LAURA LÓPEZ-HOFFMAN

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EDUCATION

Ph.D. 2003	Stanford University, Department of Biological Sciences. Advisors: DD Ackerly & H Mooney.
A.B. 1996	Princeton University, Ecology and Evolutionary Biology, Woodrow Wilson School of Public and International Affairs & Latin American Studies.

EMPLOYMENT

2020-present	Professor. University of Arizona, School of Natural Resources and the Environment & Udall Center for Studies in Public Policy.
2015–2020	Associate Professor. University of Arizona, School of Natural Resources and the Environment & Udall Center for Studies in Public Policy.
2008–2015	Assistant Professor. University of Arizona, School of Natural Resources and the Environment & Udall Center for Studies in Public Policy.
2007–2008	Associate Research Scientist. University of Arizona, Department of Geosciences.
2007	NSF Post-doctoral Fellow. University of Arizona, Udall Center for Studies in Public Policy.
2004–2007	NSF Post-doctoral Fellow. Universidad Nacional Autónoma de México, Centro de Investigaciones en Ecosistemas.

ACADEMIC & RESEARCH AFFILIATIONS

2012-present	University of Arizona, James E. Rogers College of Law. Faculty Affiliate.
2011-present	Arizona-Sonora Desert Museum, Tucson, AZ. Research Associate.
2011-present	University of Arizona, Graduate Interdisciplinary Program in Arid Lands Resource Sciences. Faculty.
2011-present	University of Arizona, Latin American Studies. Faculty.

HONORS & AWARDS

2022	Outstanding Scholarly Achievement by Faculty, School of Natural Resources & the Environment, The University of Arizona.
2022	Outstanding Course, School of Natural Resources & the Environment, The University of Arizona.
2021	US Department of Interior Natural Resource Conservation Achievement Award, for role in Monarch Conservation Science Partnership.
2020	US Geological Survey Natural Resource Conservation Achievement Award. In category of Trail Blazer.
2018	Academic Leadership Institute 2019, Faculty Fellow, University of Arizona.
2014–2016	Agnese Nelms Haury Endowment for Environment and Social Justice, Faculty Fellow, University of Arizona.
2013	Chief of the U.S. Forest Service's Excellence in Research Application Award. Co- recipient with collaborators D Semmens (USGS) and J Diffendorfer (USGS).
2011–2012	Woodrow Wilson Foundation Career Enhancement Fellowship.
2010	Outstanding Scholarly Achievement, School of Natural Resources & the Environment, The University of Arizona.
2004–2007	National Science Foundation Minority Post-doctoral Fellowship.
2003	Mellon Mays (MMUF) Dissertation Grant.
2000	National Science Foundation Dissertation Improvement Grant.
1996–1999	National Science Foundation Minority Graduate Fellowship.
1994–1996	Mellon Mays (MMUF) Undergraduate Fellowship.

PUBLICATIONS

Note: My name and the names of students mentored (undergraduate, graduate and post-docs) are in bold.

BOOKS & EDITED VOLUMES

2009 López-Hoffman L, E McGovern, RG Varady, & KW Flessa (eds). 2009. Conservation of Shared Environments: Learning from the United States and Mexico. (320 pages). First volume in the Edge: Environmental Science, Law & Policy book series. ML Miller, B Morehouse & J Overpeck (series eds). The University of Arizona Press. Note: in 2012 the book series moved to the University of Chicago Press.

PEER-REVIEWED JOURNAL ARTICLES

- 2022 Chester, C, AM Lien, J Sundberg, C Gonzalez-Duarte, W Thogmartin, B Mattsson, JJ Derbridge & L López-Hoffman. Using ecosystem services to identify inequitable outcomes in migratory species conservation. In press. Conservation Letters.
- 2022 Feng, X, BJ Enquist, DS Park, B Boyle, DD Breshears, RV Gallagher, A Lien, L López-Hoffman et al. A review of the heterogenous landscape of biodiversity databases: opportunities and challenges for a synthesized biodiversity knowledge base. 2022. Global Ecology and Biogeography. https://doi.org/10.1111/geb.13497

- 2022 Thogmartin, W, MA Haefele, D Semmens, J Diffendorfer, JJ Derbridge, AM Lien, T Huang & L López-Hoffman. Multi-species, multi-country analysis reveals North Americans are willing to pay for transborder migratory species conservation. 2022. People and Nature. https://doi.org/10.1002/pan3.10307
- 2021 **Johnson, MK, MJ Rowe, AM Lien, L López-Hoffman**. Examining compatibility and conflicts in the integration of Indigenous Agricultural Knowledge into Natural Resource Conservation Service cost-share incentives. In Press. *Journal of Soil Water and Conservation*.
- 2021 Weiser, EL, JE Diffendorfer, **L López-Hoffman**, D Semmens, & WE Thogmartin. TrendPowerTool: A tool for estimating the statistical power of a monitoring program to detect population trends. 2021. *Conservation Science in Practice*. 3:e445. https://doi.org/10.1111/csp2.445
- 2021 Lien, AM, T Dew, G Ruyle, N Robbins Sherman, N Perozzo, M Miller, L López-Hoffman. 2021. Trust plays an essential role in implementation of adaptive management on public lands. *Rangeland Ecology and Management*. 77:46-56. https://doi.org/10.1016/j.rama.2021.03.005
- 2020 Leal-Sandoval, A, A Tepatlán-Vargas, G López-Segoviano, OO Linares-Holguín, P Sanchez-Peña, & L López-Hoffman. 2020. Acoustic records of *Promops centralis* (Thomas, 1915) (Chiroptera, Molossidae) in corn agroecosystems of northwestern Mexico. Check List 16:1269-1276. https://doi.org/10.15560/16.5.1269
- 2020 Mattsson, BJ, J Devries, JA Dubovsky, DJ Semmens, WE Thogmartin, **JJ Derbridge & L** López-Hoffman. Sources and dynamics of international funding for waterfowl conservation in the Prairie Pothole Region of North America. *Wildlife Research* 47:279-295. https://doi.org/10.1071/WR19100
- 2020 Mattsson, BJ, J Devries, JA Dubovsky, DJ Semmens, WE Thogmartin, **JJ Derbridge & L** López-Hoffman. 2020. Linking landscape-scale conservation to regional and continental outcomes for a migratory species. *Scientific Reports* 10:4968. https://doi.org/10.1038/s41598-020-61058-3
- 2020 Kleeman, J, M Schröter, KJ Bagstad, C Kuhlicke, T Kastner, D Friedman, CJE Schulp, S Wolff, J Martínez-López, T Koellner, S Arnhold, B Martin-Lopez, A Marques, L López–Hoffman, J Liu, M Kissinger, CA Guerra, A Bonn. 2020. Quantifying interregional flows of multiple ecosystem services – a case study for Germany. *Global Environmental Change* 61:102051. https://doi.org/10.1016/j.gloenvcha.2020.102051
- 2019 Weiser, EL, JE Diffendorfer, R Grundel, L López-Hoffman, S Pecoraro, D Semmens, WE Thogmartin. 2019. Balancing sampling intensity against spatial coverage for a community science monitoring programme. *Journal of Applied Ecology*. 56:2252–2263.
- 2019 Koellner, T, A Bonn, S Arnhold, KJ Bagstad, D Fridman, CA Guerra, T Kastner, M Kissinger, J Kleeman, C Kuhlicke, J Liu, L López-Hoffman, A Marques, B Martín-López, CJE Schulp, S Wolff & M Schröter. 2019. Guidance for assessing interregional ecosystem service flows. *Ecological Indicators*. doi.org/10.1016/j.ecolind.2019.04.046
- 2019 Lien, AM, C Ulibarri, G Ruyle, S Bonar, W Vanasco, & L López-Hoffman. 2019. Opportunities and barriers for endangered species conservation using payments for ecosystem services. *Biological Conservation*. 232:74-82. doi.org/10.1016/j.biocon.2019.01.017
- 2018 Haefele, MA, JB Loomis, AM Lien, JA Dubovsky, RW Merideth, KJ Bagstad, T Huang, BJ Mattsson, DJ Semmens, WE Thogmartin, R Wiederholt, JE Diffendorfer, & L López-Hoffman. 2018. Multi-country willingness to pay for transborder migratory species conservation: a case study of northern pintails. *Ecological Economics*. 157:321-331. doi.org/10.1016/j.ecolecon.2018.11.024
- 2018 Weiser, EL, JE Diffendorfer, L López-Hoffman, D Semmens, & WE Thogmartin. 2018. Consequences of ignoring spatial variation in population trend when conducting a power analysis. *Ecography*. doi.org/10.1111/ecog.04093

