Christopher Brown, Ph.D. Associate Professor of Geography - Curriculum Vitae

Department of Geography New Mexico State University Las Cruces, NM 88011

Mobile: 575-642-1794 FAX: 575-646-7430

Email: brownchr@nmsu.edu

Education

San Diego State University, University of California at Santa Barbara, 1992-1998.

Joint Doctoral Program in Geography; Ph.D. awarded on 12 December 1998.
 <u>Dissertation Title</u>: "A Watershed and Ecosystem Approach to Transboundary Wastewater Management in the Tijuana River Watershed."

Research Committee Chairperson: Professor Philip Pryde.

Michigan State University, East Lansing, MI, 1987-1991.

Masters of Arts, Geography; Degree received June, 1991.

 <u>Master's Thesis Title</u>: "An Examination of a Distance Decay Function Relating Air Quality to Power Plant Location."

Research Committee Chairperson: Dr. Joanne Westphal.

San Diego State University, San Diego, CA, 1982-1986.

Bachelors of Arts, Economics; Degree with Honors received, June, 1986.

• Emphasis and course work in environmental and energy economics.

Professional Experience

Department of Geography, New Mexico State University

• Department Head August, 2009 – July 2016

Department of Geography, New Mexico State University

Associate Professor of Geography
 August, 2005 – present

• Director, Spatial Applications and Research Center

Department of Geography, New Mexico State University

Assistant Professor of Geography
 August, 2000 – August 2005

Department of Geography and Planning, West Chester University

Assistant Professor of Geography and Planning
 August, 1997 - July, 2000

Udall Center for Studies in Public Policy, The University of Arizona

• Ford Foundation/Udall Center Fellow July 1999 - December 1999

Department of Geography, San Diego State University

• Ph.D. Research Associate June, 1993 - 1997

Institute of Water Research and Center for Remote Sensing, Michigan State University (MSU)

Research Specialist
 GEMNET Coordinator
 January, 1991 - August, 1992
 April, 1990 - August, 1992

Publications

- Brown, C. 2019. "Comparative examination of binational watershed research in North America from case studies to a continental gestalt." Chapter in final review in North American Borders in Comparative Perspective: Re-Bordering Canada, the United States and Mexico in the 21st Century. Edited by Guadalupe Correa-Cabrera and Victor Konrad. Tucson, AZ: The University of Arizona Press.
- Brown, C. and S. Mumme. 2018. "A Comparative Examination of Watershed Management Efforts in Two Transboundary River Basins on the US-Mexico Border." Chapter in review for peer-reviewed volume on US-Mexico Border Research being edited by Jose Luis Castro Ruiz, El Colegio de la Frontera Norte, Monterrey, Tamaulipas, Mexico. Submitted 18 December 2018.
- Clark, D., C. Brown, J. Garlisch, M. Patrick, S. Walker, and M. Uchanski. 2018. "Postharvest Food Infrastructure Asset Mapping and County Food System Assessment in New Mexico," article accepted by *The Journal of Extension*, accepted 17 September 2018, expected date of publication is Spring, 2019.
- Fix, P., C. Brown, R.Verdin, and T. Casey. 2018. "Organ Mountains-Desert Peaks National Monument Outcomes Focused Management Study, Visitors Survey." Final Project report to the US Bureau of Land Management summarizing work done though a funded project to gather data in support of the resource management plan that BLM is mandated to do on the Monument. Date of publication = 15 January 2018.
- Fix, P., R. Garcia, C. Brown, R. Verdin, and T. Casey. 2018. "Organ Mountains-Desert peaks National Monument Outcomes Focused Management Study, Web Survey." Final Project report to the US Bureau of Land Management summarizing work done though a funded project to gather data in support of the resource management plan that BLM is mandated to do on the Monument. Date of publication = 15 February 2018.
- Rojas Villalobos, H., L. Alatorre Cejudo, B. Stringam, C. Brown, and Z. Samani. 2018. "Modelo 3D topobatimétrico para cálculo de almacenamiento en cuerpos de agua someros: Laguna de Bustillos, Chih." Article in review with *Tecnociencia Journal of the Autonomous University of Chihuahua*, paper submitted on 1 October 2017.
- Rojas Villalobos, H., L. Alatorre Cejudo, C. Brown, B. Stringam, and Z. Samani. 2017. "Forecast water storage change and expansion area of Laguna Bustillos through sedimentation rates applying the ²¹⁰Pb and ¹³⁷Cesium data techniques and GIS." Article in review with *Geographical Research Letters*, date submitted is 15 August 2017.
- Ward, E.M., C.P. Brown, and H.L. Rojas. 2017. "Household Water Quality in Rural Southern New Mexico, a Three-Year Study." NMSU Water Resources Research Institute Miscellaneous Report No. 33. Available at https://nmwrri.nmsu.edu/m33/.
- Mumme, S. and C. Brown. 2017. "Environmentalists, Natural Resources, and the Fence on the Mexico Boundary." Chapter in *Towards Continental Environmental Policy? North American Transnational Networks and Governance*, edited by O. Temby and P. Stoett, Albany, NY: SUNY Press.
- Nava, L. F., C. Brown, K. Demeter, F. Lasserre, M. Milanes-Murica, S. Mumme, and S. Sandoval-Solis. 2016. "Existing opportunities to adapt the Rio Grande/Bravo Basin Water Resources Allocation Regime." Paper published in special issue of Water: "Water Resources Management: Innovation and Challenges in a Changing World," Water, 8(7), 291. Available at http://www.mdpi.com/2073-4441/8/7/291/htm.
- Walker, S., C. Brown, and S. Fernald. 2015. Use of the DRASTIC Model to Evaluate Groundwater Pollution Sensitivity from On-Site Wastewater Systems in the Mesilla Basin. Peer-reviewed WRRI Technical Completion Report No. 367, available at https://nmwrri.nmsu.edu/tr-367/.
- Brown, C. 2014. "Scale and Subnational Resource Management: Transnational Initiatives in the Salish Sea Region." *Review of Policy Research*. 32(1): 60-78.

