean-type climate. *Journal of Soil and Water Conservation*, 67(1), 16-31.
- Chow, A.T., A.T. O'Geen, R.A. Dahlgren, F.J. Diaz, K.H. Wong, and P.K. Wong, 2011. Reactivity of litter leachates from California oak woodlands in the formation of disinfection by-products. *Journal of Environmental Quality*. 40: 1607-1616.
- Swarowsky, A. R.A. Dahlgren, K.W. Tate, J.W. Hopmans, A.T. O'Geen, 2011. Catchment-scale soil water dynamics in a Mediterranean-type oak woodland. *Vadose Zone Journal* 10:1-16.
- Maynard, J.J., R.A. Dahlgren, A.T. O'Geen, 2011. Sulfide induced mobilization of wetland phosphorus depends strongly on redox and iron geochemistry. *Soil Sci. Soc. Am. J.* 75:1986-1999.
- Maynard, J.J., R.A. Dahlgren, A.T. O'Geen, 2011. Soil Carbon cycling and sequestration in a seasonally saturated wetland receiving agricultural runoff. *Biogeosciences*, 8: 3391-3406.

- Williams, J. N., A.D. Hollander, A. T. O'Geen, L. A. Thrupp, R. Hanifin, K. Steenwerth, and L. E. Jackson, 2011. Assessment of carbon in woody plants and soil across a vineyard-woodland landscape. *Carbon Balance and Management*. doi:10.1186/1750-0680-6-11.
- Volkmar, E.C., S.S. Henson, R.A. Dahlgren, A.T. O'Geen, E.E. Van Nieuwenhuysse, 2011. Diel patterns of algae and water quality constituents in the San Joaquin River, California, USA. *Chemical Geology* 282:56-67.
- Budd, R., A.T. O'Geen, K. S. Goh, S. Bondarenko, J. Gan. 2011. Removal mechanisms and fate of insecticides in constructed wetlands. *Chemosphere* 83:1581-1587.
- Bales, R.C., J.W. Hopmans, A.T. O'Geen, M. Meadows, P.C. Hartsough, P. Kirchner, C.T. Hunsaker and D. E. Beaudette. 2011. Soil moisture response to snowmelt and rainfall in a Sierra Nevada mixed-conifer fores. *Vadose Zone J.* 10:786-799.
- Gatzke, S.E., D.E. Beaudette, D.L. Ficklin, Y. Luo, A.T. O'Geen, M. Zhang. 2011. Aggregation strategies for SSURGO data: Effects on SWAT soil inputs and hydrologic outputs. *Soil Sci. Soc. Am. J.* 75:1908-1921.
- Jackson, L.E., S.M. Wheeler, A.D. Hollander, A.T. O'Geen, B.S. Orlove, J. Six, D.A. Sumner, F. Santos Martin, J.B. Kramer, W.R. Horwath, R.E. Howitt, and T.P. Tomich. 2011. Case study on potential agricultural responses to climate change in a California landscape. *Climatic Change* 109 (Suppl 1):S407-S427.
- Culman, S.W., A. Young Mathews, A.D. Hollander, H. Ferris, S. Sánchez Moreno, A.T. O'Geen, and L.E. Jackson. 2010. Biodiversity and soil ecosystem functions over a landscape gradient of agricultural intensification in California. *Landscape Ecology* 25:1333-1348.
- Stiles, C.A. R.D. Hammer, M.G. Johnson, R. Ferguson, J. Galbraith, T. O'Geen, J. Arriaga, J. Shaw, A. Falen, P. McDaniel, R. Miles. 2010. Validation testing of a portable kit for measuring an active soil carbon fraction. *Soil Sci. Soc. Am. J.* 75: doi:10.2136/sssaj2010-0350.
- Beaudette and O'Geen, 2010. An iphone application for on demand access to digital soil survey information. *Soil Science Society of America Journal* 74: doi: 10.2136/sssaj2010.0144N
- O'Geen, A.T., R. Budd, J. Gan, J.J. Maynard, S.J. Parikh, and R.A. Dahlgren, 2010. Mitigating nonpoint source pollution in agriculture with constructed and restored wetlands. *Advances in Agronomy* 108: 1-76.
- Diaz, F.J., A.T. O'Geen and R.A. Dahlgren, 2010. Efficacy of constructed wetlands for removal of bacterial contamination from agricultural return flows. *Agricultural Water Management*, 97: 1813-1821.
- Young-Mathews, A., S. W. Culman, S. Sánchez-Moreno, A.T. O'Geen, H. Ferris, A. D. Hollander and L.E. Jackson. 2010. Plant-soil biodiversity relationships and nutrient retention in agricultural riparian zones of the Sacramento Valley, CA *Agroforestry Systems*, 80: 41-60.
- Smukler, S.M., S. Sanchez-Moreno, S.J. Fonte, H. Ferris, K. Klonsky, A.T. O'Geen and K.M. Scow, K.L. Steenwerth, L.E. Jackson, 2010. Biodiversity and multiple ecosystem functions in an organic farmscape. *Agriculture, Ecosystems and Environment*, 139:80-97.
- Diaz, F., A.T. O'Geen, C. Rasmussen, R.A. Dahlgren. 2010. Pedogenesis along a thermal gradient in a geothermal region of the southern Cascades, California. *Geoderma*.154:495-507.
- Graham, R.C. and A.T. O'Geen, 2010. Soil mineralogy trends in California landscapes. *Geoderma*. 154:418-437.
- O'Geen, A.T., R.A. Dahlgren, A. Swarowsky, K.W. Tate, D.J. Lewis, and M.J. Singer, 2010. Research connects soil hydrology and stream water chemistry in California oak woodlands. *California Agriculture*. 64:78-84.