- 2018 Loomis, J, M Haefele, J Dubovsky, **AM Lien**, WE Thogmartin, J Diffendorfer, D Humburg, K Bagstad, BJ Mattsson, R Merideth, D Semmens, & L López-Hoffman. 2018. Are there significant differences in economic values and expenditures for viewing different types of waterfowl species in the in the United States? *Human Dimensions of Wildlife* 23(6).
- 2018 Bagstad, KJ, DJ Semmens, JE Diffendorfer, BJ Mattsson, J Dubovsky, WE Thogmartin, R Wiederholt, J Loomis, JA Bieri, C Sample, J Goldstein, & L López-Hoffman. 2018. Ecosystem service flows from a migratory species: Spatial subsidies of the northern pintail. *Ambio*. doi.org/10.1007/s13280-018-1049-4
- 2018 Lien, AM, G Ruyle, & L López-Hoffman. 2018. Q Methodology: A method for understanding complex viewpoints in communities served by Cooperative Extension. *Journal of Extension*.
- Haefele, MA, JB Loomis, R Merideth, AM Lien, DJ Semmens, J Dubovsky, R Wiederholt, WE Thogmartin, T Huang, G McCracken, RA Medellin, JE Diffendorfer, & L López-Hoffman. 2018. Willingness to pay for conservation of transborder migratory species: a case study of the Mexican free-tailed bat in the United States and Mexico. *Environmental Management* doi.org/10.1007/s00267-018-1046-1
- 2018 **Johnson, MK, AM Lien, N Robbins Sherman**, & L López-Hoffman. 2018. Barriers to PES programs in Indigenous communities: A lesson in land tenure insecurity from the Hopi Indian reservation. *Ecosystem Services* 32:62-69. doi.org/10.1016/j.ecoser.2018.05.009
- 2018 Schröter, M, T Koellner, R Alkemade, S Arnhold, K Bagstad, K Erb, K Frank, T Kastner, M Kissinger, J Liu, L López-Hoffman, J Maes, A Marques, B Martín-López, C Meyer, C Schulp, J Thober, S Wolff, & A Bonna. 2018. Interregional flows of ecosystem services: Concepts, typology and four cases. *Ecosystem Services*. doi.org/10.1016/j.ecoser.2018.02.003
- 2018 Semmens, D, K Bagstad, R Wiederholt, J Goldstein, J Loomis, J Diffendorfer, K Oberhauser, L Ries, W Thogmartin, B Mattson, B Semmens & L López-Hoffman. 2018. Quantifying ecosystem service flows at multiple scales across the range of a long-distance migratory species. Invited submission to a special issue of *Ecosystem Services*. doi.org/10.1016/j.ecoser.2017.12.002
- 2018 Mattsson, BJ, JA Dubovsky, WE Thogmartin, KJ Bagstad, JH Goldstein, JB Loomis, JE Diffendorfer, DJ Semmens, **R Wiederholt & L López-Hoffman**. 2018. Recreation economics to inform migratory species conservation: Case study of the northern pintail. In *Journal of Environmental Management*. doi.org/10.1016/j.jenvman.2017.11.048
- 2018 Earl, J, S Nicol, R Wiederholt, JE Diffendorfer, D Semmens, DT Flockhart, BJ Mattson, GF McCracken, DR Norris, WE Thogmartin & L López-Hoffman. 2018. Quantitative tools to implement the new rule on "Significant Portion of its Range" under the Endangered Species Act. *Conservation Biology* 32:35-49. doi.org/10.1111/cobi.12963
- 2017 López-Hoffman, L, J Diffendorfer, R Wiederholt, R Medellin, G McCracken, WE Thogmartin & D Semmens. 2017. Operationalizing the telecoupling framework by calculating spatial subsidies in the ecosystem services of migratory Mexican free-tailed bats. Special Issue. *Ecology and Society* 22(4): 23. doi.org/10.5751/ES-09589-220423
- Thogmartin, WE, L López-Hoffman, J Rohweder, J Diffendorfer, R Drum, D Semmens, S Black, I Caldwell, D Cotter, P Drobney, LL Jackson, M Gale, D Helmers, S Hilburger, E Howard, K Oberhauser, J Pleasants, B Semmens, O Taylor, P Ward, JF Weltzin, and R Wiederholt. 2017. Monarch habitat restoration in the Midwest: "All Hands on Deck." *Environmental Research Letters*, 12(7): 074005. doi.org/10.1088/1748-9326/aa7637
- 2017 López-Hoffman, L, C Chester, D Semmens, W Thogmartin, MS Rodríguez-McGoffin, R Merideth & JE Diffendorfer. 2017. Ecosystem services from transborder migratory species: implications for conservation governance. *Annual Reviews in Environment and Resources*, 42:509-539. doi.org/10.1146/annurev-environ-110615-090119
- 2017 Lien, AM, C Svancara, W Vanasco, G Ruyle & L López-Hoffman. 2017. The land ethic of ranchers: A core value despite divergent views of government. *Rangeland Ecology and Management*, 70(6):787-793. doi.org/10.1016/j.rama.2017.06.004

- 2017 Thogmartin, WE, JE Diffendorfer, L López-Hoffman, K Oberhauser, J Pleasants, BX Semmens, D Semmens, OR Taylor & R Wiederholt. 2017. Density estimates of monarch butterflies overwintering in central Mexico. *Peer J*, *5*, e3221, doi.org/10.7717/peerj.3221
- Thogmartin, W, R Wiederholt, K Oberhauser, R Drum, JE Diffendorfer, S Altizer, O Taylor J Pleasants, D Semmens, B Semmens, R Erickson, K Libby & L López -Hoffman. 2017.
 Monarch population decline in North America: Identifying threatening processes. *R. Soc. open sci.* 4:170760. doi.org/10.1098/rsos.170760
- 2017 López-Hoffman, L, C Chester & R Merideth. 2017. Conserving transborder migratory bats, preserving nature's benefits to humans: the lesson from North America's bird conservation treaties. *BioScience*, 67(4):321-322, doi.org/10.1093/biosci/biw181
- 2017 Wiederholt, R, BJ Mattsson, WE Thogmartin, MC Runge, JE Diffendorfer, RA Erickson, P Federico, L López-Hoffman, JM Fryxell, DR Norris & C Sample. 2017. Estimating the percapita contribution of habitats and pathways in a migratory network: a modeling approach. *Ecography*. doi:10.1111/ecog.02718
- 2017 Medellin, R, **R Wiederholt & L Lopez-Hoffman**. 2017. Conservation relevance of bat caves for biodiversity and ecosystem services. *Biological Conservation*. doi.org/10.1016/j.biocon.2017.01.012
- Wiederholt, R, KJ Bagstad, GF McCracken, JE Diffendorfer, JB Loomis, DJ Semmens, AL Russell, C Sansone, K LaSharr, P Cryan, C Reynoso, RA Medellín & L López-Hoffman. 2017. Improving spatio-temporal benefit transfers for pest control by generalist predators in cotton in the southwestern US. *International Journal of Biodiversity Science, Ecosystem Services & Management*, 13(1):27-39, doi.org/10.1080/21513732.2016.1240712
- 2017 Oberhauser, K, R Wiederholt, J Diffendorfer, L Ries, L Lopez-Hoffman, D Semmens, W Thogmartin, & B Semmens. 2017. A trans-national monarch butterfly population model for identifying regional conservation priorities. *Ecological Entomology*. 42:51-60. doi.org/10.1111/een.12351
- 2016 Semmens, B, D Semmens, W Thogmartin, **R Wiederholt, L Lopez-Hoffman**, Diffendorfer, J Pleasants, K Oberhauer, & O Taylor. 2016. Quasi-extinction risk and population targets for the Eastern, migratory population of monarch butterflies (Danaus plexippus). *Nature Scientific Reports*, 6:23265, doi: 10.1038/srep23265
- 2016 Nicol, S, R Wiederholt, JE Diffendorfer, BJ Mattsson, WE Thogmartin, D Semmens, L López-Hoffman & DR Norris. 2016. A management-oriented framework for selecting metrics used to assess habitat- and path-specific quality in spatially structured populations. *Ecological Indicators*, 69:792–802. doi.org/10.1016/j.ecolind.2016.05.027
- 2016 Field, JP, DD Breshears, DJ Law, L López-Hoffman, PD Brooks, J Chorover, JD Pelletier & JC Villegas. 2016. Broadening ecosystem services through inclusion of a geosciences perspective. EOS, 97, doi.10.1029/2016EO043591
- 2015 Svancara, C, AM Lien, S Bonar, G Ruyle & L López-Hoffman. 2015. Jaguar critical habitat designation causes concern for southwestern ranchers. *Rangelands*, 37(4):144-151, doi: 10.1016/j.rala.2015.05.003
- 2015 Lien, AM, JL Neeley, G Ruyle & L López-Hoffman. 2015. The impact of Federal policies on rangeland ecosystem services. *Rangelands*, 37(4):152-157. doi: 10.1016/j.rala.2015.05.002
- 2015 Field, JP, DD Breshears, DJ Law, JC Villegas, L López-Hoffman, PD Brooks, J Chorover, GA Barron-Gafford, RE Gallery, M Litvak, R Lybrand, J McIntosh, T Meixner, G Niu, SA Papuga, JD Pelletier, CR Rasmussen & PA Troch. 2015. Critical zone services: expanding context, constraints and currency beyond ecosystem services. *Vadose Zone Journal*, 14(1):1-7. doi: 10.2136/vzj2014.10.0142
- 2015 Lien, AM, W Vanasco, L López-Hoffman & G Ruyle. 2015. Payments for Ecosystem Services for Southern Arizona Ranchers. *Arizona Cooperative Extension Publication* The University of Arizona, College of Agriculture and Life Sciences: Tucson, AZ.

