

## Catherine M. H. Keske, Ph.D.

### EDUCATION

2006 Doctor of Philosophy, Agricultural and Resource Economics, Colorado State University  
2003 Master of Science, Mineral Economics, Colorado School of Mines  
1994 Master of Science, Hearing and Speech Sciences, Vanderbilt University  
1992 Bachelor of Science, Communication Disorders, magna cum laude, Bowling Green State University

### ACADEMIC/RESEARCH POSITIONS

2014-present Memorial University of Newfoundland, Grenfell Campus  
Associate Professor, Division of Social Sciences and Boreal Ecosystem Research Institute (BERI)

2011-present University of Colorado-Boulder  
Senior Research Scientist and Affiliate, Institute of Arctic and Alpine Research (INSTAAR)

2008-present Denver University Sturm School of Law, Adjunct Professor of Natural Resource Economics

2004-2012 Colorado State University  
2012 Associate Professor, Special Appointment, Dept. of Soil and Crop Sciences  
2006-2012 Assistant Professor, Special Appointment, Dept. of Soil and Crop Sciences  
2004-2006 Graduate Research Assistant, Dept. of Agricultural and Resource Economics

2003-2006 Adjunct Economics Professor  
Colorado School of Mines, University of Northern Colorado, Red Rocks Community College

### INDUSTRY AND GOVERNMENT POSITIONS

2006-present Natural Elements Economic Consulting, Fort Collins, CO  
1996-2001 Great Nordic Companies, Minnetonka, MN  
National Manager of Technical Training & Southwest Area Business Manager  
1994-1995 Clinical Audiologist, Nashville, TN Veteran's Administration Hospital

### PUBLICATION AND GRANT SUMMARY (August 2014)

- Refereed journal articles, either published or accepted and in press: 31
- Refereed, published books and book chapters: 15
- Refereed, published technical and extension reports: 48
- Non-refereed, published scientific, technical, and outreach bulletins: 71
- Externally funded grants:
  - More than \$11,000,000 as PI or Co-PI, 2005-2014
  - More than \$27,000,000 as Collaborator/Senior Personnel, 2005-2014
  - 34 Total (PI: 6; Co-PI: 15; Collaborator/Senior Personnel: 3)
- PI/co-PI of funded workgroup, workshop, and mini-grants (eg. NSF, university internal): 11

### PUBLISHED WORKS

#### **Refereed Journal Articles:**

31) Hou, Lingling, D.L. Hoag, and **C.M.H. Keske**. Shadow pricing abatement costs of soil degradation in the Loess Plateau of China. *Journal of Environmental Management*, conditionally accepted for electronic publication in 2014.

30) Hou, Lingling, D.L. Hoag, **C.M.H. Keske**, and Changhe Lu, 2014, Sustainable value of degraded soils in China's Loess Plateau: An updated approach. *Ecological Economics* 97, pp. 20-27.

29) **Keske, C.M.H.**, and A. Mayer, 2014, Visitor willingness to pay U.S. Forest Service recreation fees in New West rural mountain economies. *Economic Development Quarterly (EDQ)* Special Edition, 28(1), pp. 87-100.

- 28) **Keske, C.M.H.**, D.L. Hoag, A. Brandess, and J. Johnson, 2013, Is it economically feasible for farmers to grow their own fuel? A study of *Camelina sativa* produced in the western United States as an on-farm biofuel. *Biomass and Bioenergy*, 54, pp. 89-99.
- 27) **Keske, C.M.H.**, G. Lohman, J. Loomis, 2013, Do respondents report willingness to pay on a per person or per group basis? A mountain recreation example. *Tourism Economics*, 19(1), pp. 133-146.
- 26) Field, J., **C.M.H. Keske**, G. Lohman Birch, M. DeFoort, M.F. Cotrufo, 2013, Distributed bioenergy and biochar co-production: A regionally-specific case study of environmental benefits and economic impacts. *Global Change Biology (GCB) Bioenergy* Special Edition on Bioenergy, 5(1), pp. 177-191.
- 25) Cropper, E., D.M. McLeod, C.T. Bastian, **C.M.H. Keske**, D.L. Hoag, J.E. Cross, 2012, Factors affecting land trusts' demand for conservation easements. *Journal of Regional Analysis and Policy* Special Issue on Market-Based Environmental Management, 42(2), pp. 88-103.
- 24) **Keske, C.M.H.**, G. Lohman, 2012, Biochar: An emerging market solution for legacy mine reclamation and the environment. *Appalachian Natural Resources Law Journal*, 6(1), pp. 1-14.
- 23) **Keske, C.M.H.**, 2012, Anaerobic Digestion Technology: How agricultural producers—and the environment—might profit from nuisance lawsuits. *Natural Resources Journal*, 52(2), pp. 315-336.
- 22) McGaffin, G., D.M. McLeod, C.T. Bastian, **C.M. Keske Hoag**, D.L. Hoag, 2012, Landowner preferences for conservation easements: Responses from two intermountain states. *Journal of Farm Managers and Rural Appraisers*, 75(1), pp. 98-111.
- 21) **Keske, C.M.H.**, S. Evans, T. Iverson, 2012, Total cost electricity pricing: A market solution for increasingly rigorous environmental standards. *The Electricity Journal*, 25(2), pp. 7-15.
- 20) Loomis, J.B. and **C.M.H. Keske**, 2012, Did the great recession reduce visitor spending and willingness to pay for nature-based recreation? Evidence from 2006 and 2009, *Contemporary Economic Policy*, 30(2), pp. 238-246.
- 19) **Keske, C.M.H.**, 2011, Costs of environmental and performance attributes of the Colorado electricity sector. *The Electricity Journal*, 24(9), pp. 75-83.
- 18) **Keske, C.M.H.**, D. Hoag, and C.T. Bastian, 2011, The effect of landowner amenity rents in conservation easement policies. *Environmental Economics Journal*, 2(3), pp. 123-130.
- 17) **Keske, C.M.H.**, 2011, How lawsuits could ignite an energy market: The case of anaerobic digestion. *Environmental Law Reporter*, 41, pp. 11094-11100.
- 16) Hoag, D.L.K., **C.M.H. Keske** and R.L. Goldbach, 2011, Risk individuality in crisis planning: The case of gender in American agriculture. *Journal of Risk Planning and Crisis Response*, 1(1), pp. 21-28.
- 15) **Keske, C.M.H.**, D.L. Hoag, D.M. McLeod, C.T. Bastian, M.G. Lacy, 2011, Using mixed methods research in environmental economics: The case of conservation easements, *International Journal of Mixed Methods for Applied Business and Policy Research*, 1(1), pp. 16-28.
- 14) Hoag, D.L.K., R. Boone, and **C.M.H. Keske**, 2011, The cost for agriculture to coexist with wildlife in Colorado, *Human Dimensions of Wildlife*, 16(5), pp. 319-329.
- 13) **Keske, C.M.H.**, 2011, How to value environmental and non-market goods: A guide for legal professionals, *Denver Journal of International Law and Policy*, 39(3), pp. 423-435.
- 12) Cross, J. E., **C.M.H. Keske**, M.G. Lacy, D.L.K. Hoag, and C.T. Bastian, 2011, Adoption of conservation easements

among agricultural landowners in Colorado and Wyoming: The role of economic dependence and sense of place, *Landscape and Urban Planning*, 101(1), pp. 75-83.

11) Miller, A., C.T. Bastian, D.M. McLeod, **C.M. Keske**, and D.L. Hoag, 2011, Factors impacting agricultural landowners' willingness to enter into conservation easements: A case study, *Society and Natural Resources: An International Journal*, 24(1), pp. 65-74.

10) Laitos, J.G. and **C.M. Keske**, 2010, The right of non-use, *Journal of Environmental Law and Litigation (JELL)*, 25(2), pp. 303-384.

9) **Keske, C.M.H.** and L.S. Smutko, 2010, Consulting communities: Using audience response system technology (ARS) to assess community preferences for sustainable recreation and tourism development, *Journal of Sustainable Tourism*, 18(8), pp. 951-970.

8) **Keske, C.M.**, D.L. Hoag, and C.T. Bastian, 2009, Economic efficiency in emerging markets: The case of conservation easements, *Western Economics Forum*, 8(1), pp. 7-17.

7) Loomis, J.B. and **C.M. Keske**, 2009, The economic value of novel means of ascending high mountain peaks: A travel cost demand model of Pikes Peak cog railway riders, automobile users and hikers, *Tourism Economics*, 15(2), pp. 426-436.

6) Loomis, J.B. and **C.M. Keske**, 2009, Mountain substitutability and peak load pricing of high alpine peaks as a management tool to reduce environmental damage: A contingent valuation study, *Journal of Environmental Management*, 90(5), pp. 1751-1760.

5) **Keske, C.M.** and J.B. Loomis, 2008, Regional economic contribution and net economic values of opening access to three Colorado Fourteeners, *Tourism Economics*, 14(2), pp. 249-262.

4) **Keske, C.M.**, and J.B. Loomis, 2007, High economic values from high peaks of the West. *Western Economics Forum*, 6(1), pp. 34-41.

3) **Keske, C.M.** and D.L. Hoag, 2006, A market perspective: a research group of economists asks, what are land trusts trying to preserve? *Exchange: The National Journal of Land Conservation*, 25, pp. 24-27.

2) Hoag, D.L., C.T. Bastian, **C.M. Keske**, D.M. McLeod, and A. Marshall, 2005, Evolving conservation easement markets in the West, *Western Economics Forum*, 4(1), pp. 7-14.

1) Hoemann, H.W. and **C.M. Keske**, 1995, Proactive interference and language change in hearing adult students of American Sign Language, *Sign Language Studies*, 24, pp. 45-62.

#### **Refereed Extension/Agricultural Experiment Station Publications:**

**Keske, C.M.H.**, Pearson, C., Hoag, D.L., Brandess, A. 2014. Western Colorado Perennial Grass and Biomass Budget Generator. Agricultural Experiment Station Report 14-03.

Bauder, T., **Keske, C.M.H.**, and Wardle, E. 2014. Colorado Nutrient Management Practices: A Summary of Adoption and Costs. Colorado Agricultural Experiment Station Technical Report 13-10. Available at: <http://webdoc.agsci.colostate.edu/aes/AES/pubs/pdf/tr13-10.pdf>

McGaffin, G., McLeod, D.M., Bastian, C.T., **Keske, C.M.**, and Hoag, D.L. 2013. Wyoming Landowners' Characteristics and Preferences Regarding Conservation Easements: Results from a Survey. B-1241.