- O'Geen, A.T. M.J. Singer and W. Horwath, 2010. Soil and water conservation for California and the desert southwest: Past, present and future trends. *In*. Soil and Water Conservation Advances in the United States. (T.M. Zobeck and W.F. Schillinger (eds.) SSSA Special Publication 60. Madison, WI.
- Brauer, N, A.T. O'Geen and R.A. Dahlgren 2009. Temporal variability in water quality of agricultural tailwaters: Implications for water quality monitoring. *Agricultural Water Management*. 96:1001-1009.
- Beaudette, D., and A.T. O'Geen 2009. Soil-Web: An online soil survey for California, Arizona and Nevada. *Computers and Geosciences*. 35:2119-2128.
- Budd, R., A. O'Geen, K. Goh, S. Bondarenko, and J. Gan. 2009. Efficacy of constructed wetlands in pesticide removal from tailwaters in the Central Valley, California. *Environmental Science & Technology*, 43: 2925-2930.
- Chow, A. T., Seong-Tae Lee, A.T. O'Geen, T. Orozco, D. Beaudette, Po-Keung Wong, P.J. Hernes, K. W. Tate, and R. A. Dahlgren 2009. Litter contributions to dissolved organic matter and disinfection byproduct precursors in California oak woodland watersheds. *Journal of Environmental Quality*.38:2334-2343.
- Diaz, F.J., A.T. Chow, A.T. O'Geen, R.A. Dahlgren and P.K. Wong, 2009. Effect of constructed wetlands receiving agricultural return flows on disinfection byproduct precursors. *Water Research* 43:2750-2760.
- Frazell, J., R. Elkins, A.T. O'Geen, R.Reynolds, and J. Meyers, 2009. Facts about serpentine rock and soil containing asbestos in California. UC-ANR Publication no. 8399. 5 pp.
- Frazell, J., R. Elkins, A.T. O'Geen, R.Reynolds, and N. Gentry, 2009. Trees and shrubs for northern California serpentine landscapes. UC-ANR Publication no. 8400. pp. 6.
- Jackson, L. E., F. Santos-Martin, A. D.Hollander, W. R. Horwath, R. E. Howitt, J.B. Kramer, A. T. O'Geen, B. S. Orlove, J. W. Six, S. K. Sokolow, D. A. Sumner, T. P. Tomich, and S. M. Wheeler. 2009. Potential for adaptation to climate change in an agricultural landscape in the Central Valley of California. *Climate Action Team Biennial Report to the Governor and Legislature*. California Energy Commission.
- Maynard, J.J., A.T. O'Geen, and R.A. Dahlgren. 2009. Spatial relationships of phosphorus sorption in a seasonally saturated constructed wetland soil. *Soil Science Society of America Journal*, 73:1741-1753.
- Beaudette, D., and A.T. O'Geen 2008. Quantifying the aspect effect: An application of solar radiation modeling for soil survey. *Soil Science Society of America Journal*. 73:1345-1352.
- Maynard, J.J., A. T. O'Geen, and R. A. Dahlgren 2008. Bioavailability and fate of phosphorus in constructed wetlands receiving agricultural runoff in the San Joaquin Valley, California. *Journal of Environmental Quality* 38:360-372
- Chow, A. R.A. Dahlgren and A.T. O'Geen, 2008. Spatial and temporal variation of dissolved organic carbon in the Sacramento and San Joaquin River watersheds. *In River Pollution Research Progress*. Mattia N. Gallo and Marco H. Ferrari (eds.), NOVA publishers ISBN: 978-1-60456-643-7, Published Date: 2008, 3rd Quarter https://www.novapublishers.com/catalog/product_info.php?products_id=7277.
- O'Geen, A.T., G.S. Pettygrove, R.J. Southard, H. Minoshima, and P. Verdegaal, 2008. Soil-landscape model helps predict potassium supply in vineyards. *California Agriculture* 62 (4):195-201.
- O'Geen, A.T., S. Southard, R.J. Southard, 2008. A revised Storie Index for use with digital soils information. UC-ANR 8000 Series Publication #8335, pp 1-11.
- Diaz, F., A. Chow, A.T. O'Geen, R.A. Dahlgren and P.K. Wong, 2008. Restored wetlands as a source of disinfection byproduct precursors. *Environmental Science & Technology*, 42(16), 5992-5997.