- Granados Olivas, A., C. Brown, V. Hugo Esquivel Ceballos, H.L. Rojas Villalobos, L.C. Alatorre Cejudo, L.C. Bravo Pena, and M.E. Torres Olave. 2013. "La Hidrologia Urbana ante los Retos del Cambio Climatologico; Evaluacion de Riesgo Hidrometeorologicos en Microcuencas Periurbanas de Ciudad Juarez, Chihuahua, Mexico. Published chapter in La Memoria de Semana Internacional de Agronomia, peerreviewed proceedings of conference held in Venecia, Durango, Mexico, 11-13 September, 2013.
- Granados Olivas, A., C. Brown, V. Hugo Esquivel Ceballos, Z. Edwards, and A. Pinon Villareal. 2013. "Cambios en el uso del suelo urbano: evaluacion de riesgos hidrometeorologicos en la region Paso del Norte aplicando sistemas de informacion geografica." Paper published in *Dinamicas Locales del Cambio Ambiental Global* (ed. Erick Sanchez Flores and Rolando E. Diaz Caravantes), a monograph published by la Universidad Autonoma de Ciudad Juarez, Cuidad Juarez, Chihuahua, Mexico.
- Ojeda-Revah, L. and C. Brown. 2012. "Environmental Services on the U.S.-Mexico Border." Paper in monograph published by the Southwest Consortium for Environmental Research and Policy (SCERP). San Diego, CA: San Diego State University Press.
- Brown, C. 2010. "Comparative Approaches to Governance and Management of Water Resources in North America." VertigO, La revue électronique en sciences de l'environnement, Hors série 7 | juin 2010.
 VertigO is an electronic journal published by l'Université du Québec à Montréal. Journal is available at http://vertigo.revues.org/9721.
- S. Tillery, Z. Sheng, J. P. King, B. Creel, C. Brown, A. Michelsen, R. Srinivasan, A. Granados. 2009. The Development of a Coordinated Database for Water Resources and Flow Model in the Paso del Norte Watershed (Phase III), Availability of Flow and Water Quality Data for the Rio Grande Project Area. Technical Completion Report 348, part II. Las Cruces, NM: New Mexico Water Resources Research Institute, available at https://nmwrri.nmsu.edu/tr348-i/.
- S. Tillery, Z. Sheng, J. P. King, B. Creel, C. Brown, A. Michelsen, R. Srinivasan, A. Granados. 2009.
 Development of a Coordinated Database for Water Resources and Flow Model in the Paso Del Norte Watershed
 (Phase III): Texas Water Resources Research Institute Technical Report #359. College Station, TX: Texas Water
 Resources Research Institute.
- Brown, C. 2009. "Innovaciones en la Gestión del Medio Ambiente entre Los Estados Unidos y México: El Caso de la Junta Ambiental de Buen Vecino. Retos Ambientales y Desarrollo Urbano en a Frontera México-Estados Unidos." Tijuana, BC, México: El Colegio de la Frontera Norte.
- Sheng, Z., C. Brown, B. Creel, R. Srinivasan, A. Michelsen, and M. Fahy. 2008. Installation of River and Drain Instrumentation Stations to Monitor Flow and Water Quality and Internet Data Sharing: NM WRRI Technical Completion Report No. 344. Las Cruces, NM: New Mexico Water Resources Research Institute, available at https://nmwrri.nmsu.edu/tr344/.
- Granados-Olivas, A., E. Sanchez-Flores, A. De la Mora-Covarrubias, S. Tulio De la Cruz, G, Reyes-Macías, F.Llera-Pacheco, J. Chávez, B. Creel, and C. Brown, 2008. "Roadmap of Geo-spatial Education in Mexico." ASPRS 2008 Annual Conference Proceedings. Portland, Oregon; ASPRS. April 28-May 2, 2008. ISBN 1-57083-087-8.
- Brown, C., Z. Sheng, and M. Bourdon, 2007. Phase II Final Project Report Paso del Norte Watershed Council Coordinated Water Resources Database and GIS Project, Technical Completion Report 341. Las Cruces, NM: New Mexico Water Resources Research Institute, available at https://nmwrri.nmsu.edu/tr341/.
- Granados-Olivas, A., C. Brown, E. Sánchez-Flores, A. de la Mora, and O. Dena-Ornelas, 2007. "The 3
 "G's" in Disaster Prevention: Geoinformatics, Geosciences and Groups (People)." Paper in peer-reviewed
 Proceedings of the 32nd International Symposium on Remote Sensing of Environment: Sustainable Development
 Through Global Earth Observations. San Jose, Costa Rica, 25-29 Junio, 2007.
- Ortiz, M., C. Brown, B. Creel, S. Fernald, T. Baker, and S. Guldan, 2007. "Land Use Change Impacts on Acequia Water Resources in Northern New Mexico, an article published in the Journal of Contemporary Water Research and Education. No.137:47-54.