**Keske, C.M.H.**, G. Lohman Birch, and M.F. Cotrufo. 2012. Biochar in Colorado. Colorado State University Agricultural Extension Bulletin 0.509.

**Keske, C.M.H.** 2012. Determining the Economic Feasibility of Anaerobic Digestion in Colorado: Guidelines for Animal Farm Producers. Colorado State University Agricultural Extension Bulletin 1.229.

Cropper, E.D., C.T. Bastian, D.M. McLeod, **C.M. Keske**, and D.L. Hoag. 2011. Understanding Land Trusts and Factors Impacting Their Demand for Conservation Easements: Survey Results from the Intermountain West. University of Wyoming Extension Bulletin, B-1225.

**Keske, C.** 2011. Determine Economic Feasibility of Anaerobic Digester, In: Technical and Economic Feasibility of Anaerobic Digestion: (Sybil Sharvelle and Catherine Keske, Eds.), Montana State University Extension. URL: <http://www.e3a4u.info/>  
<http://www.e3a4u.info/content.cfm?page=AnaerobicDigesters>

**Keske, C.M.**, S. Gripne, and L. Sherrod. 2008. "Update on Conservation Easements: What Every Colorado Landowner Should Know." CSU Technical Extension Bulletin. March 2008. XCM-227

#### **Books:**

Laitos, J.G., 2012, with Catherine Keske as contributing author in *The Right of Non-Use* (Jan Laitos, Ed.), Oxford University Press. ISBN: 978-0195386066.

Lohman, G., **Keske, C.M.H.**, and E.F. Kelly, 2011, *Environmental Impacts from Recreation on Colorado Fourteeners*. Lambert Academic Publishing, Saarbrucken, Germany. ISBN: 978-3-844-388091

**Keske, C.M.**, 2008, *Rents, Efficiency, and Incomplete Markets: The Emerging Market for Private Land Preservation and Conservation Easements*, VDM, Verlag Dr. Müller Aktiengesellschaft & Co. Publishers. ISBN: 978-3-639-06693-7

#### **Refereed Chapters in Books:**

Pearson, C.H., Larson, S.R., **Keske, C.M.H.**, Jensen, K.B., written and forthcoming in 2014, Chapter 12, Native Grasses for Biomass Production at High Elevations, In *Industrial Crops Breeding for Bioenergy and Bioproducts* (V.M.V. Cruz and D.A. Dierig, Eds.), Springer.

Laitos, J.G. and **C.M. Keske**, 2012, Part II, Chapters 2-7, Social Economic Study of Resource Use and Non-Use, In *The Right of Non-Use* (Jan Laitos, Ed.), Oxford University Press, pp. 7-72. ISBN: 978-0195386066

**Keske, C.M.H.**, 2010, High Mountain Ecosystems: How Much Love Can They Sustain? In *Environmental Management* (Santosh Sarkar, Ed.), Sciyo Publishers, pp. 189-216. ISBN: 978-953-7619

Hoag, D.L., and **Keske, C.M.**, 2010, Determine Risk Preferences, In *Applied Risk Management in Agriculture* (Dana Hoag, Ed.), Taylor and Francis Group, pp. 91-108. ISBN: 978-1439809730

**Keske, C.M.**, Hoag, D.L., Fathelrahman, E., 2010, Determining the Likelihood of Outcomes, In *Applied Risk Management in Agriculture* (Dana Hoag, Ed.), Taylor and Francis Group, pp. 191-218. ISBN: 978-1439809730

Sprague, A., and **Keske, C.M.**, 2010, A Case Study of EWS Farms, In *Applied Risk Management in Agriculture* (Dana Hoag, Ed.), Taylor and Francis Group, pp. 19-38. ISBN: 978-1439809730

**Keske, C.M.**, 2007, Economic Growth and Living Standards, In *The Economics of Business* (Paul McDonnold, Ed.), Weston Distance Learning, Inc., pp. 419-452. ISBN: 040BS140TB01A-67

**Keske, C.M.**, 2007, Economic Fluctuation and Stability, In *The Economics of Business* (Paul McDonnold, Ed.), Weston Distance Learning, Inc., pp. 453-484. ISBN: 040BS140TB01A-67

Hoag, D.L., and **Keske, C.M.**, 2006, Food Safety Overview. Issues: Understanding Controversy and Society, In ABC-

CLIO Electronic Publications. <http://issues.abc-clio.com/Authentication/LogOn?returnUrl=%2FHome>. ISBN: 978-1-598-84047-6.

**Keske, C.M.**, and Hoag, D.L., 2006, Urban Sprawl Overview. Issues: Understanding Controversy and Society, In ABC-CLIO Electronic Publications. <http://issues.abc-clio.com/Authentication/LogOn?returnUrl=%2FHome> ISBN: 978-1-598-84047-6.

**Keske, C.M.**, and Hoag, D.L., 2006, Water Quality and Availability Overview. Issues: Understanding Controversy and Society, In ABC-CLIO Electronic Publications. <http://issues.abc-clio.com/Authentication/LogOn?returnUrl=%2FHome> ISBN: 978-1-598-84047-6.

Hoag, D.L., **Keske, C.M.**, Ascough, J., Koontz, L., 2005, Decision Making with Environmental Indices, In *New Trends in Ecology Research* (A.R. Burk, Ed.), Nova Publishers, pp. 159-182. ISBN: 1-59454-379-8

### **Refereed Technical Papers, Proceedings, and Reports:**

Pearson, C.H., **Keske, C.M.H.**, Follett, R., Halvorson, A., Larson, S., and Brandess, A. Developing Low-Input, High-Biomass, Perennial Cropping Systems for Advanced Biofuels in the Intermountain West. *Sun Grant Technical Paper*, Volume 2, Chapter 2, Section 2.8. October 6, 2012. <http://sungrant.tennessee.edu/NatConference/ConferenceProceedings/ENERGY+CROP+PRODUCTION.htm>

**Keske, C.M.H.**, A. Brandess, D. Hoag, and C. Pearson, The Economic Feasibility of Bio-Butanol on Marginal Lands in Western Colorado poster presentation at the Agricultural and Applied Economics Association (AAEA) meetings, August 13, 2012. Seattle, Washington. Refereed poster available on-line: <http://ageconsearch.umn.edu/bitstream/124047/1/AAEA%20POSTER%20664%20UPDATED.pdf>

Grunau, L., M. Fink, K. Decker, D. Anderson, G. Smith, **C.M.H. Keske**, E. Carlson, J. Goldstein, and J. Lemly, SHRP C21 Pilot Test the Ecological Approaches to Environmental Protection Developed in Capacity Research Projects C06A and C06B. Submitted to National Science Foundation Transportation and Research Board. September 6, 2012.

**Keske, C.M.H.**, T. Bauder, and A. Irrer, Colorado Nutrient Management Practices 1997-2011: Costs and Technological Advances. Submitted to the Colorado Department of Public Health and the Environment. October 31, 2011. Presented March 13, 2012.

**Keske, C.M.H.**, T. Iverson, S. Evans, and G. Graff, Designing a Technology-Neutral, Benefit Pricing Policy for the Electric Power Sector in Colorado. Refereed technical report submitted to the Colorado Governor's Energy Office, December 10, 2010.

Loomis, J.B., **C.M. Keske**, and G. Lohman, Did the Great Recession Reduce Visitor Expenditures? Evidence From 2006-2009. American Agricultural Economics Annual Meetings, Denver, Colorado. Refereed poster available on-line: <http://ageconsearch.umn.edu/bitstream/60825/2/Loomis%20AAEA%2010267%20Great%20Recession%2014er%20poster.pdf>

Lohman, G., **C.M.H. Keske**, and J.B. Loomis, Verbiage Matters: Do Respondents Answer Willingness to Pay Dichotomous Choice Questions on a Per Person or Per Group Basis? American Agricultural Economics Annual Meetings, Denver, Colorado. Refereed poster available on-line: <http://ideas.repec.org/p/ags/aaea10/60679.html>

**Keske, C.M.**, Economic Feasibility Study of Colorado Anaerobic Digester Projects. Refereed technical report submitted to the Colorado Governor's Energy Office. August 28, 2009. Project 09-205.

**Keske, C.M.**, S. Smutko, C. Doyle, 2009, Using Audience Response Systems to Measure Stakeholder Preferences in Economies Transitioning from Extraction to Recreation, In: *Journal of Agricultural and Resource Economics* (DeeVon Bailey, Ed.), 34(3), pp. 555. Refereed meeting abstract. ISSN: 1068-5502.

Laitos, J., and **C.M. Keske**, 2009, The Right of Non-Use: Providing Legal Rights to a Resource, In: Journal of Agricultural and Resource Economics (DeeVon Bailey, Ed.), 34(3), pp. 555. Refereed meeting abstract. ISSN: 1068-5502.

Bastian, C.T., A. Miller, D. McLeod, **C.M. Keske** and D.L. Hoag, Determinants of Agricultural Landowners' Willingness to Supply Open Space Through Conservation Easements, American Agricultural Economics Association (AAEA)/ACCI Joint Annual Meeting, Orlando, Florida. July 29, 2008. Refereed paper published in proceedings from the annual meeting. File URL: <http://purl.umn.edu/6724>. [www.aaea.org](http://www.aaea.org)

Loomis, J.B., and **C.M. Keske**, 2008, The Economic Value of Novel Mechanized Means of Ascending High Mountain Peaks: A Travel Cost Demand Model of Pikes Peak Automobile Users, Cog Railway Riders, and Hikers, In: Journal of Agricultural and Resource Economics (DeeVon Bailey, Ed.), 33(3), pp. 489. Refereed meeting abstract. ISSN: 1068-5502.

Loomis, J.B., and **C.M. Keske**, 2008, Peak Load Pricing of High Alpine Peaks to Reduce Environmental Damage: Is the Reduction in Use Due to Substitution Effect or Income Effect? In: Journal of Agricultural and Resource Economics (DeeVon Bailey, Ed.), 33(3), pp. 489. Refereed meeting abstract. ISSN: 1068-5502.