- Sanchez-Moreno, S., S. Smukler, H. Ferris, A.T. O'Geen, L.E. Jackson, 2008. Nematode diversity, food web condition, and chemical and physical properties in different soil habitats of an organic farm. *Biology and Fertility of Soils*. 44:727-744.
- O'Geen, A.T., W.A. Hobson, R.A. Dahlgren, and D.B. Kelley. 2007. Soil properties and horizon stratigraphy in vernal pool landscapes of northern California. *Soil Science Society of America Journal*. 72:727-740.
- Jackson, L.E. M. Potthoff, K.L. Steenwerth, A.T. O'Geen, M.R. Stromberg, and K.M. Scow. 2007. Soil biology and carbon sequestration. Chapter 7. *In: Ecology and Management of California Grasslands* M.R. Stromberg, J.C. Corbin, and C. D'Antonio (eds.) University Press, Berkeley, CA.
- O'Geen, A.T., R.A. Dahlgren, and D. Sanchez-Mata, 2007. California soils and examples of ultramafic vegetation. *In Terrestrial Vegetation*. M. Barbour, T. Keeler-Wolf and A. Schoenherr (Eds.) University of California Press, Berkeley, CA.
- O'Geen, A.T., J.J. Maynard and R.A. Dahlgren, 2007. Efficacy of constructed wetlands to mitigate non-point source pollution from irrigation tailwaters in the San Joaquin Valley California, USA. *Water Science & Technology* 55:55-61
- O'Geen, A.T. 2007. Soils: Genesis and Geomorphology a Book Review. *Vadose Zone Journal* 6:265.
- O'Geen, A.T., T.L. Prichard, R. Elkins and G.S. Pettygrove, 2006. Orchard floor management to reduce erosion, UC-DANR Series publication # 8202.
- O'Geen, A.T. and L.J. Schwankl, 2006. Understanding soil erosion in irrigated agriculture UC-DANR 8000 Series publication # 8196.
- Grismer, M.E., A.T. O'Geen and D.J. Lewis, 2005. Sediment control with vegetative filter strips (VFSs), UC-DANR Series publication # 8195.
- O'Geen, A.T., R. Elkins, and D. J. Lewis, 2005. Erodibility of agricultural soils in Lake and Mendocino Counties UC-DANR Series publication #8194.
- O'Geen, A.T., and S.B. Southard, 2005. A revised Storie Index modeled in NASIS. *Soil Survey Horizons* 46 (3): 98-109.
- O'Geen, A.T., P.A. McDaniel, J. Boll and C.K. Keller, 2005. Paleosols as deep regolith: Implications for recharge in a Palouse climosequence. *Geoderma* 126:85-99.
- O'Geen, A.T., P.A. McDaniel, J. Boll, and E. Brooks, 2003. Hydrologic processes in valley soils of the eastern Palouse Basin. *Soil Science* 168:846-855.
- Murray, J., P.A. McDaniel and A.T. O'Geen, 2003. Development of a GIS database for hydrological studies of the Palouse Basin. *Soil Science* 168:759-768.
- O'Geen, A.T. McDaniel, P.A., and A.J. Busacca, 2002. Cicada burrows as indicators of buried soils in arid and semiarid regions of the Pacific Northwest. *S.S.S.A.J.* 66:1584-1586.
- O'Geen, A.T., J. Boll, and P.A. McDaniel, 2002. Chloride distributions as indicators of vadose zone stratigraphy in semiarid loess deposits. *Vadose Zone Journal* 1:150-157.
- O'Geen, A.T., and A.J. Busacca, 2001. Faunal burrows as indicators of paleo-vegetation in eastern Washington USA. *Palaeogeography, Palaeoclimatology, Palaeoecology* 169:23-37.