- 2015 Wiederholt, R, L Lopez-Hoffman, C Svancara, G McCracken, W Thogmartin, J Diffendorfer, K Bagstad, P Cryan, A Russell, D Semmens & R Medellin. 2015. Optimal conservation strategies for Mexican free-tailed bats: A population viability and ecosystem services approach. *Biodiversity and Conservation*, 24:63-82. doi: 10.1007/s10531-014-0790-7
- 2015 **Presnall, CK, L López-Hoffman** & ML Miller. 2015. Adding Ecosystem Services to Environmental Impact Assessments: More sequins on a "Bloated Elvis" or Rockin' Idea? *Ecological Economics*, 115: 29-38. doi.org/10.1016/j.ecolecon.2014.02.001
- López-Hoffman, L, R Wiederholt, C Sansone, KJ Bagstad, P Cryan, JE Diffendorfer, J Goldstein, K LaSharr, J Loomis, G McCracken, RA Medellín, A Russell & D Semmens.
 2014. Market forces & technological substitutes cause fluctuations in the value of bat pest-control services for cotton. *PLOS ONE*, 9(2): e87912. doi: 10.1371/journal.pone.0087912
- 2014 Goldstein, JH, W Thogmartin, KJ Bagstad, JA Dubovsky, D Semmens, BJ Mattsson, L López-Hoffman & JE Diffendorfer. Replacement cost valuation of Northern Pintail (*Anas acuta*) subsistence harvest in Arctic and sub-Arctic North America. *Human Dimensions of Wildlife*, 19:347-354. doi: 10.1080/10871209.2014.917345
- 2014 Diffendorfer, JD, J Loomis, L Reis, K Oberhauser, L López-Hoffman, D Semmens, B
 Butterfield, K Bagstad, B Semmens, J Goldstein, R Wiederholt, B Mattsson & W Thogmartin.
 2013. National valuation of monarch butterflies suggests untapped potential for incentive-based conservation strategies. *Conservation Letters*, 7(3):253-262. doi: 10.1111/conl.12065
- 2013 Baeza, K, L López-Hoffman, EP Glenn, KW Flessa & J Garcia-Hernandez. 2012. Salinity limits of vegetation in the Cienega de Santa Clara, an oligotrophic marsh in the delta of the Colorado River, Mexico: Implications for a salinity increase. *Ecological Engineering*, 59: 157-166. Special issue on the Colorado River delta. doi: 10.1016/j.ecoleng.2012.08.019
- 2013 Wiederholt, R, L López-Hoffman, J Cline, R Medellin, P Cryan, A Russell, G McCracken, J Diffendorfer & D Semmens. Moving across the border: modeling migratory bat populations. *Ecosphere*, 4(9):114. doi: 10.1890/ES13-00023.1
- 2013 López-Hoffman, L, DD Breshears, CD Allen, and ML Miller. 2013. Key landscape ecology metrics for assessing climate change adaptation options: rate of change and patchiness of impacts. *Ecosphere*, 4(8): 101. doi: 10.1890/ES13-00118.1
- 2013 **Carrillo-Guerrero**, Y, KW Flessa, O Hinojosa-Huerta & L López-Hoffman. 2013. From Accident to Management: The Cienega de Santa Clara Ecosystem. *Ecological Engineering*, 59:84-92. Special issue on the Colorado River delta. doi: 10.1016/j.ecoleng.2013.03.003
- 2013 López-Hoffman, L, D Semmens & JE Diffendorfer. 2013. How do migratory species add ecosystem service value to wilderness? Calculating the spatial subsidies provided by protected areas. *International Journal of Wilderness*, 19(1):14-19. Special issue on ecosystem services and wilderness conservation.
- 2011 Goldstein, JH, CK Presnall, L López-Hoffman, GP Nabhan, RL Knight, G Ruyle & TP Toombs. 2011. Beef and beyond: paying for ecosystem services on western US rangelands. *Rangelands*, 33(5):4-12. Special issue on rangeland ecosystem services. doi:10.2111/1551-501X-33.5.4
- 2011 Semmens DJ, JE Diffendorfer, L López-Hoffman & C Shapiro. 2011. Accounting for the ecosystem services of migratory species: quantifying migration support and spatial subsidies. *Ecological Economics*, 70:2236-2242. doi: 10.1016/j.ecolecon.2011.07.002
- 2011 Breshears DD, L López-Hoffman & LJ. Graumlich. 2011. When ecosystem services crash: preparing for big, fast, patchy climate change. *Ambio*, 40:256-263. doi: 10.1007/s13280-010-0106-4
- 2010 Presnall, CK, L López–Hoffman & ML Miller. 2010. Can the Deepwater Horizon Trust Take Account of Ecosystem Services and Fund Restoration? *Environmental Law Reporter*, 40(11):29-31. Special issue on the Deepwater Horizon oil spill.

- 2010 López-Hoffman L, RG Varady, KW Flessa & P Balvanera. 2010. Ecosystem services across borders: A framework for transboundary conservation. *Frontiers in Ecology and the Environment*, 8(2):84–91. doi: 10.1890/070216
- 2008 Krauss, KW, CM Lovelock, KL McKee, L López-Hoffman, SML Ewe & WP Sousa. 2008. Environmental drivers in mangrove establishment and early development. *Aquatic Botany*, 89:105-127. Special issue on forestry and coastal zone management of mangrove ecosystems.
- Aguilera-Taylor I, A Corzo-Domínguez, G Muñoz-Castro & L López-Hoffman. 2007.
 Ecosystem services from an endemic plant and value for local people. *Gaceta Ecologica*, 84: 75-83. Special issue on ecosystem services in Mexico.
- 2007 López-Hoffman L, DD Ackerly, NPR Anten, JL DeNoyer & M Martínez-Ramos. 2007. Gap dynamics and mangrove life histories: the importance of considering the whole life cycle. *Journal of Ecology*, 95:1222-1233.
- 2007 López-Hoffman L, NPR Anten, M Martínez-Ramos & DD Ackerly. 2007. Salinity and light interactively affect Neotropical mangrove seedlings at the leaf and whole plant levels. *Oecologia*, 150(4):545-556.
- 2006 López-Hoffman L, IE Monroe, E Narvaéz, M Martínez-Ramos & DD Ackerly. 2006. Sustainability of mangrove harvesting: How do harvesters' perceptions differ from ecological analysis? *Ecology and Society*, 11(2): 14. Special issue: Do we need new management paradigms to achieve sustainability in tropical forests?
- 2006 López-Hoffman L, JL DeNoyer, IE Monroe, R Shaftel, NPR Anten, M Martínez-Ramos & DD Ackerly. 2006. Mangrove seedling net photosynthesis, growth, and survivorship are interactively affected by salinity and light. *Biotropica*, 38:606-616.
- 1998 Field, CB, JG Osborn, L López-Hoffman, et al. 1998. Mangrove biodiversity and ecosystem function. *Global Ecology and Biogeography Letters*, 7:3-14.
- 1998 Field, CB, RJ Whittaker, L López-Hoffman, JG Osborn & JF Polsenberg. 1998. Biodiversity and function of mangrove ecosystems. *Global Ecology and Biogeography Letters*, 7:1-1.

JOURNAL BOOK REVIEWS & COMMENTS

- 2012 Balvanera, P & L López-Hoffman. 2012. Mapping the links between ecosystems and society. Book review of "Natural Capital: Theory and Practice of Mapping Ecosystem Services" by Kareiva, P, H. Tallis, TH Ricketts, GC Daily & S Polasky. *Trends in Ecology and Evolution*, 20(9):477-478.
- 2010 Skroch M & L López-Hoffman. 2010. Saving nature under the big tent of ecosystem services: A response to Adams and Redford. *Conservation Biology*, 24(1):325-327.

CHAPTERS IN SCHOLARLY BOOKS

- 2014 Nabhan, GP, L López-Hoffman, H Gosnell, J Goldstein, R Knight, CK Presnall, L Gwin, D Thilmany & S Charnley. 2014. Payments for ecosystem services: keeping working landscapes productive and functioning. In *Stitching the West Back Together: Conserving Working Landscapes and Biodiversity in the American West*, S Charnley, T Sheridan, GP Nabhan (eds). *Summits: Environmental Science, Law & Policy* ML Miller, B Morehouse & J Overpeck (series eds). pp 275-294. University of Chicago Press, Chicago.
- 2013 Peters, DPC, SA Archer, BT Bestelmeyer, ML Brooks, JR Brown, AC Comrie, HR Gimblett, JH Goldstein, KM Havstad, L López-Hoffman, HC Monger, GS Okin, A Rango, OE Sala, CE Tweedie & ER Vivoni. 2013. Desertification of Rangelands. In TR Seastedt & KN Suding, eds. *Ecosystem Functions and Services*, Volume 4 in RA Pielke, Sr. Editor-in-Chief. *Climate Vulnerability: Understanding and Addressing Threats to Essential Resources*. pp. 239-258. Elsevier.