Bastian, C.T., **C.M. Keske**, D.L. Hoag, D.M. McLeod, and A. D. Miller, 2008, Factors Impacting the Potential Supply of and Demand for Development Rights in the Emerging Market for Conservation Easements, In: Journal of Agricultural and Resource Economics (DeeVon Bailey, Ed.), 33(3), pp. 506. Refereed meeting abstract. ISSN: 1068-5502.

**Keske, C.M.**, D.L. Hoag, C.T. Bastian, A. D. Miller, and D.M. McLeod, 2007, What are Landowners and Land Trusts Trying to Preserve with Conservation Easements? A Simultaneous Examination of Buyers and Sellers, In: Journal of Agricultural and Resource Economics (DeeVon Bailey, Ed.), 32(3), pp. 559. Refereed meeting abstract. ISSN: 1062-1912.

**Keske, C.M.**, D.L. Hoag, and C.T. Bastian, 2007, Internalizing externalities when there are significant private non-market rents, Refereed paper published in the 2007 AAEA (formerly American Agricultural Economics Association) meeting proceedings. <http://ageconsearch.umn.edu/bitstream/9722/1/sp07ke03.pdf>

## **CONTRACTS & GRANTS**

### **Externally-Funded Projects as PI**

**2009-2013** "Interdisciplinary Graduate Research for the Production and Marketing of Oilseed Biofuel Products". PI: **Catherine Keske**. Co-PIs Patrick Byrne (Soil and Crop Sciences), Jerry Johnson (Soil and Crop Sciences) and Daniel Olsen (Mechanical Engineering). USDA AFRI Biofuel Education Program. December 15, 2009-December 14, 2013. \$500,000. Grant# 2010-65504-20357; Contract#2009-02813.

**2008-2012** "Using Mountain Ecosystem Services to Provide Sustainable Economic Growth and Job Development in Rural Communities". USDA-NRI. PI: **Catherine Keske**. September 1, 2008-August 31, 2012. \$375,000. Grant#2008-02698.

**2010-2011** "Environmental Economics in the Nation of Mali". Colorado Livestock Climate Change Collaborative Research Support Program. LCC-CRSP U.S. AID Mali Associate Award. PI: **Catherine Keske**. October 1, 2010-September 30, 2011. \$50,516.

**2010** "Designing a Technology-Neutral Benefit Pricing for the Electric Power Sector in Colorado." Invited proposal funded by Colorado Governor's Energy Office. PI: **Catherine Keske**. Co-PIs: Terry Iverson, Gregory Graff. Collaborator: Samuel Evans. July 1, 2010-December 30, 2010. \$72,520.78. Grant # 10-136.

**2009** "Economic Feasibility of Anaerobic Digesters in Colorado". Invited proposal funded by Colorado Governor's Energy Office. PI: **Catherine Keske**. March 23, 2009-June 30, 2009. \$18,942. Grant # 09-205.

**2008-2009** “Risk and Strategic Planning for Female Agricultural Producers in Utah and Western Colorado”. Grant funded by Western Center for Risk Management. August 1, 2008-July 31, 2009. PI: **Catherine Keske**. \$41,242. Grant#2007-49200-03892.

### **Externally-Funded Projects as Co-PI**

**2011-2015** “Dynamics of Coupled Natural and Human Systems in the Colorado Front Range Wildland/Urban Interface: Causes and Consequences”. National Science Foundation–CNH Program. Project PI at University of Colorado–Boulder: Patrick S. Bourgeron. Co-PIs: Hope Humphries, **Catherine Keske** (sub-contract PI), Patricia N. Limerick, Timothy R. Seastedt, Randall Walsh (sub-contract PI), Mark Williams. September 1, 2011-August 30, 2015. \$1,430,000. Award Contract # 1115068.

**2011-2017** “The Niwot Ridge Long-Term Ecological Research Program 2011-2016: Tipping Points in High-Elevation Ecosystems in Response to Changes in Climate and Atmospheric Deposition”. National Science Foundation Long Term Ecological Research Grant renewal proposal for Niwot Ridge LTER site. PI: Mark Williams, University of Colorado–Boulder. Co-PIs: Peter D. Blanken, Patrick Bourgeron, William D. Bowman, Nel Caine, Detlev Helming, **Catherine Keske**, Pieter Johnson, Diane M. McKnight, Noah Molotch, Russel K. Monson, Jason C. Neff, Chris Ray, Robert L. Sanford, Steven K. Schmidt, Tim Seastedt, Katharine Nash Suding, Alan R. Townsend. 2011-2016. \$5,900,000. Contract #DEB-1027341.

**2011-2013** “Developing Low-Input, High-Biomass, Perennial Cropping Systems To Support a Bioenergy Economy on Marginal Land at Higher Elevations” South Central Sun Grant administered by Oklahoma State University. PI: Calvin Pearson. Co-PIs: Ron Follott, and **Catherine Keske**. September 1, 2011-August 31, 2013. \$75,000. Grant #: DTOS59-07-G-00053.

**2010-2012** “CSU Irrigation Survey: Analysis, Training and Education for Agricultural Chemicals and Groundwater Protection”. Colorado Department of Agriculture. PI: Troy Bauder. Co-PI: **Catherine Keske**. July 1, 2011-June 30, 2012. \$185,000. Grant #: POFAAWQC0800123 Amendment 3.

**2011-2014** “Soils, Land Use and Climate Change: A New Baccalaureate Concentration”. PI: Francesca Cotrufo. Co-PIs: Meena Balgopol, Rich Conant, **Catherine Keske**, Stephen Ogle, and Keith Paustian. USDA AFRI-NIFA HEC program. \$139,694. Grant #2011-01783.

**2011-2012** “Pilot Test the Ecological Approaches to Environmental Protection Developed in Capacity Research. Project C06B”. PI: David Anderson. Co-PIs: Joshua Goldstein and **Catherine Keske**. National Academy of Sciences Strategic Highway Research Program, Transportation Research Board (TRB) FFIWA March 30, 2011-March 30, 2012. \$304,986. Cooperative Agreement No. DTFH61-06-H-00009.

**2011-2012** “Biochar in Colorado agriculture: a research assessment of energy, environmental and economic benefits”. Colorado Department of Agriculture: Advancing Colorado’s Renewable Energy (ACRE) grant. PI: Francesca Cotrufo. Co-PIs: Morgan DeFoort and **Catherine Keske**. March 1, 2011-April 1, 2012. \$49,909. Contract #27777.

**2010-2013** “Adapting Livestock Systems to Climate Change in Mali”. Sub-award of USAID Associate Award. PI: Sybil Sharvelle. Co-PI: Jessica Davis and **Catherine Keske**. December 15, 2011-September 30, 2013. \$245,850. Funding discontinued in May 2012 due to Republic du Mali coup d’états.

**2011** “Financial Models for Electric Utility Business Model Transformation”. Department of Energy National Renewable Energy Laboratory’s Joint Institute for Strategic Energy Analysis (JISEA) program. January 1, 2011-September 30, 2011. PI: Thomas Bradley. Co-PIs: **Catherine Keske** and Dan Zimmerle. \$49,926.

**2011-2012** “CSU Irrigation Survey: Analysis, Training and Education for Agricultural Chemicals and Groundwater Protection”. Colorado Department of Agriculture. PI: Troy Bauder. Co-PI: **Catherine Keske**. July 1, 2011-June 30, 2012. \$85,000.

**2009-2011** “Development of Decision Tools for Anaerobic Digestion Projects.” PI: Sybil Sharvelle (Civil and

Environmental Engineering). Co-PIs: Jessica Davis and **Catherine Keske**. USDA-NRCS CIG. October 1, 2009-September 30, 2011. \$75,000. 69-8B05-A-09-10.

**2005-2009** "Economic Factors Affecting Conservation Easements for Rural Land Preservation: Matching Buyer and Seller Preferences in Emerging Markets." USDA-NRI. August 15, 2005-August 15, 2009. PI: Chris Bastian (University of Wyoming). Co-PIs: Dana Hoag, Don McLeod, and **Catherine Keske**. \$388,000. Grant# 2005-35401-16008

**2007-2008** "Specialized Strategic Risk Management Training for Female Farmers and Ranchers in Montana." U.S. Department of Agriculture Risk Management Agency Small Sessions Division (USDA RMA). PI: Dana Hoag. Co-PIs: **Catherine Keske** and Jay Parsons. October 1, 2007-September 30, 2008. \$10,000. Grant # 07-IE-0831-0077-E

**2006-2007** "Specialized Strategic Risk Management Training for Female Farmers and Ranchers in Colorado and Nearby States". U.S. Department of Agriculture Risk Management Agency (USDA RMA). October 1, 2006-November 30, 2007. PI: Dana Hoag. Co-PI: **Catherine Keske**. \$125,000. Grant# 06-IE-0831-0169-C

**2005** "Vegetation and Trail Restoration Using a Vegetative Screening Procedure in Seed Collection Projects". Funded by the Foundation for Sustainability and Innovation, Laguna Beach, CA. Start and End Dates: January 15-June 15, 2005. PI: **Catherine Keske**. Co-PI: John Giordanengo (Colorado Fourteeners Initiative, Golden, CO). \$10,000.

#### **External, Competitive "Workgroup Mini-grants" intended to fund multi-disciplinary activities and grant proposal writing**

**2010-2011** "Assessment and Mitigation of Whole Farm Sustainability and Emissions from Dairy Production Systems in the Arid West". USDA-AFRI-NIFA Climate change planning grant. PI: April Leytem (USDA-Agricultural Research Service, Idaho). Co-PIs: **Catherine Keske**, Dave Bjorneberg, Dave Dungan, Robert Ippolito, Jim Tarkalson, David Moore, Amber Moore, J.D. Wulforst, Chris McIntosh, Ermias Kebreab (University of California-Davis). September 1, 2010-August 31, 2011. \$50,000.

**2009** "The Disappearing Cryosphere: Socioeconomic Consequences for Ecosystem Services." National Science Foundation Cross-site LTER Research Workgroup Grant. PI: Hugh Ducklow (Woods Hole, MA LTER). Co-PIs: **Catherine Keske**, Andrew Fountain, Susan Capalbo. December, 2009. \$10,000.

**2007** "Ecosystem Services from Working Lands: Cross-site LTER Research" Leadership Grant for Social Scientists. National Science Foundation Long Term Ecological Research (LTER) Network Office Working Group Grant. PI: Scott Swinton (Michigan State University). Co-PIs: **Catherine Keske** and eight others. April 11-April 13, 2007. \$8,150.