- Brown, C., C. Buscaglia, R. Czerniak, and M. Rich. 2006. "A GIS Approach to Exploring Areas of Ecological Concern on the U.S.-Mexico Border." Chapter in *The U.S.-Mexico Border Environment:* Transboundary Ecosystem Management, a peer-reviewed monograph published by the San Diego State University Press: San Diego, CA.
- Tillery, S., Z. Sheng, J.P. King, B. Creel, C. Brown, A. Michelsen, R. Srinivasan, and A. Granados, 2006. The development of a Coordinated Database for Water Resources and Flow Model in the Paso del Norte Watershed. Technical Completion Report 337, Las Cruces, NM: New Mexico Water Resources Research Institute, available at https://nmwrri.nmsu.edu/tr337/.
- Brown, C., B. Hurd, J. Greenlee, A. Granados, and M. Hendrie, 2006. "Assessing Water Resource Vulnerability for Arid Watersheds: GIS-based Research in the Paso del Norte Region." Chapter published in a Special Issue of New Mexico Journal of Science entitled, Science on the Border. Date of publication is September 2006.
- Granados-Olivas, A., C. Brown, J. Greenlee, B. Creel, J. Hawley, J. Kennedy, O. Dena-Ornelas, and B. Hurd. 2006. "GIS and Remote Sensing Technology for the U.S.-Mexico Transboundary Aquifer Assessment Act (The Mexican Academic Perspective on Senate 214 and House 469). Chapter published in Special Issue of New Mexico Journal of Science entitled, Science on the Border. Date of publication is September 2006.
- Brown, C. 2005. "Transboundary Water Resource Issues on the US-Mexico Border: Challenges and Opportunities in the 21st Century," an article published in VertigO, La revue électronique en sciences de l'environnement, an electronic journal published by l'Université du Québec à Montréal. Journal is available at http://www.vertigo.uqam.ca/.
- Brown, C., Z. Sheng, and M. Bourdon. 2005. "Final Project Report for the Paso del Norte Watershed Council (PdNWC) Coordinated Water Resources Database, Phase II." Technical completion report produced on behalf of the PDNWC for the El Paso Water Utilities, the funding agency for this project. Report submitted 11 March 2005.
- Brown, C. 2005. "Un Examen Comparativo de los Instrumentos Para el Manejo Binacional de los Recursos Hidraulicos en la Frontera Estados Unidos-Mexico," chapter in Seguridad, Agua y Desarrollo: El futuro de la Frontera Mexico-Estados Unidos, "(edited by A. Cortez Lara, S. Whiteford, and M. Chavez), a special monograph published by el Colegio de la Frontera Norte and Michigan State University, pp. 289-331.
- Maurice, K., J. Welch, C. Brown, and R. Latham. 2004. "Mesic Till Barrens in Retreat: Topography, Fire, and Forest Contagion Effects." *Landscape Ecology*, 19-6:603-620.
- Granados, A., C. Brown, and Juan Martínez-Ríos. 2004. "Mapping Ecohydrological Regions with GIS
 and Remote Sensing for Vulnerability Assessment in the Mexico-US Transboundary Paso del Norte."
 Paper published in *Proceedings of 2004 Annual Meeting of the American Society of Photogrammetry and Remote Sensing*, May 2004. Denver, CO.
- Van Schoik, R., C. Brown, E. Lelea, and A. Connor. 2004. "Barriers and Bridges: Managing Water in the U.S.-Mexico Border Region." *Environment*. 46(1):26-41.
- Brown, C., Z. Sheng, and M. Rich. 2004. "Technical Completion Report No. 327, Paso del Norte Watershed Council (PdNWC) Coordinated Water Resources Database." Peer-reviewed technical report jointly published by the New Mexico Water Resources Research Institute and the Texas Water Resources Institute
- Brown, C., 2003. "New Directions in Binational Water Resource Management in the U.S.-Mexico Borderlands." *The Social Science Journal*. 40(4):555-572.
- Brown, C., R. Wright, N. Lowery, and J.L. Castro. 2003. "Comparative Analysis of Transborder Water Management Strategies: Case Studies on The United States - Mexico Border." Chapter in *The U.S.-Mexico Border Environment: Binational Water Management Planning*. San Diego, CA: San Diego State University Press.