- 2012 López-Hoffman, L & A Quijada. Madrean Sky Islands, North America. 2012. In *Climate and Conservation: Landscape and Seascape Science, Planning and Action*. C Chester, M Cross & J Hilty (eds); pp 217-226. Island Press. Washington, DC.
- 2012 Quijada-Mascareñas, JA, C Van Riper, D James, L López-Hoffman, C Sharp, R Gimblett, M Scott, L Norman, R Medellin, JB Callegary, R List, C Wallace, P Holm, E Glenn, J Leenhouts, T Esque, M Culver, R Webb, R Steidl. 2012. An ecosystem approach for monitoring the border wall. In, *The Border Wall between Mexico and the United States. Venues, Mechanisms and Stakeholders for a Constructive Dialogue*, C de la Parra, E Peters, A Cordova y Vazquez (eds). Instituto Nacional de Ecología, SEMARNAT, Mexico DF, Mexico
- 2009 López-Hoffman L, RG Varady & P Balvanera. 2009. Finding mutual interest in shared ecosystem services: new approaches to transboundary conservation. In *Conservation of Shared Environments: Learning from the United States and Mexico*; L López-Hoffman, E McGovern, RG Varady & KW Flessa (eds); pp 137-153. University of Arizona Press, Tucson.
- 2009 López-Hoffman L, E McGovern, RG Varady, & KW Flessa. 2009. Guiding principles for successful transboundary conservation. In *Conservation of Shared Environments: Learning from the United States and Mexico*; L López-Hoffman, E McGovern, RG Varady, & KW Flessa (eds); pp 293-298. University of Arizona Press, Tucson.
- 2009 López-Hoffman L, E McGovern, RG Varady, & KW Flessa. 2009. Energizing transboundary conservation Three easy steps. In *Conservation of Shared Environments: Learning from the United States and Mexico*, L López-Hoffman, E McGovern, RG Varady, & KW Flessa (eds); pp 299-301. University of Arizona Press, Tucson.

PEER-REVIEWED REPORTS & ASSESSMENTS

2018 Seixas, CS, CB Anderson, S Fennessy, B Herrera-F, O Barbosa, R Cole, R Juman, L López-Hoffman, RM Moraes, G Overbeck, WR Townsend, & J Díaz-José. 2018. Chapter 2: Nature's contributions to people and quality of life. In Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES) regional assessment report on biodiversity and ecosystem services for the Americas pp 53-169.

TESTIMONY & REPORTS NOT PEER-REVIEWED

- 2020 Pidot, J, S Bethard, K Emerson, B Kim, AM Lien, M Miller, S Ram & L López-Hoffman. 2020. Testimony to Senate Committee on Environment and Public Works hearing: "Better, Faster, Cheaper, Smarter, and Stronger: Infrastructure Development Opportunities to Drive Economic Recovery and Resiliency." July 1, 2020.
- 2018 Emerson, K, E Baldwin, L López–Hoffman. Interagency cooperation on the US Mexico border. Read into the record for *United States Subcommittee Congressional Hearing on Oversight and Investigations* The Costs of Denying Border Patrol Access: Our Environment and Security. 12 February 2018.
- 2013 **Presnall, CK, L López–Hoffman &** ML Miller. 2013. An ecosystem services approach to environmental impact assessments: useful tool or business as usual? Environmental Policy Working Paper. Udall Center for Studies in Public Policy, University of Arizona.
- 2012 Flessa, K, J Campoy Favela, F Zamora, J García, E Glenn, O Hinojosa, J Ramírez, L Lopez-Hoffman, L Mexicano, Y Carrillo, L Cadena, R Brambila de Zamora, E Santiago, S Drake, MAS El Vilaly, K Hartfield & M Lomelí. 2012. Monitoring program for the Cienega de Santa Clara. A report to: Central Arizona Water Conservation District, Metropolitan Water District of Southern California, Southern Nevada Water Authority, Comisión Nacional de Áreas Naturales

Protegidas & Instituto Nacional de Ecología. 124 pages. http://www.geo.arizona.edu/cienega/?q=webfm_send/347

- 2010 López-Hoffman, L. 2010. Transboundary Ecosystem Services: A New Vision for Managing the Shared Environment of the U.S. and Mexico. Environmental Policy Working Paper (2). Udall Center for Studies in Public Policy, University of Arizona.
- 2010 Good Neighbor Environmental Board. 2010. A Blueprint for Action on the US-Mexico Border. Thirteenth Report of the Good Neighbor Environmental Board to the President and Congress of the United States. L López-Hoffman and M Skroch contributed to the chapter on Habitat and Biodiversity Conservation. http://www.epa.gov/ocem/gneb/

OP-ED PIECES & GENERAL PUBLIC COMMENTARY

- 2022 López-Hoffman, L, ML Miller, S Ram & JJ Derbridge. 2022. Data science, history point way to a more sustainable Arizona. *Arizona Daily Star*. https://tucson.com/opinion/local/local-opinion-data-science-history-point-way-to-a-more-sustainable-arizona/article_1471fe54-9fcb-11ec-80a9-fb4e3f166695.html
- 2019 López-Hoffman, L, A Lien & A Swann. 2019. America's 2019 harvest is already in trouble. *The Hill*. https://thehill.com/opinion/energy-environment/436500-americas-2019-harvest-is-already-in-trouble
- Baldwin, E, K Emerson & L López-Hoffman. 8-5-2017. Border security vs. environmental protection? It's a false choice. Protecting the nation doesn't require destruction of natural resources. *Houston Chronicle*. http://www.houstonchronicle.com/opinion/outlook/article/Border-security-vs-environmental-protection-11737181.php?cmpid=gsa-chron-result
- 2017 Lien, AM, G Ruyle, and L López-Hoffman. 2017. What we've learned about public lands stewardship. *Arizona Cattlelog*.
- 2017 Chester, C & L Lopez-Hoffman. 1-10-2017. We should not end 100 years of breaking down walls to help wildlife. *Houston Chronicle*. http://www.chron.com/opinion/outlook/article/Chester-Lopez-Hoffman-We-should-not-end-100-10848767.php

OTHER MEDIA OUTPUT

- 2020 Anderson, S, B Francis, AM Lien & L López-Hoffman. NEPAccess: the Undergraduate Team. Short video starring the UA undergraduates involved in creating the NEPAccess platform. https://vimeo.com/514047784
- 2020 Anderson, S, B Francis, AM Lien & L López-Hoffman. NEPAccess: Explained by the Undergraduate Team. Short video where the UA undergraduates involved in creating the NEPAccess platform explain what the project is all about and the team involved. https://vimeo.com/508049098
- 2020 Derbridge, JJ, MR Stahl, JC Jackson, P Mirocha, Anderson, S, B Francis, AM Lien & L López-Hoffman. NEPA the next 50. A 2-minute version of the short animated film about NEPAccess, a cutting-edge knowledge platform that uses data science to provide public access to all NEPA documents, and analysis tools that transform the potential for understanding environmental governance in the US. https://vimeo.com/510886460
- 2020 Derbridge, JJ, MR Stahl, JC Jackson, P Mirocha, Anderson, S, B Francis, AM Lien & L López-Hoffman. NEPA the next 50. A short animated film about NEPAccess, a cutting-edge knowledge platform that uses data science to provide public access to all NEPA documents, and

analysis tools that transform the potential for understanding environmental governance in the US.

- 2019 Derbridge, JJ, MR Stahl & L López-Hoffman. Getting our ducks in a row for 21st century conservation. A short animated film about spatial subsidies related to ecosystem service provided by northern pintail ducks and other migratory species.
- 2018 Derbridge, JJ, MR Stahl & L López-Hoffman. Migrations make the world go around. A short animated film about spatial subsidies related to ecosystem service provided by Mexican free-tailed bats and other migratory species.
- 2018 Stahl, MR & L López-Hoffman. NEPAccess in action. A graphical use case interpretation for National Science Foundation proposal - RIDIR: Collaborative Research: Data Science Tools for Policy Analyses.

WORK IN PROGRESS

IN REVIEW

IN REVISION

López-Hoffman, L, AM Lien, K Emerson, T Scott, E Baldwin, SJ Bethard, E Laparra, F Currim, J Derbridge, R Merideth, S Ram & M Miller. NEPAccess: Harnessing the power of big data to catalyze engagement, participation and analysis under the National Environmental Policy Act.

Huang, TK, JR Soto, J Liou, AM Lien, **JJ Derbridge**, W Thogmartin, J Diffendorfer, HY Wan, D Yang & L López-Hoffman. Sharing ecosystem services can help overcome international impediments to migratory bird conservation in East Asia.

Huang, TK, X Feng, J Diffendorfer, W Thogmartin, G McCracken, K Libby, JJ Derbridge & L López-Hoffman. Can wind farms and bat migrations coexist? Identifying low-impact areas for wind development.

Lien, AM, C Svancara, W Vanasco, G Ruyle, S Bonar & L López-Hoffman. Leveraging intrinsic motivations and collaborative conservation to improve the effectiveness of incentives for endangered species conservation.

IN PREPARATION

Semmens D, W Thogmartin, J Diffendorfer, K Bagstad & L López-Hoffman. Understanding the ecology and economics of spatial subsidies in relation to conservation of migratory species.

López-Hoffman L, AM Lien, ALS Swann, X Feng, **T Huang**, DD Breshears, **JJ Derbridge**, E Baldwin, MM Laguë, MM Núñez-Regueiro & J Soto. Where forest loss matters for agriculture: identifying the hidden economic telecouplings caused by ecoclimate teleconnections.

Derbridge JJ, K Bagstad, J Diffendorfer, D Semmens, W Thogmartin, B Mattsson, A Harrison, AM Lien & L López-Hoffman. How to assess interregional flows of ecosystem services from migratory species: a fit-for-purpose tiered approach.