**2005** National Science Foundation, Competitive Grant for Economic Classroom Experiments Training and the Economic Science Organization, \$2,000, June 20-22, 2005. Montreal, Quebec. PI: David Reilly.

**2004-2005** "Assessing Waste Products as Input Fuels in the Cement Manufacturing Process". \$15,000 to lead undergraduate engineering research project. Sponsored by HOLCIM Cement Manufacturing and the Colorado School of Mines. PI: Bob Knecht. Co-PI: **Catherine Keske**. May 1, 2004-May 31, 2005.

#### **Externally-Funded projects, investigator role other than PI or Co-PI**

**2012-2017** "Routes to Sustainability for Natural Gas Development and Water and Air Resources in the Rocky Mountain Region." National Science Foundation Chemical, Bioengineering, Environmental, and Transport Division. Project PI: Joseph Ryan, Colorado University-Boulder. Co-PIs and Collaborators: John Adgate, Patrick Bourgeron, Gregory Brinkman, Tzahi Cath, Robert Dick, Kevin Doran, Alfred Eustes, William Fleckstein, Michael Hannigan, Becca Hatheway, Hope C. Humpries, Daria Kotys, **Catherine Keske**, Patricia N.Limerick, Karl G. Linden, Qin Lv, Jana Milford, Kathryn Mutz, Stephen Osborn, Gabrielle Patron, Harihar Rajaram, Li Shang, Reagan Waskom, Mark Williams, Roxana Zulauf Witter. \$11,999,328. October 1, 2012-September 30, 2017. CBET-1240584.

**2010-2015** "Adapting Livestock Systems to Climate Change Collaborative Research Support Program." USAID



Livestock and Climate Change Collaborative Research Support Program (LCC-CRSP) Leadership Award. PI: Dick Bowen. Director: Jessica Davis. Collaborator and sub-contract award: **Catherine Keske**. April 2010-April 2015. \$15,000,000.

**2010-2013** “Adapting Livestock Systems to Climate Change in Mali”. USAID Associate Award. PI: Jessica Davis. Collaborator and sub-contract award: **Catherine Keske**. October 1, 2010-September 30, 2013. \$450,000.

#### **Internally-Funded Awards and Internally Funded Sub-Awards**

**2011-2012** “Expanding the Total Benefit Pricing of Green House Gas Emission Reduction in the Colorado Electricity Sector”. CSU/GEO Greening the Government Initiative. PI: **Catherine Keske** \$10,000.

**2011-2012** “Estimating the Carbon Footprint of Beef Production in Colorado.” Colorado State University Agricultural Experiment Station and Office of Dean of College of Agricultural Sciences. PI: Jay Ham. Co-PIs: Steve Koontz, Keith Paustian, Sybil Sharvelle, Kraig Peel, Jason Ahola, Dale Woerner, Joshua Goldstein, Joe Brummer, Jessica Davis, **Catherine Keske**. May 1, 2011-May 30, 2012. \$40,000.

**2011** “Online Course Development Proposal: AGRI 638 Ecosystem Services on Agricultural Lands”. Colorado State University College of Agricultural Sciences On-line Course Development Grant. PI: Kraig Peel. Course Instructor: **Catherine Keske**. January 2011-August, 2011. \$2,500.

**2010-2011** “Undergraduate Curriculum Development for an Interdisciplinary Bioenergy Concentration Capacity Building Project Proposal to the CSU Clean Energy Supercluster”. Capacity Building Project Proposal to the CSU Clean Energy Supercluster. PI: **Catherine Keske**. Co-PIs: Jerry Johnson (Soil and Crop Sciences), Jay Ham (Soil and Crop Sciences), Joe Brummer (Soil and Crop Sciences). April 2010-April 2011. \$7,500.

**2010-2011** “Developing a Technology-Neutral, Benefit-Pricing Policy for the Colorado Electricity Sector.” Colorado State University Clean Energy Supercluster. PIs: Terry Iverson and Gregory Graff. Collaborators: **Catherine Keske** and Samuel Evans. April 2010-March 2011. \$15,000.

**2011-2013** “CSU SOGES Global Challenges Research Team Mini-Grant ‘Managing for Resilience’”. PI: Dennis Ojima. Co-PIs: Michelle Betsill, Scott Denning, Kathy Galvin, **Catherine Keske**, Jorge A. Ramirez, and Robin Reid. June 1, 2011-May 31, 2012. \$2,000.

**2011-2013** “CSU SOGES Food, Energy, and Waste Global Challenges Research Team”. PI: Susan DeLong. Collaborators: **Catherine Keske**, Thomas Bradley, Cecil Stushnoff, Jessica Davis, Mary Strongberger, Yaling Qian, Frank Stonaker, Robin Reid.

**2010-2011** “Biochar: An Assessment of Potential Energy, Environmental and Economic Benefits”. CSU Clean Energy Supercluster. PI: Francesca Cotrufo. Co-PIs: Morgan DeFoort and **Catherine Keske**. April 1, 2010-April 30, 2011. \$20,000.

**2009-2010** “Expanded Economic Opportunities for Algae-based Biofuel Production, Using the Remaining Extract as a Feed for Animals” CSU Sustainable Biofuels Development Center Internal Grant. PI: Shawn Archibeque (Animal Science). Co-PIs: **Catherine Keske**, Terry Engle (Co-PI, Animal Science), Bryan Willson (Co-PI, Mechanical Engineering). January 1, 2009-March 31, 2010. \$75,000.

**2009** CSU Monfort Professor in Residency Grant for Sponsorship of Guest Lecturer Lester Brown. PIs: **Catherine Keske** and Jessica Davis. September 22, 2009-November 20, 2009. \$10,000.

**2009** “CSU SOGES Workgroup Development Grant.” Awarded to Institute for Livestock and the Environment. CSU internal grant submission by Jessica Davis (Soil and Crop Sciences) and Institute for Livestock and the Environment (ILE) core strategic planning team members to CSU School of Global Environmental Sustainability (SOGES). PI: Jessica Davis. January 1, 2009-June 30, 2009. \$10,000.

**2009-2010** “Teens on Farms Project” CSU Extension Innovations Grant. Co-PIs Edward Page, Isaac Munoz, **Catherine Keske**, and Cassandra Shenk. August 1, 2009-July 31, 2010. \$8,693.55.

**2008-2009** “CSU Clean Energy Supercluster Multidisciplinary Workgroup for Biofuel from Oilseed Crops in Colorado”. CSU PIs: Jerry J. Johnson, Patrick Byrne, Gary Peterson. Co-PIs: Shawn Archibeque, Neil Hansen, Alan Helm, **Catherine Keske**, John McKay, Dan Olsen, Meg Wilson. October 1, 2008 - April 30, 2009. \$15,000.

## **PAPERS PRESENTED/SYMPOSIA/INVITED LECTURES/PROFESSIONAL MEETINGS/WORKSHOPS**

### **Refereed**

**December 3-7, 2012.** Birch, G.L., J.L. Field, C.M.H. Keske, M. DeFoort, and M.F. Cotrufo. B33D-0554: A Regionally-Specific Assessment of the Carbon Abatement Potential of Biochar. In Session B33D: Potential Capacities to Sequester Carbon at a Regional Scale II Posters. American Geophysical Union (AGU) Annual Meetings. San Francisco, California. Refereed.

**August 12, 2012.** Keske, C.M.H., A. Brandess, D. Hoag, and C. Pearson. Economic Feasibility of Bio-Butanol on Marginal Lands in Western Colorado. Agricultural and Applied Economics Association Meetings. August 12-14, 2012. Seattle, Washington. <http://ideas.repec.org/p/ags/aaea12/124047.html>. Refereed.

**June 21, 2012.** Brandess, A., C.M.H. Keske, D. Hoag, and J. Johnson, Profitability of Camelina Sativa as a Biofuel Feedstock in Northeastern Colorado for presentation at the annual meetings, June 20-22, 2012, Park City, Utah. Refereed.

**July 31, 2011.** Cross, J., C.M.H. Keske and P. Bixler. It’s All About Context: The Social Dimensions of Perceived Land Use Change in the Intermountain West. Rural Sociological Society and Rural Community Development Society Meeting. Boise, Idaho. Refereed.

**February 23, 2011.** Cropper, E., C.T. Bastian, D.M. McLeod, C.M.H. Keske, D.L.K. Hoag, and J. Cross. Factors Impacting Land Trusts’ Demand for Conservation Easements. Presentation at W-2133 Meeting. Albuquerque, NM, Refereed.

**June 30, 2011.** Cropper, E., D.M. McLeod, C.T. Bastian, C.M.H. Keske, D.L. Hoag, and J.E. Cross. Land Trusts’ Demand for Conservation Easements in the Intermountain West. Presentation at the 2011 Western Agricultural Economics Association and Canadian Agricultural Association Joint Meeting. Banff, Canada. Refereed.

**July 26, 2010.** Lohman, G., C.M.H. Keske and J.B. Loomis. Verbiage Matters: High Individual WTP for High Mountain Recreation in a CVM Model. Poster presentation at American Agricultural Economics Association, Western Agricultural Economics Association, and Canadian Agricultural Economics Association Joint Annual Meeting. Refereed.

**July 26, 2010.** Loomis, J.B., C.M.H. Keske and G. Lohman. Did the Great Recession Reduce Visitor Spending and Willingness to Pay for Nature-Based Recreation? Evidence from 2006 and 2009. Poster presentation at American Agricultural Economics Association, Western Agricultural Economics Association, and Canadian Agricultural Economics Association Joint Annual Meeting. Refereed.

**October 3, 2010.** McGaffin, G., C. T. Bastian, P. Dewell, C. M. Keske, C. West, D. L. Hoag, and D. M. McLeod. Do Landowners Trust Land Trusts? Debunking Myths on Landowner Conservation Easement Preferences. Selected workshop presentation. The National Land Conservation Conference. Hartford Connecticut. Refereed.

**August 1, 2009.** Cross, J., C.M. Keske, M.G. Lacy, and C.T. Bastian. Dimension of Sense of Place and Attitudes Towards Conservation Easements. Presented by Cross at Rural Sociological Society Meeting. Madison, WI. Refereed.

**November 19, 2009.** Evans, S., C.M. Keske and D.L. Hoag. Economic Feasibility of Anaerobic Digesters in the Mountain West. Institute for Livestock and the Environment 2009 Stakeholder Summit. Fort Collins, Colorado. Poster selected for 3<sup>rd</sup> place in graduate student poster contest. Refereed.