- Mumme, S. and C. Brown, 2002. "Decentralizing Water Policy on the US-Mexico Border." Chapter in Protecting A Sacred Gift: Changes in Water Management in Mexico. San Diego, CA: Center for U.S.-Mexican Studies, University of California.
- Brown, C., A. Browning-Aiken, R. Varady, and D. Moreno. 2002. "Comparative Analysis of Water Resources Management on the U.S.-Mexico Border: the Case of the Rio Bravo/Rio Grande Basin." Paper published in *Proceedings of the First International Symposium on Transboundary Waters Management*. Monterrey Nuevo Leon, Mexico: la Associación Mexicana Hidraulica.
- Browning-Aiken, A., C. Brown, R. Varady, and D. Moreno. 2002. "Comparative Analysis of Water Resources Management on the U.S.-Mexico Border: the Case of the San Pedro Basin." Paper published in Proceedings of the First International Symposium on Transboundary Waters Management. Monterrey Nuevo Leon, Mexico: la Associación Mexicana Hidraulica.
- Brown, C. 2002. "Research into Binational Watershed Councils (Consejos Binacionales de las Cuencas) as
 Instruments for Conflict Resolution in the Upper Santa Cruz Watershed," Udall Center for Studies in
 Public Policy Issue Paper. Tucson, AZ: The University of Arizona.
- Gersberg, R., C. Brown, V. Zambrano, K. Worthington, and D. Weis. 2000. "Quality of Urban Runoff
 in the Tijuana River Watershed," book chapter in *The U.S.-Mexico Border Environment: Water Issues along*the U.S.-Mexican Border. San Diego, CA: San Diego State University Press.
- Brown, C. and S. Mumme. 2000. "Applied and Theoretical Aspects of Binational Watershed Councils (Consejos de Cuencas) in the U.S.-Mexico Borderlands." Natural Resources Journal, 40(4): 895-929.
- Brown, C. and S. Mumme. 1999. "Consejos De Cuencas: An Institutional Option For Transboundary Water Management on the U.S.-Mexico Border." International Review of Comparative Public Policy, 11: 115-140
- Englert, P., C. Brown, C. Placchi, and R. Gersberg. 1999. "Geographic Information System (GIS)
 Characterization of Metal Loading in the Binational Tijuana River Watershed." Journal of Borderland
 Studies, 14(2).
- Brown, C., C. Placchi, and R. Gersberg. 1998. "Modeling the Impacts of Surface Water Hydrology and Land Use on Water Quality in the Tijuana River Watershed." Paper published in the juried *Proceedings* of Watershed Management: Moving from Theory to Implementation Specialty Conference. Alexandria, VA: Water Environment Federation.
- Wright, R., E. Griffin, C. Brown, S. McElroy, and A. Obee. 1996. "GIS Applications in the San Diego-Tijuana Interface." Paper published in the juried Annual Conference and Exposition Proceedings of GIS/LIS 1996. Bethesda, MD: American Society for Photogrammetry and Remote Sensing.
- Brown, C. 1996. "A Watershed and Ecosystem Approach for Transboundary Wastewater Management in the Tijuana River Catchment." Transboundary Water Resources Management: Institutional and Engineering Approaches Berlin, Heidelberg, New York: Springer-Verlag. pp. 97-118.
- Brown, C. and R. Wright 1995. Directory of Spatial Datasets to Support Environmental Research Along the US-Mexico Border: An Inventory of US/Mexican Agencies Along the Baja California-California Segment of the US-Mexico Border: Steps Towards a Regional Data Cooperative. San Diego, CA: Institute for Regional Studies of the Californias, San Diego State University.
- Brown, C. 1994. "US-Mexico Border GIS Databases: Current Activities and Future Needs" in Wright, Hepner, and Brown (ed.) Geographic Information Systems for Mexico-United States Border Environmental Research and Management. pp. 5-7. San Diego, CA: Institute for Regional Studies of the Californias, San Diego State University.
- Wright, R., G. Hepner, and C. Brown. 1994. Geographic Information Systems for Mexico-United States Border Environmental Research and Management. San Diego, CA: Institute for Regional Studies of the Californias, San Diego State University.