GRANTS & CONTRACTS

FEDERAL GRANTS

- 2021 National Science Foundation: Dynamics of Integrated Social Environmental Systems: Governance Across Space: Discovering Principles of Equity and Sustainability to Conserve Migratory Species within Telecoupled Social Environmental Systems. \$1,599,873. PI: L López-Hoffman; Co-PIs: C Chester, JJ Derbridge, J Diffendorfer, AM Lien. 40% effort.
- 2018 National Science Foundation: RIDIR: Collaborative Research: Data Science Tools for Policy Analyses. \$1,500,000. PI: L López-Hoffman; Co-PIs: ML Miller, E Baldwin, S Ram, SJ Bethard, T Scott. Senior Personnel: K Emerson, R Merideth. 30% effort.
- 2018 National Science Foundation: Coupled-Natural Human Systems. Revealing the Hidden Ecoclimate Teleconnections between Forest and Agriculture in the US Enables Novel Governance Strategies for a Telecoupled World. \$1,599,767. PI: D Breshears; Co-PIs L López-Hoffman, A Swann, E Baldwin, J Soto. Senior Personnel: A Lien, X Feng, R Merideth, M Nuñez-Regeuiro. 40% effort.
- 2016 U.S. Geological Survey. Impacts of wind energy development on Mexican free-tailed bats. 2016-2017. \$65,000. PI: L López-Hoffman. 100% effort.
- 2016 USDA-NIFA. Bioenergy, Natural Resources and Environment (BNRE) program, Agroecosystem Management priority area. Does adaptive management enhance ecosystem services and provide socio-economic benefits on Southwestern rangelands? \$439,080. PI: L
 López-Hoffman; Co-PIs: G Ruyle, M Miller & T Teegerstrom. Senior Personnel: A Lien, A Kerna, S Noelle & JL Neeley. 75% effort.
- 2015 National Science Foundation: Coupled-Natural Human Systems. A telecoupling model to account for spatial subsidies of ecosystem services provided by transboundary migratory species in North America. \$849,999. PI: L López-Hoffman; Co-PIs: J Loomis, & R Wiederholt. Senior Personnel: C Chester, A Lien, B Mattsson & J Sundberg. Collaborating USGS Scientists: W Thogmartin, K Bagstad, D Semmens & J Diffendorfer. Collaborating US Fish & Wildlife Service Scientist: J Dubovsky. 75% effort.
- 2014 U.S. Geological Survey: John Wesley Powell Center for Analysis and Synthesis. Continental Scale Monarch Conservation Planning. 2014-2015. \$70,717. PI: L López-Hoffman. 100% effort.
- 2013 U.S. Fish & Wildlife. Incentives for large landscape conservation: ranching and jaguars. In negotiation. 2013-1015. \$330,086. PI: S Bonar. Co-PIs: L Lopez-Hoffman & G Ruyle. 50% effort.
- U.S. Geological Survey: John Wesley Powell Center for Analysis and Synthesis. Migratory species and spatial subsidies of ecosystem services. 2011-2013. \$79,458. PI: L López-Hoffman. 100% effort.
- 2011 National Science Foundation, Research Initiation Grant. Transboundary ecosystem services of migratory bats: modeling spatial mismatches and subsidies. 2011-2014. \$187,000. PI: L López-Hoffman. 100% effort.
- 2011 National Science Foundation: Office of International Science & Engineering Catalyzing New International Collaborations. International workshop on shared and paired environments: US and Mexico. 2011-2012. \$39,791. PI: C Hutchinson. Co-PIs: KW Flessa, TE Huxman & L López-Hoffman. 40% effort.
- 2011 National Oceanic & Atmospheric Administration: Climate and Societal Interactions. 2011-2013. Managing demand and rethinking supply: conservation, adaptation, and planning alternatives in the drought-prone southwestern United States and northwestern Mexico.
 \$300,000. PI: M Wilder. Co-PIs: R Varady & G Garfin. Senior Personnel: D Austin, C Scott, L López-Hoffman, G Frisvold, M Vasquez & KW Flessa. 5% effort.

2009 U.S. Forest Service: Aldo Leopold Leadership Fund. 2009-2010. Transboundary conservation and adaptation to climate change. \$25,000. PI: LJ Graumlich. Co-PI: L López-Hoffman. 50% effort.

UNIVERSITY GRANTS

- Office of Research, Discovery and Innovation, University of Arizona. Forecasting future operating environments: bridging biodiversity conservation, public health and security. 2017-2019. \$579,796. PI: L López-Hoffman. Lead scientists: B Enquist, E Baldwin, K Ernst & D Breshears. 100% effort.
- 2016 Institute of the Environment, University of Arizona. 2016. Building and bridging for new research in biodiversity and conservation. \$26,500. PI: L López-Hoffman. Co-PI D Breshears. 50% effort.
- 2011 Arizona Technology and Research Initiative Fund (TRIF): Water, Environment and Energy Solutions Initiative. 2011-2012. Enhancing transborder ecosystem services through active management: The Ciénega de Santa Clara. 2011-2012. \$40,000 with \$19,436 match from the Central Arizona Project. PI: KW Flessa. Co-PI: L López-Hoffman. 33% effort.
- 2010 University Commission on the Status of Women, University of Arizona. 2010. Promoting women's research perspectives through the "Op-Ed Page." \$500. PI: L López-Hoffman. 100% effort.
- 2008 The University of Arizona: Graduate College: Graduate Incentives for Growth Awards. 2009. A proposal for funding Mexican graduate students in SNRE. \$114,000. PI: C Conway. Co-PIs: JA Quijada, L López-Hoffman, B Mannan & LJ Graumlich. 15% effort.

PRIVATE FOUNDATION GRANTS

- 2010 Tinker Foundation. 2010-2012. Securing water for people and the environment in the Colorado River Delta. \$299,761. PI: F Zamora. Co-PIs: J Marlowe, KW Flessa, L López-Hoffman & A McCoy. 10% effort.
- 2008 The Christensen Foundation. 2008-2010. Community-based restoration and monitoring of the Colorado River Estuary, Mexico. \$50,000. PI: KW Flessa. Co-PI: L López-Hoffman. 50% effort.

GRANTS & CONTRACTS PENDING (In review)

2021 NEPAccess: A platform for 21st Century NEPA, Environmental Justice and Democratic Decision-making. A case for support for private philanthropy. 2021. \$9,787,728. PI: L López-Hoffman; Co-PIs: M Miller, S Ram, S Bethard & K Emerson.

GRANTS & CONTRACTS PENDING (In preparation)

CONFERENCES & SCHOLARLY PRESENTATIONS

Note: My name and the names of students mentored (undergraduate, graduate and post-docs) are in bold.

SYMPOSIA ORGANIZED

- 2012 Spatial Subsidies from Migration: A Foundation for Conservation Markets. ACES and Ecosystem Markets 2012. December 10-14, 2012. Fort Lauderdale, FL. Co-organized with D Semmens & JE Diffendorfer.
- 2010 When Ecosystem Services Cross Boundaries: Science and Governance. ACES: A Conference on Ecosystem Services. Dec 6-9, 2010. Gila River Indian Community, AZ. Co-organized with L Norman.
- 2009 Ecosystem services delivered by watersheds. Global Land Project Open Science. Oct 17-19, 2009. Arizona State University, Tempe, AZ. Co-organized with P Balvanera.
- 2009 Transboundary Conservation in the Face of Climate Change. Wild09. Nov 2009. Merida, Mexico. Co-organized with LJ Graumlich and B Morehouse.

WORKSHOPS ORGANIZED

- 2013 Animal migration and spatial subsidies: Establishing a framework for conservation markets, Fourth Workshop. USGS John Wesley Powell Center for Analysis & Synthesis. April 21-25, 2013. Fort Collins, CO. Co-organized with D Semmens & JE Diffendorfer.
- 2013 Transboundary Water Resources Governance and Riparian Areas: Theories, Methods and Applications. Udall Center for Studies in Public Policy and the Water Resources Research Center, The University of Arizona. Jan 10-11, 2013. Tucson, AZ.
- 2012 Animal migration and spatial subsidies: Establishing a framework for conservation markets, Third Workshop. USGS John Wesley Powell Center for Analysis & Synthesis. Oct 16-19, 2012. Fort Collins, CO. Co-organized with D Semmens & JE Diffendorfer.
- 2012 Animal migration and spatial subsidies: Establishing a framework for conservation markets, Second Workshop. USGS John Wesley Powell Center for Analysis & Synthesis. April 23-26, 2012. Biosphere 2, Tucson, AZ. Co-organized with D Semmens & JE Diffendorfer.
- 2011 Animal migration and spatial subsidies: Establishing a framework for conservation markets, First Workshop. USGS John Wesley Powell Center for Analysis & Synthesis. Oct 3-6, 2011. Fort Collins, CO. Co-organized with D Semmens & JE Diffendorfer.
- 2008 When ecosystem services jump and crash. Ecological Society of America. August 2008. Albuquerque, NM. Co-organized with DD Breshears & LJ Graumlich.

INVITED SEMINARS & PRESENTATIONS

- 2020 López-Hoffman, L, DJ Semmens, R Wiederholt, W Thogmartin, R Medellín, G McCracken, B Mattsson, J Loomis, J Dubovsky, K Bagstad, J Diffendorfer, AM Lien, M Haefele. Spatial subsidies & environmental justice and in the conservation of migratory species. *North American Congress for Conservation Biology* July 2020, Virtual.
- 2020 Haefele, M, J Loomis, R Merideth, K Bagstad, DJ Semmens, J Diffendorfer, J Dubovsky, W Thogmartin, BJ Mattsson, R Wiederholt, R Medellín, G McCracken, AM Lien, T Huang, L López-Hoffman. Willingness to pay for transborder conservation of migratory species in Canada, the United States, and Mexico. North American Congress for Conservation Biology July 2020, Virtual.
- 2020 Mattsson, BJ, K Bagstad, DJ Semmens, J Diffendorfer, J Dubovsky, W Thogmartin, R Wiederholt, J Loomis, J Goldstein, J Bieri, C Sample, L López-Hoffman. Ecosystem service flows from a migratory species: spatial subsidies of the northern pintail. *North American Congress for Conservation Biology* July 2020, Virtual.