- June 26, 2009.** Keske, C.M. New West, Old West, What's Best? Symposium for Western Agricultural Economic Association Annual Meeting. Kauai, Hawaii. Refereed.
- June 26, 2009.** Keske, C.M., S. Smutko and C. Doyle. Using Audience Response Systems to Assess Rural Stakeholder Preferences. Paper presented in "New West, Old West, What's Best?" Symposium for Western Agricultural Economic Association Annual Meeting. Kauai, Hawaii. Refereed.
- June 25, 2009.** McGaffin, G.H., D.M. McLeod, C.T. Bastian, C.M. Keske, and D.L. Hoag. 2009. Identifying Influential Factors for Colorado and Wyoming Landowners regarding Conservation Easement Acceptance. Presented by McGaffin at the Western Agricultural Economics Association Meeting in Kauai, Hawaii. Refereed.
- February 21, 2009.** McLeod, D.M., C.T. Bastian, C.M. Keske, and D.L. Hoag. 2009. The Market for Conservation Easements: Evidence from Stated Choice Surveys in the West. Presented by McLeod at the W2133 Meeting in San Antonio, TX. Refereed.
- September 21, 2008.** Keske, C.M. Effective Conservation Easement Stewardship for Volunteer Organizations. The National Land Conservation Conference (Land Trust Alliance Rally). Pittsburgh, Pennsylvania. Refereed.
- June 27, 2008.** Keske, C.M. and J.B. Loomis. The Economic Value of Novel Means of Ascending High Mountain Peaks: A Travel Cost Demand Model of Automobile Drivers, Cog Railway Riders, and Hikers. Western Agricultural Economic Association Annual Conference, Big Sky, Montana. Refereed.
- June 27, 2008.** Loomis, J.B. and C.M. Keske. Peak Load Pricing of High Alpine Peaks to Reduce Environmental Damage: Is the Reduction in Use Due to Substitution Effect of Income Effect. Western Agricultural Economic Association Annual Conference, Big Sky, Montana. Refereed.
- June 26, 2008.** Bastian, C.T., C.M. Keske, S. Swallow, D.L. Hoag, E. Uchida, C. Anderson, D.M. McLeod, and A.D. Miller. WAEA Invited Symposium: Emerging Markets for Environmental Goods: Can the Market Solve Such Problems? Western Agricultural Economic Association Annual Conference, Big Sky, Montana. Keske as moderator. Refereed.
- June 26, 2008.** Bastian, C.T., C.M. Keske, D.L. Hoag, D.M. McLeod, and A.D. Miller. Factors Impacting the Potential Supply of and Demand for Development Rights in the Emerging Market for Conservation Easements. Paper in WAEA Accepted Symposium: Emerging Markets for Environmental Goods: Can the Market Solve Such Problems? Western Agricultural Economic Association Annual Conference, Big Sky, Montana. Refereed.
- June 25, 2008.** Goldbach, R.L., C.M. Keske and D.L. Hoag. Gender Differences in Producers' Perceived and Revealed Risk-Taking Behaviors. Western Agricultural Economic Association Annual Conference, Big Sky, Montana. Refereed.
- September 10, 2007.** Hoag, D.L., J. Ascough, E. Fathelrahman, and C.M. Keske. Stakeholder Payoff Matrix for Disparate Tradeoffs, Invited paper. Sicily, Catania, Italy. International Farming Systems Design Conference. Refereed.
- August 1, 2007.** Hoag, D.L., C. M. Keske, C.T. Bastian, D.M. McLeod, and A.M. Miller. What Are Landowners and Land Trusts Trying to Preserve with Conservation Easements? A Simultaneous Examination of Buyers and Sellers. Western Agricultural Economic Association Annual Conference. Refereed.
- August 1, 2007.** Keske, C.M. and J.B. Loomis. Regional Economic Development and Net Economic Values of Public Access to Colorado Fourteeners. Western Agricultural Economics Association Annual Conference. Refereed.
- October 6, 2007.** Keske, C.M. and M. Strunk. Using Photography and Stories of the Land to Preserve a Community's Sense of Place. Land Trust Alliance Annual Conference. Refereed.
- July 30, 2007.** Keske, C.M., D.L. Hoag and C.T. Bastian. Internalizing Externalities When There Are Significant Private Non-market Rents. American Agricultural Economics Association Annual Conference. Refereed.

**October 13, 2006.** Keske, C.M., D.L. Hoag, C.T. Bastian, and D. McLeod. What Did Your Peers Tell Us about Land Conservation? Land Trust Alliance Annual Conference, Nashville, Tennessee. Refereed.

**June 29, 2006.** Hoag, D.L., C.M. Keske, and M.G. Lacy. Conservation Easements on Ag Lands: The Influence of Income, Tax Policy, and Other Factors. Western Economic Association Annual Conference, Anchorage, Alaska. Refereed.

**June 30, 2006.** Keske, C.M., D.L. Hoag, C.T. Bastian, and D.L. McLeod. Waste Not, Want Not: Getting More Value of Focus Groups about Conservation Easements. Western Agricultural Economics Association Annual Conference, Anchorage, Alaska. Refereed.

**April 19, 1997.** Keske, C.M. and D.A. Smriga. Hearing aid selection using the auditory loudness mapping and Scal-Adapt software. American Academy of Audiology Annual Conference (1997) Fort Lauderdale, Florida.

**April 6, 1996.** Smriga, D.A., and C.M. Keske. Using Loudness Mapping to Fit WDRC Hearing Aids. American Academy of Audiology Annual Conference (1996) Salt Lake City, Utah.

#### **Non-refereed**

**April 14, 2014.** Keske, C.M.H. Economic Methods to Value Mountain Ecosystem Services in the New West. Invited lecture for Montana Institute on Ecosystem Services.

**November 20 2013.** Keske, C.M.H. From Wildfires to Wild Animals: A World Wide Perspective on Contemporary Land Use Issues and Ecosystem Services. Invited lecture for Denver University Sturm School of Law Land Use Society.

**October 10, 2013.** Keske, C.M.H. The Economic Feasibility of Growing Biofuel Crops. Invited by Yuma County Economic Development Board and Colorado State University Extension.

**April 18, 2013.** Birch, G.L., J.L. Field, C.M.H. Keske, M. DeFoort, and M.F. Cotrufo. A Regionally-Specific Assessment of the Carbon Abatement Potential of Biochar. Our Energy Future: An Earth Week Symposium on Clean Energy. Colorado State University Clean Energy Supercluster Annual Meeting.

**March 4, 2013.** Keske, C.M.H. Mountains of value: findings and implications from economic research on Colorado mountains. Institute of Arctic and Alpine Research (INSTAAR) Seminar. Boulder, Colorado.

**September 10-13, 2012.** Keske, C.M.H. Visitor willingness to pay U.S. Forest Service recreation fees in New West rural mountain economies. Long Term Ecological Research Grant All-Scientists Meeting (LTER-ASM). Estes Park, Colorado.

**May 23, 2012.** Keske, C.M.H. Energy, Technological Innovation, and Long Term Economic Stability: Fun Dialogue About Economic Theory and GEO-Sponsored Project Updates. Colorado Energy Office Invited Lecture.

**April 18, 2012.** Keske, C.M.H. Energy, Technological Innovation, and Long Term Economic Stability. Colorado State University Clean Energy Supercluster Annual Meeting.

**April 18, 2012.** Pearson, C.H. and Keske, C.M.H. Developing Low-Input, High Biomass, Perennial Cropping Systems: Sustainable Biomass Resources for Western Colorado. International Biomass Conference. Denver, Colorado.

**November 8, 2011.** Keske, C.M.H. Update: Using Mountain Ecosystem Services to Provide Sustainable Economic Growth and Job Development in Rural Communities. Panelist and presenter at The AFRI-Small and Medium Sized Farms & Rural Development FY 2012 Project Director Meeting, Miami, FL. Hosted by The Northeast Regional Center for Rural Development at: <http://nercrd.psu.edu/AFRI.PD.Meeting/2012.CombinedPD.Mtg.Pres.html>

- June 2, 2011.** Bastian, C.T., D. M. McLeod, G. McGaffin, C.M. Keske, and D. L. Hoag. What are landowners looking for in a conservation easement? Results from a survey, Invited and presented at the 2011 Wyoming Conservation Easement Conference. University of Wyoming College of Law Rural Law Center. (Presented by Bastian).
- April 20, 2011.** Cotrufo, M.F., M. DeFoort, C.M.H. Keske, C. Stewart, J. Field, G. Lohman, and J. Zheng. Biochar: An Assessment of Potential Energy, Environmental, and Economic Benefits. Poster Presentation at Colorado State University Clean Energy Supercluster Annual Meeting.
- April 20, 2011.** Graff, G., T. Iverson, C. Keske, S. Evans, and L. Hans. Developing a Technology-Neutral Benefit Pricing Policy for the Electricity Sector. Poster Presentation at Colorado State University Clean Energy Supercluster Annual Meeting.
- April 20, 2011.** Keske, C.M. Undergraduate Curriculum Development for an Interdisciplinary Bioenergy Concentration. Poster Presentation at Colorado State University Clean Energy Supercluster Annual Meeting.
- March 3, 2011.** Callahan, M., D. Zimmerle, T. Bradley, C.M. Keske, and R. Duthu. Financial Models for Electric Utility Market Transformation. Poster presentation at Joint Institute for Strategic Energy Analysis Annual Meeting. Golden, Colorado.
- April 20, 2011.** Keske, C.M. and G. Lohman. Biochar: An Economic Assessment of the Viability in the State of Colorado. Poster Presentation at Colorado State University Clean Energy Supercluster Annual Meeting.
- March 24, 2011.** Keske, C.M. Regional Economic Considerations for Biofuel/Biomass Production. Western Colorado Carbon Neutral Bioenergy Consortium (WCCNBC) Conference "Biomass for Biofuels: Economic Development in Western Colorado. Colorado Mountain College. Rifle, Colorado. Available online: <http://www.youtube.com/watch?v=vTjw6yeDeFM>
- November 22, 2010.** Keske, C.M.H. USDA AFRI NIFA AFRI – Rural Development Project Director’s Webinar. Using Mountain Ecosystem Services to Provide Sustainable Economic Growth and Job Development in Rural Communities. <http://nifa-connect.nifa.usda.gov/p69718383/>
- March 5, 2009.** Davis, J.D. and C.M. Keske. Nitrogen Deposition in Rocky Mountain National Park. Science on the Hill. United States Capital Building.
- October 22, 2009.** Keske, C.M. Using Mountain Ecosystem Services to Provide Sustainable Economic Growth and Job Development in Rural Communities. Annual Project Director’s Meeting, U.S. Department of Agriculture NIFA/NRI Program. Washington, D.C.
- September 14, 2009.** Keske, C.M. Regional Economic Development & Net Economic Values of Public Access to Colorado Fourteeners. Long Term Ecological Research Grant All Scientists’ Meeting Poster Session. Estes Park, Colorado.
- April 17, 2009.** Keske, C.M. Risk and Women in the Legal Profession. Wyoming Women’s Legal Forum. Saratoga, Wyoming.
- October 15, 2008.** Bastian, C. T., C. M. Keske, D. L. Hoag, D. M. McLeod and A.D. Miller. Factors Impacting the Potential Supply of and Demand for Development Rights in the Emerging Market for Conservation Easements, Invited Seminar Presentation at Colorado State University, Department of Agricultural and Resource Economics. (Presented by Bastian).
- November 13, 2008.** Keske, C.M. Poster Presentation, Economics, Agriculture and the Environment. Institute for Livestock and the Environment Stakeholder Research Symposium, Golden, Colorado.
- July 28, 2008.** Bastian, C. T., D. M. McLeod, D. L. Hoag, C. M. Keske, and A. D. Miller. Factors Affecting Rural Land Preservation: Agricultural Production and Amenity Preservation Through Emerging Markets, USDA National Research