HONORS

- Outstanding Graduate Student, 2001. Gamma Sigma Delta Honor Society of Agriculture

- GPSA Teaching Excellence Award, 2000. University of Idaho, Moscow.
- GPSA Research Excellence Award, 2000. University of Idaho, Moscow.
- GPSA Teaching Excellence Award, 1998. Washington State University, Pullman.
- Citation of Excellence for Associate Editors, 2010. Soil Science Society of America
- Award of Excellence, 2012 Western Extension Directors' Association
- Cooperator Achievement Award, 2012. National Cooperative Soil Survey

UNIVERSITY & PROFESSIONAL SERVICE

Task Force to Revise Soil Taxonomy 2015-2018
 Vice Chair of the Department of Land, Air and Water Resources 2010-present
 Chair of the Soils and Biogeochemistry Graduate Group 2011-present
 Associate Editor for UC ANR Communication Services 2008-present
 Technical Editor for Soil Science Society of America Journal 2012-present
 Associate Editor for Soil Science Society of America Journal 2009-2012
 Chair; Western Region National Cooperative Soil Survey Research Needs Committee
 Chair; Land, Air and Water Resources Cooperative Extension Committee, UC Davis
 Co-Chair; National Cooperative Soil Survey Data Management Committee
 Co-Chair; National Cooperative Soil Survey Dynamic Soil Properties Committee
 Chair; Land, Air and Water Resources Outreach Committee, UC Davis
 Chair; Soil and Biogeochemistry Graduate Group Admissions Committee, UC Davis
 Member; National Cooperative Soil Survey Future Directions in Soil Survey Committee
 Member; National Cooperative Soil Survey Advisory Group to the Director of NRCS Soil Survey Division
 Member; Land, Air and Water Resources Strategic Plan-outreach Workgroup, UC Davis
 Member; Soils and Biogeochemistry Graduate Group Executive Committee, UC Davis
 Member; Land, Air and Water Resources Junior Faculty Strategic Planning Committee, UC Davis
 Member; College Planning Committee 2009-2010, UC Davis
 Member; Land, Air and Water Resources Executive Committee, UC Davis
 Member; Specialists Advisory Council to the Dean, UC Davis
 Member; UC-ANR Resource Allocation Committee for SFREC
 Editor; Land Air and Water Resources Newsletter