- 2020 Semmens, DJ, L López-Hoffman, R Wiederholt, W Thogmartin, B Semmens, C Sample, A Russell, L Ries, K Oberhauser, R Medellín, G McCracken, B Mattsson, J Loomis, J Goldstein, J Dubovsky, J Bieri, K Bagstad, J Diffendorfer. Closing the loop: Markets and payments as a mechanism for affecting cross-jurisdictional conservation of migratory species. *North American Congress for Conservation Biology* July 2020, Virtual.
- 2020 **Derbridge, JJ,** D Semmens, J Diffendorfer, W Thogmartin, **AM Lien, TK Huang**, MA Haefele, J Loomis, K Bagstad, BJ Mattsson and L López-Hoffman. Using the spatial subsidies framework for conservation of transboundary ecosystem services from migratory species. *North American Congress for Conservation Biology* July 2020, Virtual.
- 2020 Diffendorfer, J, D Semmens, K Bagstad, R Wiederholt, K Oberhauser, L Ries, B Semmens, J Goldstein, J Loomis, W Thogmartin, B Mattsson, L López-Hoffman. Patterns of Ecosystem Services Generated by Migratory Monarch Butterflies Across Scales and Countries in North America. North American Congress for Conservation Biology July 2020, Virtual.
- 2019 Mattsson, BJ, L López-Hoffman, D Semmens, J Diffendorfer, W Thogmartin, AM Lien, TK Huang, MA Haefele, J Loomis, K Bagstad and JJ Derbridge. Using the spatial subsidies framework for conservation of transboundary ecosystem services from migratory species. Symposium. *The Wildlife Society Annual Conference* October 2019, Reno, NV.
- 2019 López-Hoffman, L, K Emerson, E Baldwin, & MS Rodríguez-McGoffin. What happened when NEPA ended at the border? The "end" of environmental law: a multi-disciplinary conference. 18 January 2019. James E. Rogers College of Law, University of Arizona, Tucson, AZ.
- 2018 **Johnson, MK**, **AM Lien, NC Robbins Sherman**, & **L López-Hoffman**. Barriers associated with the Environmental Quality Improvement Program: Case study on the Hopi Indian Reservation, A Community on Ecosystem Services Conference, December 2018, Washington DC.
- 2018 **Huang TK, X Feng, & L López-Hoffman**. Migratory wildlife link people and ecosystems over distances: A case study of Black-faced spoonbill in East Asia. Global Land Programme 2018 Asia Conference, Sep 3-5, Taipei, Taiwan.
- 2018 Lien, AM, L López-Hoffman, & G Ruyle. Ranchers, Jaguars, and the ESA. Madrean Archipelago Conference. May 14-18, 2018. Tucson, AZ.
- 2018 **Huang, TK**, D Semmens, J Diffendorfer, W Thogmartin, L López-Hoffman. Migratory wildlife link people and ecosystems over distances. US Regional Association of the International Association for Landscape Ecology Annual Meeting, April 8-12, Chicago, IL.
- 2017 Weiser, EL, JE Diffendorfer, L Lopez-Hoffman, D Semmens, & WE Thogmartin. Designing a robust monitoring scheme at a continental scale. November 2017. Monarch Joint Venture annual meeting, San Antonio, TX.
- 2017 **López-Hoffman, L**, A Swann, D Garcia, D Breshears, R Meredith, D Semmens & J Diffendorfer. An approach to understand how ecoclimate teleconnections create telecoupling in ecosystem services across space. August 2017. Ecological Society of America, Portland, OR.
- 2017 **Johnson, MK**, **AM Lien, L López-Hoffman**. Barriers Associated with the Environmental Quality Incentives Program: Case Study on the Hopi Indian Reservation. Farm Bill 2018: Policy, Politics, and Potential. March 28, 2017. Washington, DC.
- 2017 Lien, AM, G Ruyle, N Robbins-Sherman, K Libby, and L López-Hoffman. Impacts of Adaptive Management on Southwestern Rangelands. Arizona Section of the Society of Range Management Winter Meeting. January 5, 2017. Tucson, AZ.

- 2016 **Lopez-Hoffman, L, R Wierderholt** & J Loomis. A Telecoupling Model to Account for Spatial Subsidies of Ecosystem Services Provided by Transboundary Migratory Species in North America. April 2017. US IALE (International Association for Landscape Ecology). Asheville, North Carolina.
- 2016 **Lopez-Hoffman, L**, M Miller & G Ruyle. Data mining socio-ecological data from government documents. June 16, 2016. Sabin Center for Climate Change Law, Columbia University Law School, New York.
- 2016 Thogmartin, WE, R Drum, L Lopez-Hoffman, R Wiederholt, D. Semmens, & J Diffendorfer. Scenarios for achieving stable monarch populations and the importance of agricultural habitats. 18 July 2016. North American Congress of Conservation Biology, Madison, Wisconsin.
- 2016 Thogmartin, WE, B Bateman, A Allstadt, R Wiederholt, N Lemoine, V Barve, V Radeloff, . Pidgeon, P Heglund, J Diffendorfer, D Semmens, L Lopez-Hoffman, E Howard & K Oberhauser. The consequences of climatic extremes on the continental migration of the Monarch butterfly. July 2016. North American Congress of Conservation Biology, Madison, Wisconsin.
- 2016 Semmens, B, D Semmens, WE Thogmartin, R Wiederholt, JE Diffendorfer, L López-Hoffman, J Pleasants, K Oberhauser & C Taylor. Population viability analysis for the eastern migratory population of monarch butterflies (*Danaus plexippus*). 7 May 2015. Trilateral Monarch Science Partnership Discussion (teleconference).
- 2015 Semmens, D, **R Wiederholt**, JE Diffendorfer, W Thogmartin & L López-Hoffman. Monarch Conservation Science Partnership. Trilateral Commission of North American Federal Wildlife Agencies. April 2015, San Diego, CA. All co-authors presented.
- 2012 Palmer, M, SA Levin, M Macauley, R Hilborn, L López-Hoffman (panelists). Research and funding priorities for SESYNC, the National Socio-Environmental Synthesis Center. Ecological Society of America. Aug 2012. Portland, OR.
- 2012 López-Hoffman L, RP Wiederholt*, DJ Semmens & J Diffendorfer. Spatial ecosystem services of Mexican free-tailed bats. In symposium: Spatial subsidies from migration: a foundation for conservation markets. ACES and Ecosystem Markets. Dec 2012. Fort Lauderdale, FL. *presenter.
- 2012 Semmens, D, JE Diffendorfer, L López-Hoffman. Combining ecological and socioeconomic information to inform the management of migratory species: Quantifying spatial subsidies. In Symposium: Ecological security and societal well-being. Human Dimensions of Wildlife Conference, September 2012, Breckenridge CO.
- 2012 López-Hoffman, L. Ecosystem services subsidies of Mexican free-tailed bats. RISE: Research Insights in Semiarid Ecosystems USDA-ARS. Oct 2012, Tucson, AZ.
- 2011 López-Hoffman, L. Spatial subsidies in the ecosystem services of migratory species: an argument for wilderness conservation. USFS Aldo Leopold Wilderness Institute. Nov 2011. Missoula, MT.
- 2011 **López-Hoffman, L.** Preparing for sudden patch versus incremental homogeneous climate change regimes and impacts on ecosystem services. Sustainability on the border: water, climate and social change in a fragile landscape conference. University of Texas. May 2011. El Paso, TX.
- 2011 **López-Hoffman, L.** Preparing for sudden patch versus incremental homogeneous climate change regimes and impacts on ecosystem services. Woodrow Wilson Foundation. Oct 2011. Princeton, NJ.

- 2011 López-Hoffman, L & M Skroch. Ecosystem services at the urban fringe: tools for urban planning. Workshop on Water and Urban Planning Policy. Institute of Geography, Sorbonne. June 2011. Paris, France.
- 2010 López-Hoffman, L. What Happens When Ecosystem Services Cross Boundaries? In symposium: When Ecosystem Services Cross Boundaries: Science and Governance. ACES: A Conference on Ecosystem Services. Dec 2010. Gila River Indian Community, AZ.
- 2010 Petit, O & L López-Hoffman. Strengthening Cooperation on International Rivers: Transboundary Ecosystem Services as a Policy Tool. In symposium: When Ecosystem Services Cross Boundaries: Science and Governance. ACES: A Conference on Ecosystem Services. Dec 2010. Gila River Indian Community, AZ.
- 2010 Graumlich, LJ, L López-Hoffman*, B Morehouse. A North American Greenprint: Next steps in developing capacity for maintaining transboundary connectivity under climate change. In symposium: Connectivity under climate change. Society for Conservation Biology. July 2010. Edmonton, Canada. *presenter
- 2009 **López-Hoffman, L.** Managing ecosystem services that jump across borders. In symposium: New approaches to valuing ecosystem services. SAHRA. Tucson, AZ.
- 2009 López-Hoffman, L. Managing ecosystem services that jump across borders: new approaches to transboundary conservation. Woodrow Wilson International Center for Scholars and Colegio de la Frontera Norte, Border Governor Association working-group: US-Mexico Border: A discussion on sub-national policy options. Phoenix, AZ.
- 2009 **López-Hoffman, L.** What to do when ecosystem services cross borders? Colegio de la Frontera Norte. Tijuana, Baja California, Mexico.
- 2008 **López-Hoffman, L.** Sustainability and biological conservation: an ecosystem service approach. Arizona State University, School of Sustainability. Tempe, AZ.
- 2008 **López-Hoffman, L.** What to do when ecosystem services cross borders? Diversus workshop. Universidad Autonoma de Cordoba. December 2008. Cordoba, Argentina
- 2008 López-Hoffman, L. Information flows and policy: Use of climate diagnostics for adaptive water-resources management under climatic uncertainty in western North America. Inter-American Institute for Global Change Research. Nov 2008. Turrialba, Costa Rica.
- 2008 López-Hoffman, L, K Hyun, O Hinojosa Huerta, A Calvo Fonseca, K Flessa & Francisco Zamora. Just add water? Agricultural return flow and estuary restoration in the Colorado River delta. CAERS. Esenada, Baja California, Mexico.
- 2007 **López-Hoffman, L.** Conserving an endangered palm tree by sustaining and protecting the ecosystem services it provides. In symposium: Ecosystem Services in the Tropics. Association for Tropical Biology and Conservation. Morelia, Michoacán, Mexico.