Initiative Grant Program Project Directors Meeting, New Hampshire.

**August 2, 2007.** Bastian, C.T., D.M. McLeod, D.L. Hoag, C.M. Keske, and A. Miller. Factors Affecting Conservation Easements for Rural Land Preservation: Agricultural Production and Amenity Preservation Through Emerging Markets, Rural Sociological Society Meeting. Santa Clara, CA.

**September 8, 2007.** Keske, C.M. The Economic Value of Colorado Fourteeners: A Summary of the Research to Date. 2007 Friends of the Forest Trail Maintenance Kick-Off. Alma, Colorado.

**March 8, 2007.** Keske, C.M. Regional Economic Development & Net Economic Values of Providing Access to Colorado 14ers: Important Considerations for Non-Profit Organizations. Seminar with Colorado Fourteeners Initiative and Colorado Mountain Club.

**June 20, 2007.** Miller, A., C.T. Bastian, D.M. McLeod, C.M. Keske, and D.L. Hoag. Agricultural Landowners' Preferences for Conservation Easements and Conserving Amenities. 13th International Symposium on Society and Resource Management (2007), Salt Lake City, Utah.

**October 2, 2005.** Holt, C., Dutra, J., Elbittar, A., Fried, H., Halevy, Y., Keske, C., Qi, L. 2005. The Regional Development Game. ESA North American Meeting. Tucson, AZ.

**July 7, 2005.** Keske, C.M. Market Days: Using Active Trading to Teach Market Fundamentals to Undergraduate Economics Students. Western Agricultural Economics Association Annual Conference (2005) San Francisco, California.

**September 9, 2004.** Keske, C.M. Market Days: Using Active Trading to Teach Market Fundamentals to Undergraduate Economics Students. Economics and the Classroom Conference sponsored by Idaho State University (2004) Jackson Hole, Wyoming.

**October 23, 2001.** Keske, C.M. Digital disposable hearing aids: The next generation of technology. Academy of Dispensing Audiologists Annual Conference (2001) Asheville, North Carolina.

**May 13, 1994.** Hall, J.W. and C.M. Keske. Clinical experience with central auditory processing disorders (CAPD). American Academy of Audiology Annual Conference (1994) Richmond, Virginia.

**July 19, 1993.** Hoemann, H.W. and C.M. Keske. Proactive interference and language change in hearing adult students of American Sign Language. American Psychological Association Annual Conference (1993) Toronto, Canada.

**September 10, 1998.** Keske, C.M. The audiologist as a communication link between industry and the office. Academy of Dispensing Audiologists Annual Conference (1998) Monterey, California.

**February 19, 1998.** Keske, C.M. The Role of the Audiologist in the Hearing Aid Industry. Minnesota Academy of Audiology Annual Conference (1998) St. Paul, Minnesota.

**October 17, 1996.** Smriga, D.A., and C.M. Keske. Using Loudness Mapping to Fit WDRC Hearing Aids. Academy of Dispensing Audiologists Annual Conference (1996) Las Vegas, Nevada.

**Non-Refereed Journal Articles/Chapters/Proceedings/Transactions:**

Troy Bauder, **Catherine Keske**, Erik Wardle, 2012, Nutrient Best Management Practices: Assessing Adoption by Colorado Producers. *Nutrient Digest*, a publication of the WERA 103 Committee. Fall 2012, 4(3): 1-3.

Troy Bauder, **Catherine Keske**, Erik Wardle, 2012, Nutrient Management Practices and Groundwater Protection: Assessing Adoption by Colorado Producers. Colorado Water Institute. Colorado Water: Newsletter of the Colorado Water Institute at Colorado State. 29(4): 8-11.

Andrew Brandess, **Catherine Keske**, Can Erbil, The Viability of Butanol as a Biofuel Option in Western Colorado, United States Association for Energy Economics, September 2011, [http://dialogue.usaee.org/index.php?option=com\\_content&view=article&id=148&Itemid=554](http://dialogue.usaee.org/index.php?option=com_content&view=article&id=148&Itemid=554)

**Keske, C.M.H.**, 2011, How Lawsuits Could Ignite an Energy Market: The Case of Anaerobic Digestion, The Berkeley Electronic Press, [http://works.bepress.com/catherine\\_keske/1/](http://works.bepress.com/catherine_keske/1/).

Andrew Brandess, **Catherine Keske**, Can Erbil, Gold of Pleasure, *Dialogue*, United States Association for Energy Economics, May 2011, [http://dialogue.usaee.org/index.php?option=com\\_content&view=article&id=132&Itemid=364](http://dialogue.usaee.org/index.php?option=com_content&view=article&id=132&Itemid=364).

Anne Nolin, Peter Adler, Dominique Bachelet, John Campbell, Robert Crabtree, Kelly Gleason, James Gosz, Kathleen Kavanagh, **Catherine Keske**, Tim Link, Marcy Litvak, Jessica Lundquist, Roger Ruess, Mark Williams. *When Winter Wanes: Biotic Impacts of Changing Climate and Disturbance Regimes on Seasonally Snow-covered Ecosystems from the Watershed to Continental Scale*. National Science Foundation White Paper. July 9, 2011

**Keske, C.M.**, 2010, Landowner Motivations for Conservation Easements: Research Shows that Conservation Ethic Dominates, Editorial In: *Saving Land*, 29(1), pp. 9.

**Keske, C.M.**, 2007, The Human Perspective. Our Valuable Fourteeners, Commentary by Catherine Keske, *Colorado State Magazine*. (Winter 2007-2008), 47, pp. 7.

**Other (e.g. lab texts, book reviews, technical reports, in-house reports):**

Bauder, T., **C.M.H. Keske**, and E. Wardle. Assessing Adoption of Nutrient Management Best Management Practices by Colorado Producers. *CSU Colorado Water Institute Technical Report*. June 2012.

Institute for Livestock and the Environment (ILE) Bylaws, Incorporated November, 2009, Keske as lead author, with review and revision from J. Davis and ILE Leadership Team.

**Keske, C.M.** and J.B. Loomis, 2008, Colorado Fourteeners: Estimating a Price on the Priceless. A Primer on When and How to Apply Economics to the Environment, CSU Economic Development Report, January 2008. 08-03.

**Keske, C.M.**, 2008, Public Comment to Bureau of Land Management Environmental Impact Statement on Oil Shale and Tar Sands Development.

Loomis, J.B. and **C.M. Keske**, 2008, When Nothing Else 'Will Do': Colorado Fourteeners and the Effect of Limited Substitutes on Recreation Economic Benefits. *CSU Economic Development Report*, July 2008. 08-06.

**Keske, C.M.**, 2007, The Value of Fourteener Recreation: An Economic Study of the Colorado Fourteeners, CFI: Colorado Fourteener Initiative Bi-Annual Outreach Publication, (2007), 10:1.

**Keske, C.M.**, S. Gripne, and L. Sherrod, 2007, Update on Conservation Easements: What Every Colorado Landowner Should Know, CSU Economic Development Report, May 2007 and August 2007: 07-12 and 07-18.

**Keske, C.M.** and J.B. Loomis, 2007, The Economics of Colorado Fourteeners: Research Summary, CSU Economic Development Report, August 2007: 07-19.

**Keske, C.M.** and J.B. Loomis, 2007, Quick Fact Sheet on the Economics of Colorado Fourteeners, CSU Economic Development Report, August 2007: 07-20.

**Keske, C.M.**, D.L. Hoag, R.L. Goldbach, and J. Parsons, 2007, Strategic Risk Management Planning for Agricultural Women: Managing the Risks That You Can Control...and Letting Go of the Ones that You Can't. Technical Paper, Colorado State University, October 2007.

**Keske, C.M.**, 2006, *Mountain Area Land Trust Volunteer Conservation Easement Stewardship Training Manual*.

Consisted of stewardship monitoring plans for 25 conservation easement properties, including updates.

**Keske, C.M.** Colorado's Fourteeners: Public Display of Affection VS. Private Property. CFI: Colorado Fourteener Initiative Annual Publication, (2004), 7:2.

**Keske, C.M.**, Quarterly Manufacturing Partners Column, Merge Ahead! Feedback: Journal of the Academy of Dispensing Audiologists, (2000), 11:1.

**Keske, C.M.**, Quarterly Manufacturing Partners Column, Doctor, Doctor Give Me the News. Feedback: Journal of the Academy of Dispensing Audiologists, (2000), 11:2.

**Keske, C.M.**, Quarterly Manufacturing Partners Column, Feeding Your Practice, Feedback: Journal of the Academy of Dispensing Audiologists, (1999), 10:1.