PROPOSALS RECEIVING FUNDING

O'Geen, A.T. A data Driven Nitrate Hazard leaching Index, 2014, CDFR FREP- \$250,000.

O'Geen, A.T. Soil climate database development and information delivery, 2014. USDA-NRCS \$75,000.

Bales et al., Southern Sierra Critical Zone, 2013, NSF \$5,000,000.

O'Geen, A.T.. Soil Survey Decision Support Tools for sustainable water resources and agricultural productivity, 2013 UC ANR \$600,000.

O'Geen, A.T. Advancing Soil Survey Delivery within the Cooperative Soil Survey 2011. USDA-NRCS \$100,000.

O'Geen, A.T. Soil Geomorphology Institute. 2010. USDA-NRCS \$36,000.

O'Geen A.T. Tate, K., and L. Roche. 2010. Testing Dynamic Soil Properties in California Rangelands USDA NRCS. \$40,000.

Tate, K., L. Roche, J. Derner, M. Lubell, V. Eviner, A. O'Geen, and M. George. 2010-2012. Prescribed Grazing to Sustain Livestock Production, Soil Quality, and Diversity in Rangeland Ecosystems. USDA Western Sustainable Agriculture Research and Education Program. \$197,268.

Steenwerth, K. and A.T. O'Geen 2010. \$500,000 California Department of Food and Agriculture.

Pettygrove, G.S., A.T. O'Geen and R.J. Southard. 2009. Soil-specific potassium management in the Lodi winegrape region Lodi Winegrape Commission \$69,649.

Tate, K.W., L.M. Roche, V. Eviner, A.T. O'Geen, J. Derner, M.N. Lubell, and M.R. George. 2009-2011. Prescribed Grazing to Restore Rangeland Soil Quality, Plant Diversity, Water Quality, and Agricultural Productivity. USDA Rangeland Research Program. \$483,488.

Tate, K.W. and A.T. O'Geen 2009. Integrating spatially dependent, temporally dynamic soil and vegetation properties into ecosystem service-based state and transition models to guide rangeland management. Kearney foundation of Soil Science \$90,000.

Tate, K., A.T. O'Geen, E.R. Atwill, D. Holstege and A. Craigmill. 2009. Transport and Mitigation of Beef Cattle Veterinary Pharmaceuticals and Hormones in Surface and Sub-surface Runoff from Grazing Lands. Agriculture and Food Research Initiative USDA CSREES. \$399,809

Harter, T. and A.T. O'Geen, 2008. Soil-Hydrology-Plant Structure and Functioning in a Vernal Pool Ecosystem: Spatiotemporal Analysis of Watershed to Pool Level Scale. Kearney foundation of Soil Science \$90,000.

Zhang, M. and A.T. O'Geen, 2008. Development of soil property aggregation techniques for spatially distributed watershed models. Kearney foundation of Soil Science \$90,000.

Gan, J. and A.T. O'Geen, 2008. Spatial and temporal considerations of runoff mitigation. Kearney foundation of Soil Science \$90,000.

O'Geen, A.T. 2008. A Multi-scale framework for extending the application of digital soil survey products. Kearney foundation of Soil Science \$90,000.

O'Geen, A.T. 2007. Collection and digitization of historical pedon data in California. USDA-NRCS \$31,000.

O'Geen, A.T., 2007. Benchmark soilscapes to predict effects of climate change in the western USA. USDA-CREES Regional Research Project. ~\$5,000 per year per state (9 states).