CONTRIBUTED CONFERENCE PRESENTATIONS

- 2019 **Robbins Sherman, NC, AM Lien, L López-Hoffman**, & G Ruyle. Forty years of 'Learning by Doing': An on-the-ground look at Adaptive Management. Arizona and New Mexico Joint Society for Range Management winter meeting. January 2019.
- 2018 Semmens, D., López-Hoffman, L., Widerholt, R., Thogmartin, W., Semmens, B., Sample, C., Russell, A., Ries, L., Oberhauser, K., Medellin, R., McCraken, G., Mattsson, B., Loomis, J., Goldstein, J., Dubovsky, J., Cryan, P., Bieri, J., Bagstad, K., Diffendorfer, J. Mapping aggregate flows of ecosystem services from multiple migratory species. A Conference on Ecosystem Services, 2018 Washington DC.
- 2018 Lien, AM, L López-Hoffman, X Feng, D Breshears, A Swann, T Huang, M Nuñez-Regueiro.

Crops in a Changing World: Hidden Forest-Agricuture Teleconnections. *European Congress of Conservation Biology*. June 11-15, 2018. Jyvaskyla, Finland.

- 2018 Lien, AM, L López-Hoffman, N Robbins-Sherman, and G Ruyle. Can Implementation of Adaptive Management Reduce Conflict? *Society for Range Management Annual Conference*. January 29-February 2, Reno, NV.
- 2017 Lien, AM, G Ruyle, N Robbins-Sherman, K Libby, L López-Hoffman. Bringing Dark Data into the Light: Mining US Forest Service Records for Trends in Management and Ecological Change. *Society of Range Management Annual Meeting*. January 30-February 2, 2017. St. George, UT.
- 2017 Lien, AM, G Ruyle, N Robbins-Sherman, K Libby, L López-Hoffman. Measuring Ecosystem Services Provided by Adaptive Management on Southwestern Rangelands. *Society of Range Management Annual Meeting*. January 30-February 2, 2017. St. George, UT.
- Bieri, J, J Diffendorfer, J Earl, R Erickson, P Federico, K Long, L López-Hoffman, B Mattsson, G McCracken, S Nicol, R Norris, M Runge, C Sample, D Semmens, W Thogmartin & R
 Wiederholt. 15 June 2016. Mathematical models for habitat contributions of migrating species on a network. World Conference on Natural Resource Modeling, Flagstaff, Arizona.
- 2013 Wiederholt, R, L Lopez-Hoffman, D Semmen & J Diffendorfer. Subsidies for Mexican freetailed bat ecosystem services. European Society for Ecological Economics. June 18-21, Lille, France.
- 2013 Colby, B, L Lopez-Hoffman, R Wiederholt, R Klawitter, C Presnall. Transboundary Spatial Subsidies in Ecosystem Services: Bi-national Incentive Mechanisms for the Colorado River Delta. Oral presentation. European Society for Ecological Economics. June 18-21, Lille, France.
- 2012 **Presnall, C, L López-Hoffman** & M Miller. Ecosystem Services & NEPA: USFS Familiarity And Perceptions. ACES and Ecosystem Markets 2012. December 10-14, 2012, Fort Lauderdale, FL.
- 2012 López-Hoffman L, RP Wiederholt & K LaSharr*. Assigning monetary value to pest control provided by Mexican free-tailed bats (*Tadarida brasiliensis*). ACES and Ecosystem Markets 2012. December 10-14, 2012, Fort Lauderdale, FL. *presenter
- 2012 Diffendorfer, J, B Butterfield, J Loomis, L López-Hoffman, D Semmens, K Bagstad, J Goldstein, K Oberhauser & L Ries. Willingness to pay for Monarch butterflies. ACES and Ecosystem Markets 2012. December 10-14, 2012, Fort Lauderdale, FL.
- 2012 Semmens, D, L Lopez-Hoffman, J Diffendorfer, et al. Sustaining migration: quantifying spatial subsidies to incentivize conservation of migratory species. Ecosummit, October 2012, Columbus OH.
- 2011 Petit, O & L López-Hoffman. Transboundary Ecosystem Services as a Policy Tool to Strengthen Cooperation on International Rivers: the case of the Colorado River Delta. European Society for Ecological Economics. June 2011, Istanbul, Turkey.
- 2010 **Skroch, M, L López-Hoffman**, & K Wilson. Ecosystem services and smart growth planning: Integrating public service costs into conservation planning at the urban fringe. ACES: A Conference on Ecosystem Services. Dec 2010, Gila River Indian Community, AZ.
- 2010 Presnall, C, L López-Hoffman, & M Miller. Ecosystem services Ecosystem Services in NEPA

 Exciting New Tool, Weak Buzzword, or Another Burden? ACES: A Conference on Ecosystem
 Services. Dec 2010, Gila River Indian Community, AZ.
- 2010 **Presnall, C, L López-Hoffman**, J Goldstein, G Nabhan, RL Knight & G Ruyle. Market Development for Rangeland Ecosystem Services. ACES: A Conference on Ecosystem Services. Dec 2010, Gila River Indian Community, AZ.

- 2008 López-Hoffman, L, RG Varady & P Balvanera. Ecosystem services across borders: a framework for transboundary conservation policy. ACES: A Conference on Ecosystem Services. Dec 2008, Fort Myers. FL.
- 2007 **Farfan Heredia**, **B**, FA Casas, M Martinez-Ramos & L Lopez-Hoffman. Effect of silvicultural management on population dynamics of Plaskia chichipe (Cactaceae) in the Tehuacán-Cuicatlán Valley, Mexico. Annual Meeting of the Association for Tropical Biology and Conservation, Morelia, Michoacan, Mexico.
- 2007 Aguilera-Taylor, I, A Dominguez-Corzo, I Monroe & L López-Hoffman. Management options for the endangered, micro-endemic palm, *Sabal pumos*, based on demographic analyses. Annual Meeting of the Association for Tropical Biology and Conservation, Morelia, Michoacán, Mexico.

UNIVERSITY & DEPARTMENTAL PRESENTATIONS

- 2012 López-Hoffman, L. Transborder ecosystem services & conservation: the example of the Mexican free-tailed bat. Transborder Climate Webinar Series, CLIMAS/Institute of Environment, The University of Arizona. Oct 12, 2012, Tucson, AZ.
- 2012 López-Hoffman L, RP Wiederholt & K Lasharr. How much does the US owe Mexico for the pest control services of bats? Environmental Breakfast Club, James E. Rogers College of Law, The University of Arizona. Dec 7, 2012, Tucson, AZ.

RESEARCH PRESENTATIONS TO FEDERAL AGENCIES

- 2021 López-Hoffman, L, AM Lien, J Derbridge, K Emerson. January 11, 2021. Introduction to NEPAccess. Presentation to the Bureau of Land Management.
- 2021 López-Hoffman, L, AM Lien, J Derbridge, K Emerson. March 15, 2021. Introduction to NEPAccess. Presentation to Council for Environmental Quality (CEQ), Executive Office of the President of the United States.
- 2021 López-Hoffman, L, AM Lien, J Derbridge, K Emerson. March 16, 2021. Introduction to NEPAccess. Presentation to the Environmental Protection Agency (EPA).

OTHER SCHOLARLY ACTIVITY

2016 – present	Working group participant	sDiv Synthesis Centre of iDiv (German Centre for Integrative Biodiversity Research). Telecoupled use of biodiversity and ecosystem services: synthesis of concepts, methods and evidence.
2017 – present	Lead Author	IPBES (Intergovernmental Panel on Biodiversity and Ecosystem Service). Americas Assessment. Chapter 2, Nature's Benefits to People and Good Quality of Life.
2016	Working group participant	Commission on Environmental Cooperation (CEC). Working group, Trilateral Monarch Conservation Science Partnership.
2014-2016	Synthesis center working group organizer	USGS John Wesley Powell Center for Analysis and Synthesis. U.S. Monarch Conservation Science Partnership. Co-organizer with D Semmens (USGS), W Thogmartin (USGS) & JE Diffendorfer (USGS). Organized 3 meetings.