**Keske, C.M.**, Quarterly Manufacturing Partners Column, Expanding the Scope of Your Practice—and Your Bottom Line, Feedback: Journal of the Academy of Dispensing Audiologists, (1999), 10:2.

**Keske, C.M.**, Quarterly Manufacturing Partners Column, The Impact of Digital Hearing Instruments on Audiology Practices: A Manufacturer's Perspective, Feedback: Journal of the Academy of Dispensing Audiologists, (1999), 10:3.

**Keske, C.M.**, Quarterly Manufacturing Partners Column, Can Tinnitus Be Music to Your Ears? Feedback: Journal of the Academy of Dispensing Audiologists, (1999), 10:4.

Barker, A.M. and **C.M. Keske**. (1998). Directional Microphones. Lori Medical Laboratories Technical Paper Series.

**Keske, C.M.** and A.M. Barker (1998). Open Digital Primer. Lori Medical Laboratories Technical Paper Series.

**Keske, C.M.** and A.M. Barker (1998). Loudness Mapping. Lori Medical Laboratories Technical Paper Series.

**Keske, C.M.** and J.M. Coverstone. Now That We're Digital, Where Do We Go From Here? Appearing in *On the Move!* (Fall 1998). Bi-annual newsletter for Members of the Minnesota Academy of Audiology.

#### **Extension Newsletters (Identified as Editor or Contributor):**

##### **Editor**

**Keske, C.M.** 2009. Editor. Ag Women and Risk Newsletter, Colorado State University College of Agriculture Volume 2, Issue 2 (Fall 2009).

Volume 2, Issue 2 (Spring 2009).

Volume 1, Issue 1 (Fall 2008). [http://www.agsci.colostate.edu/news/Ag\\_Women\\_12\\_08\\_final\\_web.pdf](http://www.agsci.colostate.edu/news/Ag_Women_12_08_final_web.pdf)

##### **Contributions to Newsletters:**

**Keske, C.M.**, 2009, A Waste of Energy? Two CSU Professors Study the Feasibility of Anaerobic Digestion, CSU The Salt Lick Newsletter, Volume 1, Issue 4 (October 2009).

**Keske, C.M.**, 2009, Feature Story: Using Horsepower to Cut Costs, Ag Women and Risk Newsletter. Issue 2 (Spring 2009).

**Keske, C.M.** and Lohman, G., 2009, A New Source of Labor on the Western Slope: Teens on Farms, CSU Ag Women and Risk Newsletter, Volume 2, Issue 2 (Fall 2009).

**Keske, C.M.**, 2008, Feature Story: "Criating" a Successful Business, Ag Women and Risk Newsletter. Issue 1 (Fall 2008).

**Keske, C.M.** and R.L. Goldbach, 2008, Ag Women and Risk' Research: Results from the CSU Gender and Risk Study, Ag Women and Risk Newsletter. Volume 1, Issue 1 (Fall 2008).



**Keske, C.M.**, 2007, Conservation Easements Offer Ranchers the Opportunity to Leave an Enduring Legacy. Colorado Livestock Association Weekend Edition, Colorado State University Livestock Links Column. November 2, 2007, 8, pp. 45.

### **HONORS AND AWARDS**

**2014** Distinguished Visiting Professor, Tecnológico de Costa Rica, Escuela Administración de Empresas  
**2013** Western Extension Award of Excellence for Exploring Energy Efficiency and Alternatives (E<sup>3</sup>A Program)  
**2008** Annual Outstanding Stewardship Award for Jefferson, Clear Creek and Park Counties, Sponsored by Mountain Area Land Trust in Evergreen, CO.  
**2004-2005** Colorado State University Doctoral Recruiting Scholarship  
**2004** Hubert and Sarah Risser Annual Award for Outstanding Academic Achievement in Economics, Colorado School of Mines.  
**2002-03; 2003-04; 2004-05** Darlene Pauli Memorial Scholarship, Colorado School of Mines (3 time recipient)  
**1997** Great Nordic-Americas, GN Danavox Employee of the Year  
**1995** Certificate of Clinical Competence, Audiology (CCC-A) by American Speech, Language Hearing Association (ASHA)  
**1994** Clinical Fellowship, Audiology (CFY-A) by American Speech, Language Hearing Association (ASHA)  
**1992-93; 1993-94** Vanderbilt University School of Medicine Full Tuition Scholarship (2 time recipient)  
**1992** Board of Trustees Fellowship, Bowling Green State University  
**1992** E.L Moseley Scholarship for Student Leadership, Bowling Green State University  
**1992** Administrative Staff Council Scholarship, Bowling Green State University  
**1990-91, 1991-92, 1992-93** Alumni Book Scholarship, Bowling Green State University  
**1990-91** Bob Bashore Honors Scholarship, Bowling Green State University  
**1990** Kiyo Kitahara Educational Scholarship, Bowling Green State University  
**1988** University of Dayton Supplemental Athletic Scholarship, Cross Country  
**1988** Pillsbury Community Service Scholarship

### **SOFTWARE DEVELOPMENT**

Western Colorado Perennial Grass and Biomass Budget Generator. Agricultural Experiment Station Report 14-03.

Technical and Economic Decision Tools for Anaerobic Digestion Projects. Development of economic decision tools. <http://www.engr.colostate.edu/adtool/>

Risk Navigator Strategic Risk Management Tools. Co-Development Risk Profiler and Risk Ranker electronic tools. [www.risknavigatorarm.com](http://www.risknavigatorarm.com)

### **BROADCASTS AND PRODUCTIONS:**

**Television and Radio Broadcasts** Listed by year, broadcast affiliate, date

**“Mali National News, LeJournal, Station ORTM”**. Livestock and Climate Change: Biogas and Manure Management. Broadcast February 16, 2011 and February 17, 2011.

**“Broadcast NBC-11-News, Grand Junction, Colorado”** Gender Risk: Management Tools for Women in Agriculture. February 3, 2009.

**“Saturday Morning Farm Equipment Show with Keith Maxey”**

**1310 KFKA News Talk Radio** Update: The Economics of Using Anaerobic Digesters for Animal Waste Management. October 17, 2009.

**“Colorado Agricultural News Network Radio Broadcast with Lorrie Boyer” (19 Stations)**

1) Using Cost Effective Management Practices in a Down Economy. February 10, 2009.

2) Teens on Farms: Using Teens as a Source of Summer Labor. October 30, 2009.

**“Northern Ag Network Powerful Voice of the West”**

**94 stations across Idaho, Montana, North Dakota, South Dakota & Wyoming**

- 1) Learn to Manage Your Risk. News and Voices in Agriculture with Kristi Pettis and Haylie Shipp. October 3, 2008.
- 2) Commodity Price Volatility and Other Agricultural Risks. News and Voices in Agriculture with Kristi Pettis. 94 stations across Idaho, Montana, North Dakota, South Dakota, and Wyoming. May 24, 2008.

**“Colorado Agricultural News Network Radio Broadcast with Lorrie Boyer” (19 Stations)** The Farm Bill’s Expanded Definition of Livestock and Other Agricultural Risks. December 12, 2008.

**“Saturday Morning Farm Equipment Show with Keith Maxey”**

**1310 KFKA News Talk Radio**

- 1) The Economics of Using Anaerobic Digesters for Animal Waste Management. November 8, 2008
- 2) Choosing Your Risk Preferences and Mitigating Your Financial Risk. April 5, 2008.

**“Colorado Matters”, with Ryan Warner on Colorado Public Radio** People Spend Hundreds Climbing Fourteeners. August 7, 2007; August 11, 2007; August 12, 2007 (KCFR); August 13, 2007 (KUNC).  
<http://www.soilcrop.colostate.edu/keske/index.html>

**“Colorado Agricultural News Network Radio Broadcast with Lorrie Boyer” (19 Stations)**

- 1) Women in Agriculture and the Risks that Women Face: Part IV. October 10, 2007.
- 2) Women in Agriculture and the Risks that Women Face: Part III. September 12, 2007.
- 3) Using Cowboy Poetry to Preserve Western Heritage and a Community’s Sense of Place. September 5, 2007.
- 4) Women in Agriculture and the Risks that Women Face: Part II. July 25, 2007.
- 5) Women in Agriculture and the Risks that Women Face. April 9, 2007.

**“Saturday Morning Farm Equipment Show with Keith Maxey” 1310 KFKA News Talk Radio.**

- 1) Agricultural Conservation Easements. December 13, 2007.
- 2) Women in Agriculture and the Risks that Women Face: Part II. October 13, 2007.
- 3) Women in Agriculture and the Risks that Women Face: Part I. September 22, 2007.

**“Colorado Agricultural News Network Radio Broadcast with Lorrie Boyer” (19 Stations)** Research on Conservation Easements. December 27, 2006.

**“WRGT-TV45, Kids’ Time”.** Children’s On-Air Television Show Hostess. August 1988-August 1989.

**Clinics/Adjudications/Workshops:**

**November 19, 2009.** Institute for Livestock and the Environment Second Annual Stakeholder Summit. Co-organized with Jessica Davis and Sarah Lupis. Fort Collins, Colorado.

**April 28, 2009.** Institute for Livestock and the Environment Open House, sponsored by CSU School for the Environment and Global Sustainability (SOGES). Co-organizer with Jessica Davis and Katherine Sanchez Meador.

**February 3, 2009.** Strategic Risk Management for Women in Agriculture: Labor Retention and Supply. Grand Junction,

**October 24, 2008.** Strategic Risk Management for Women in the Alpaca Industry Conference. Fort Collins, CO.

**October 19, 2007.** Business and Risk Management Conference for Women in Agriculture: Owners, Operators, and Rookies. Greeley, CO.