Pettygrove, G.S. Patrick H. Brown, A.T. O'Geen and R.J. Southard, 2007. Spatial variability of winegrape petiole nutrient content and relationship to vineyard soil properties: Implications for nutrient management and identification of vineyard management zones. American Viticulture Association. \$38,535.

O'Geen, 2007. Upscaling and downscaling soil survey: impacts of local and regional climate change on soil form and function. Kearney Foundation of Soil Science \$43,000.

Harter, T., P. Hernes, T. O'Geen 2007. Non-point Source Pollutant Transfer across Deep Vadose Zones: A Multiscale Investigation to Inform Regulatory Monitoring, Assessment, and Decision Making. Kearney Foundation of Soil Science. \$86,000.

Jackson, Louise, H. Ferris, A. T. O'Geen. 2007. Soil Nutrient Retention and Biodiversity of Wetland Margins in an Agricultural Landscape. Kearney Foundation of Soil Science. \$86,000.

Whiting, M.L., A.T. O'Geen, G.S. Pettygrove, D. Smart, R.J. Southard, S.L. Ustin. 2007 Mineralogy, Pedology and Remote Sensing: a multiscaled approach to potassium deficiency risk in California vineyards \$43,000.

Pettygrove, G.S. A.T. O'Geen and R.J. Southard, 2007. Soil-specific Potassium Management in the Lodi Winegrape Region. \$29,782.

O'Geen and Dahlgren, 2006. Monitoring constructed wetlands to improve water quality of irrigation return flows. State Water Resource Control Board \$500,000.

Pettygrove, G.S., A.T. O'Geen and R.J. Southard, 2005. Soil-specific Potassium Management in the Lodi Winegrape Region. \$30,950.

Gan J., A.T. O'Geen, 2006. Use of constructed wetlands to mitigate pesticide runoff. California Department of Pesticide Regulation \$123,144.

Dahlgren, R.A., K.W. Tate, A.T. O'Geen 2005 Efficacy of Wetlands to Enhance Water Quality of Tailwaters from Irrigated Pastures, UC-DANR Core Issues Grant, \$34,370.

O'Geen, A.T. 2005. Soil Properties that Influence Helicopter Brownout. US-Navy TENCAP, \$11,439.

O'Geen A.T., R.A. Dahlgren, P. Hernes 2005. Hydrologic Flowpaths in Oak Woodland Landscapes: Implications for Dissolved Organic Carbon and Nutrient Transport CALFED/State Water Resources Control Board, \$355,633.

O'Geen A.T. 2005. Development of a Field- and GIS-Based Soil Resource Inventory Program for National Parks. USDA-NRCS \$45,985.

O'Geen, A.T. 2004. Do Constructed Flow-Through Wetlands Improve Water Quality in the San Joaquin River? UC Center for Water Resources \$57,201.

O'Geen A.T. and Dahlgren, R.A., 2004. Carbon dynamics in constructed flow-through wetlands: A chronosequence of subaqueous soils Kearney Foundation of Soil Science, \$111,000.

Dahlgren, R.A. and A.T. O'Geen. 2004. Monitoring, Analyzing, and Reporting Food Resource Boundary Conditions for the Bay Delta Estuary US Bureau of Reclamation. \$110,000.

O'Geen, A.T., 2003. Real-time measurements of water quality parameters to assess dissolved oxygen TMDLs in the San Joaquin River. San Joaquin Valley Trust \$5,000.

Hernes, P.J. and O'Geen A.T., 2003. Investigations of Dissolved organic carbon transport through hydrologic flowpaths Kearney Foundation Grad Student fellowship \$59,838.

O'Geen, A.T. and P.A. McDaniel, 1999. Evaluation of recharge mechanisms and rates through loess in the Moscow-Pullman Basin using environmental tracers and soil stratigraphy. Idaho Water Resources Research Institute, \$18,551