2014-2016	Synthesis center working group participant	National Institute for Mathematical and Biological Synthesis (NIMBioS). Habitat for migratory species: estimating area-specific contributions to the population dynamics of migratory species. Organizer: W Thogmartin (USGS), JE Diffendorfer (USGS) & R Wiederholt (University of Arizona).
2011-2013	Synthesis center working group organizer	USGS John Wesley Powell Center for Analysis and Synthesis. Animal migration and spatial subsidies – Establishing a framework for conservation markets. Co- organizer with D Semmens (USGS) & JE Diffendorfer (USGS).
2011-2013 2011-2013	Advisory Board External Advisory Board	Environmental Science, Law and Policy Book Series. National Socio-Environmental Synthesis Center.

TEACHING EXPERIENCE (University of Arizona)

GRADUATE

Arid+Semiarid Lands	ARL 564	2013
Collaboration in Natural Resource Management	RNR 696a	2010
Ecosystem Services and Conservation Ranching	RAM 696a	2011 & 2015
Natural Resource Management: Applications to Development	DVP 621	2013 & 2014

UNDERGRADUATE

Natural Resource Law and Policy	RNR 480/58	02016-present
Ecosystem Services: Science and Management	RNR 351	2009-2015

SERVICE & OUTREACH

SERVICE TO US FEDERAL AGENCIES

2016-2018	Member	Trilateral (US, Mexico, Canada) Monarch Conservation Science Partnership
2014–2019	Co-PI	US Monarch Conservation Science Partnership
2010	Contributor	Good Neighbor Environmental Board Report to the President of the United States and Congress.
2009–2010	Contributor	U.S. Geological Survey, and U.S. Departments of Homeland Security and of the Interior scientific writing team to develop a protocol for monitoring the environmental impacts of border security activities

SERVICE TO PROFESSION

2020-present	Associate Editor in Chief	Ecosphere, Socio-Ecological Systems track
2013-2018	Science Advisor	Makeway formonarchs.org
2012–2013	Academic Press Peer Review	Cambridge University Press & The University of Arizona Press.
2011–2013	Journal Advisor	Arizona Journal of Environmental Law and Policy (indexed Law Review).
2008–present	Journal Peer Review	Brazilian Journal of Oceanography; Conservation Biology; Biotropica; Earth's Future; Ecohydrology; Ecological Applications; Ecology & Society; Ecosystems; Ecosystem Services; Environmental Modeling and Software; Environmental Planning and Management; Environmental Research; Environmental Science & Policy; Environmental Science & Technology; Forest Ecology & Management; Frontiers in Ecology and the Environment; Journal of Applied Vegetation Science; Journal of Vegetation Science; Nature Communications; Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources; Plant Biology; Plant Ecology; Science of the Total Environment; Solutions; TREE (Trends in Ecology and Evolution); Water History; Wetlands.

NATIONAL & INTERNATIONAL OUTREACH & SERVICE

2014-present	Proposal Review Panels	National Institute of Food and Agriculture & National Science Foundation
2011–2013	External advisory board	National Science Foundation, National Socio- Environmental Synthesis Center (SESYNC).
2012-present	Advisory board	Summits: Environmental Science, Law and Policy book series. University of Chicago Press.
2009–2012	Advisory board	Edge: Environmental Science, Law and Policy book series. The University of Arizona Press.
2009	Advisor	Mellon Mays Undergraduate Fellowship (MMUF) committee to expand programs for minority students in the sciences.

STATE & LOCAL OUTREACH & SERVICE

2013	Outreach Brochure	The Colorado River Delta: An invaluable resource for people and wildlife. Authored by L Lopez-Hoffman, C Presnall & R Merideth. Commissioned by the NGOs Sonoran Institute and ProNatura.
2013	Cooperative Extension Presentation	Ranching into the Future Workshop. The University of Arizona and Santa Cruz County Extension. Ecosystem Services and Ranching Overview. Patagonia, AZ. January 22, 2013.
2011	Presenter	Straw Bale Forum: water and climate change in S. Arizona. Adapting to fast and patchy vs. slow and homogenous climate change. Williams, AZ. July 2011.

2010	Workshop Organized	Stewardship and Ecosystem Services of Western Working Landscapes. Blackstone Ranch Institute, Diablo Trust & The University of Arizona. Feb 13-14, 2010, Phoenix, AZ.
2008-present	Faculty Associate	Center for Latin American Studies.
2008	Workshop Organized	Transboundary conservation in the Sky Islands. Phoenix Zoo, Arizona State University, The University of Arizona. May 5-7 2008. Biosphere 2, Oracle, AZ.
2007	Workshop Organized	Modeling advances for the Colorado River Delta. Research Coordination Network: Colorado River Delta. Nov 16-18 2007. Biosphere 2, Oracle AZ.

UNIVERSITY SERVICE

2018	Academic Program Review Self Study Committee	Udall Center for Studies in Public Policy
2017-present	Director	Bridging Biodiversity and Conservation Biodiversity Science Initiative
2016	Organizer	Strategic Planning Workshops: Building and Bridging for New Research in Biodiversity and Conservation. Co-lead with D Breshears
2016-2018	Program Advisory Board	Center for Indigenous Environmental Health Resources
2016	Promotion & Tenure Committee	Udall Center for Studies in Public Policy
2015-2017	Program Advisory Board	Agnese Nelms Haury Endowment for Environment and Social Justice, University of Arizona
2015-2017	Director Search Committee	Udall Center for Studies in Public Policy
2015	Strategic Planning Committee	Udall Center for Studies in Public Policy
2014–2015	Faculty Appointments Committee	James E. Rogers College of Law, The University of Arizona.
2014	Search Committee	Environmental Cluster Hires
2012-2013	Provost Search Committee	The University of Arizona.
2011–2012	Presidential Search Advisory Council	The University of Arizona.
2011, 2012	Proposal evaluation panel	TRIF: Water, Energy & Environment Solutions, The University of Arizona.
2010–2011	Dean Search Committee	College of Agriculture & Life Sciences, The University of Arizona.
2011	Workshop Organized	Workshop to increase collaboration between the University of Arizona & the Universidad Nacional Autónoma de México (UNAM). Oct 23-25, 2011. Mexico City.
2010	Workshop Organized	Facilitation training with Gary Forbes for College of Agriculture and Life Sciences faculty. The University of Arizona. May 6-7, 2010. Tucson, AZ.
2010	Workshop Organized	Sharing Ideas: Writing Perspectives and Op-Eds. The University of Arizona. Oct 9, 2010. Tucson, AZ.

2010	Workshop Organized	Badia Rangeland Rehabilitation. Joint workshop between the Royal Jordanian Badia Development and Research Program & The University of Arizona. September 2010. Amman, Jordan.		
2010	Proposal contributor	Institute of the Environment effort to develop an NSF synthesis center proposal.		
DEPARTMENTAL SERVICE				
2021	Search Committee	Director. School of Natural Resources and the Environment, University of Arizona.		
2016-present	Director Graduate Studies	Natural Resources Studies Program. School of Natural Resources & the Environment.		
2016-2017	Search Committee	Assistant Professor. Human Dimensions of Natural Resources, School of Natural Resources and the Environment.		
2015	Hiring Initiative Committee	e School of Natural Resources & the Environment. Fall semester.		
2015	Curriculum Committee	School of Natural Resources & the Environment. Fall semester.		
2015	Executive Committee	Graduate Interdisciplinary Programs, Arid Lands Resource Sciences.		
2015	Self Study Committee	Graduate Interdisciplinary Programs, Arid Lands Resource Sciences.		
2014	Department Seminar	School of Natural Resources & the Environment. Spring Semester. Co-organizer.		
2011	Faculty	Graduate Interdisciplinary Programs, Arid Lands Resource Sciences.		
2010-present	Strategic Planning Committee	School of Natural Resources & the Environment.		
2010-present	Admissions Committee	Natural Resources Studies graduate program, School of Natural Resources & the Environment.		
2010-2013	Awards Committee	School of Natural Resources & the Environment.		
2010	Re-Accreditation Committee	Rangeland Ecology and Management, School of Natural Resources & the Environment, The University of Arizona		

MEDIA COVERAGE (selected)

Arizona Public Media. AZ Nature Illustrated. Tucson welcomes international assistance for migratory insect. <u>https://originals.azpm.org/p/azill-nature/2014/2/24/30586-tucson-residents-welcome-international-assistance-for-migratory-insect/</u>. February 24, 2014.
 New York Times. Migration of monarch butterflies shrinks again under inhospitable conditions. <u>http://www.nytimes.com/2014/01/30/us/monarch-butterflies-falter-under-extreme-weather.html?emc=eta1</u>. January 29, 2014. This article cites links to Diffendorfer et al. 2013.

2011	Earth Sky. Economic benefits of bats. In Spanish.		
	http://espanol.earthsky.org/agricultura/laura-lopez-hoffman-y-la-contribucion-de-		
	murcielagos-a-la-economia. December 12, 2011.		
2011	C-SPAN. Panel on climate change at Tucson Festival of Books. http://www.c-		
	spanvideo.org/program/PanelonCl. March 11, 2011.		

2010 NPR-KUAZ. Interview about edited book, *Conservation of Shared Environments*. http://udallcenter.arizona.edu/lauralhlab/ENVIROSHARE.wav. Jan, 2010.

LANGUAGES (according to ACTFL proficiency levels)

SpanishSuperiorPortugueseAdvanced Low