**June 21, 2007.** Risk Management for Women in Agriculture: Owners, Operators, and Rookies. Steamboat Springs, CO.

**TEACHING:**

<u>Year</u>	<u>Semester</u>	<u>Course No./Title</u>	<u>Cr. Hrs.</u>	<u>Semester Enrollment</u>
2006	Fall	AREC/ECON 335 Introduction to Econometrics	3	2 sections of 40
2008	Spring	AREC/ECON 335 Introduction to Econometrics	3	2 sections of 40
2010- 2012	Spring	AGRI 638 Ecosystem Services on Ag Lands	3	15 Masters
2010- 2012	Spring	AGRI/ENGR 681 Bioenergy Assessment <i>Comment: Co-designed this Ph.D.-level bio-energy course. Responsible for teaching 35%.</i>	3	6-15 Ph.D.
2010	Spring	SOCR/CIVE 481 Waste and Water Recycling <i>Comment: Co-designed course and responsible for teaching 40%. Course continues to be offered in engineering, and was invited as a CSU SOGES course.</i>	3	20 Masters/Ph.D.
2011	Summer	AGRI 638 Ecosystem Services on Ag Lands (online)	3	15 Masters
2008- 2014	Spring/Fall	LAWS 4452 Environmental Economics	3	15-20 J.D./L.L.M.
2010	Fall	LAWS 4701 Energy Economics (online)	3	10 J.D./L.L.M.
2011- 2013	Summer	LAWS 4500 Public Utility Regulation	3	20-25 J.D./L.L.M.
2006	Fall	ECON 201 Macroeconomics at UNC—Greeley	3	3 sections of 60

**Course Descriptions**

**LAWS 4500 Public Utility Regulation:** This course has been taught for three semesters, primarily to law students. Guest speakers include Public Utility Commissioners, attorneys from the Colorado Office of the Attorney General, engineers and economists from federal, state, and local agencies. The author of the textbook, Peter Fox-Penner, also lectured through video conference. This was a new prep course that integrates my niche area of economics, law, and policy.

**LAWS 4452 Environmental and Natural Resource Economics:** This course has been taught seven semesters to law students, graduate students, and to practicing attorneys returning for a master's degree in environmental and natural resource law. The course covers law and economics, policy, sustainable development, and economic modeling, with a focus on public lands.

**SOCR/CIVE 481 Waste and Water Recycling:** This experimental, interdisciplinary course was created and co-taught by three faculty members from different disciplines (economics, engineering, and soil science). After its initial offering, the course is now taught through Civil and Environmental Engineering, which has committed to provide funding for the course instructor.

**AGRI/ENGR 638 Bioenergy Assessment:** This interdisciplinary course is required for MAS-IGERT bioenergy Ph.D. students and the Master of Science oilseed students. I co-taught the course with four other faculty members, but I was not provided funding to do so.

**AGRI 638 Ecosystem Services on Agricultural Lands:** I designed and taught this experimental course as part of Master of Agriculture degree. I also developed an on-line version of the course. The experimental courses reviewed bio-physical components of agricultural ecosystem services, and examined the co-production of provisioning ecosystem services (e.g. commodities, forest products) and supporting/cultural/regulating ecosystem services (e.g. soil formation, open space). The course also addressed practical aspects, like public and private partnerships and ecosystem service funding opportunities. The course was discontinued due to lack of funding.

### **Examples of Course Improvements**

I re-designed AGRI 638 (Ecosystem Services on Ag Lands), which was offered as part of the Integrated Resource Management Program and results in a Master of Agriculture degree. I also developed an on-line version.

At the Denver University Law School I created a new course called LAWS 4701 Energy Economics, but redesigned this course after one semester to better meet student demand. The course is now LAWS 4500 Public Utility Regulation.

### **Development of New Courses**

I co-developed two new courses at CSU:

AGRI/ENGR 681 Bioenergy Assessment  
CIVE/SOCR 481 Waste and Water Recycling

I developed three new courses at the Denver University Sturm School of Law:

LAWS 4452 Environmental and Natural Resource Economics  
LAWS 4701 Energy Economics (offered as an experimental on-line course during fall 2010)  
LAWS 4500 Public Utility Regulation (re-designed after the fall 2010 experimental course)

### **Participation in Professional Development Activities Related to Teaching**

Colorado State University Center Director for Colorado Council on Economic Education  
Responsibilities: Developed curriculum and administered continuing education programs for teachers seeking to fulfill annual licensing continuing education requirements. Evaluated writing requirements, and served as professor of record for these programs. Served as contact for the state/national network, answer questions as needed, and serve in consulting role for the Colorado Council: <http://www.ccee.net>

### **Continuing Education Presentations**

#### **A. Delivery of continuing education programs for Colorado teacher licensing requirements through the Colorado Council on Economic Education. All courses in Denver.**

**September 13, 2014.** “Economics of Fracking.”

**November 12, 2011.** “Energy Policies Toward a Better World—the U.S. and E.U.”

**December 4, 2010.** “Carbon Economy.” Colorado Council for Economic Education.

**April 20, 2010.** “Economics of Alternative Energy in Colorado.” Co-sponsored by Denver Science Museum.

**July 7, 2009.** “Energy Economics”. Colorado Council for Economic Education.

#### **B. Programs for continuing education attorney CLU credits**

**February 12, 2010.** “Sustainable Development, Corporate Governance, and International Law”. American Branch of the International Law Association. Ved Nanda Center for International Law & International Legal Studies Program. Denver Journal of International Law & Policy. University of Denver Sturm College of Law.

#### **C. International Teaching**

**March 3 and March 31, 2014.** Two-part publishing workshop sponsored by Tecnológico de Costa Rica, Centro de Investigación en Administración, Economía y Gestión Tecnológica, Comisión de Internacionalización, Escuela Administración de Empresas. Provided resources, instruction, and mentoring to faculty learning to publish in academic, peer-reviewed journals.

**February 20, 2014.** “Does a Healthy Economy Lead to a Healthy Environment?” Distinguished lecture sponsored by Tecnológico de Costa Rica, Centro de Investigación en Administración, Economía y Gestión Tecnológica, Comisión de Internacionalización, Escuela Administración de Empresas.

**June 13, 2010.** China Agricultural University sponsored guest lecture on environmental economics and resource management in rural communities.

### **STUDENT ADVISING/GRADUATE SUPERVISION**

**Ph.D. Advisees:** Greta Lohman, Adviser CSU 2010-2012, IGERT MASB Fellow  
Andrew Brandess, Adviser CSU 2011-2012, IGERT MASB Fellow

#### **Ph.D. Independent Study/Project Supervision:**

Paul Tanger, CSU IGERT Rotation Adviser CSU Spring 2010  
Patrick Bixler, Independent Study Adviser CSU Spring 2011  
Adam Mayer, Independent Study Advisor CSU Spring 2012  
Andrew Brandess, CSU Spring 2012  
Greta Lohman, CSU Spring 2011, Fall 2011 and Spring 2012

#### **Master of Science:**

2012: Andrew Brandess, Major Adviser CSU 2010-2012 (M.S. in Ag and Resource Economics 5/2012), USDA AFRI NIFA Fellow

Jeffrey Lasker, Committee Member (Master of Engineering 5/2013)  
Cristian Robbins, Committee Member (Master of Engineering 5/2012)  
Andrew Arrell, Major Adviser (Master of Agriculture 12/2012)

2011: Shannon Clark, Major Adviser CSU (Master of Agriculture 12/2011)  
Stephen Goodwin, Committee Member (Master of Engineering 12/2011)  
Christopher Henry, Committee Member (Master of Science in Forestry 8/2011)

2010: Greta Lohman, Major Adviser CSU (Master of Science in Soil and Crop Sciences 12/2010)  
Morgan Davis, Committee Member CSU (Master of Engineering 12/2010)  
Benjamin Geller, Committee Member CSU (Master of Engineering 12/2010)  
Eric Cropper, Committee Member University of Wyoming (Master of Science in Agricultural and Resource Economics 5/2010)

2008: Rebecca Goldbach, Major Adviser, CSU (M.S. in Agricultural and Resource Economics (12/2008)

2007: Michael Verdone, Advising Committee Member, CU-Denver (M.S. in Economics 12/2007)

#### **Bachelor of Science Honors Committees:**

2008: Cassie Fiscus, CSU Honors Thesis Committee Member (B.S. 12/2008)

**Clubs:** University of Northern Colorado Snowboarding Club Faculty Adviser (2006/07)  
UNC Outstanding Club President Nate Giska (Spring 2007)

### **UNIVERSITY COMMITTEES**

Appointed to Colorado State University Disciplinary Panel (2011-2014; 3-year term)  
Institute for Livestock and the Environment Research Coordinator Search Committee (2009)  
Committee Chair: Design of Undergraduate Biofuels Concentration (2010)

### **PROFESSIONAL AFFILIATIONS AND ACTIVITIES**

**Professional reviews for the following journals:** American Journal of Agricultural Economics (AJAE), Agricultural Ecological Economics, Ecological Economics, Economics Society, Human Dimensions of Wildlife, Journal of Environmental Management, Journal of Hospitality Marketing & Management, Journal of Landscape and Urban

Planning, Land, Landscape and Urban Design, Tourism Management, Utilities Policy

**Professional reviews for the following agencies:** National Science Foundation, U.S. Department of Interior, Colorado State Trails Grant, Mosquito Range Heritage Initiative, Colorado Mountain Club and Colorado Fourteeners Initiative, USDA AFRI-NIFA

**Grant panel:** USDA AFRI-NIFA Weedy and Invasive Species Grant Panel (September 2009), National Science Foundation (2014)

**Editorial Board:** Utilities Policy (2010-2014)

**Memberships in professional societies:**

Elected to Western Agricultural Economics Association Board of Directors (2010-2013; 3-year term)

- Refereed Paper Committee Chair for 2012 meetings in Park City, Utah (served 2011-2012)
- Awards Committee Co-Chair for 2011 annual meetings in Banff, Canada (served 2010-2011)
- Awards Committee Co-Chair for 2013 annual meetings in Monterey, California (serving 2012-2013)

Western Agricultural Economics Association Member (2005-present)

Western Center for Integrated Resource Management (Colorado State University 2010- 2012)

CSU Institute for Livestock and the Environment

Associate Director (2008-2012)

Strategic Planning Core Team Member (2007-2012)

CSU Center for Agriculture and Energy (2011-2012)

Board of Directors: Teens on Farms, Delta, Colorado (2009-2010)

Board of Directors: Mountain Area Land Trust, Evergreen, Colorado (2005-2008)

- Chair of Land Stewardship Committee (2005-2006; 2006-2007)
- Lands Committee (2005-2006, 2006-2007, 2007-2008)
- Chair of the Nominating Committee (2007-2008)
- Executive Committee (2007-2008)
- Board Secretary (2007-2008)

NSF Faculty Affiliate, Short Grass Steppe LTER Site (2006-2010)

NSF Faculty Affiliate, Niwot Ridge LTER Site (2009-present)

Colorado Mountain Club Conservation Advisory Council (2009-present)

Agricultural and Applied Economics Association Member (2006-present)