 Brown, C., J. Westphal, and B. Pigozzi. 1991. "A Preliminary Examination of Perceptions Relating to Power Plant Location and Air Quality in Urban Areas." Selected Works (Juried Proceedings) of the 1990 Council for Education of Landscape Architects Conference. pp. 213-219. Washington, DC: Landscape Architecture Foundation.

Grants, Contracts, and MOUs

- Co-Principal Investigator on proposal to the State of New Mexico Research and Public Service
 Program, "Development of a The Border Economic Development Institute." Proposal is part of
 NMSU's Healthy Boarders Program. Amount of funding requested is \$218,762, proposal submitted to
 internal NMSU review committee 20 June, 2019.
- Principal Investigator on proposal to the US Army Mentor Protégé Program, "Development of the Water Resiliency Assessment Tool (WRAST)." Proposal submitted 7 August 2018, total amount funded on 1 October is \$131,029.
- Principal Investigator on "Paso del Norte Watershed Protection Plan Data Collection and Education for the Rio Grande Reach from NM/TX Stateline to Ft. Quitman, Texas." Proposal submitted to Texas Agrilife Research on 30 July 2018, amount of proposal is \$20,454.
- Principal Investigator on "Project to Support the Work of the NMSU's College of Agricultural,
 Consumer, and Environmental Sciences (ACES) and Cooperative Extensions Service (CES) Food
 Systems Mapping Project," internal award from ACES to the NMSU Department of Geography,
 amount awarded on 1 July 2018 is \$1,513.
- Principal Investigator on "SWCHI Mapping Alcohol Density in Las Cruces," proposal submitted to and funded by the Southwest Center for Health Innovations. Amount awarded on 1 May 2018 is \$2,880.
- Co-Principal Investigator on "BLM New Mexico, Resource Management Planning Support for Organ Mountains Desert Peaks and Prehistoric Trackways National Monument." Total amount of award is \$95,000, portion coming to Geography is \$19,000. Period of performance is 9 September 2017 to 8 September, 2018, renewable for 5 years.
- Co-Principal Investigator on "Photo-chemical Modeling of Air Quality in the El Paso, Juarez, Southern New Mexico Airshed," funded by the El Paso Metropolitan Planning Organization. Amount funded is \$120,696. Period of performance is 2 November 2016 to 30 April 2018.
- Principal Investigator on "Recreation and Visitor Services, Manager's Desk Guide: Phase Two Manual Development and Implementation," Sub-award from the Bureau of Land Management through the University of Alaska at Fairbanks. Amount of Award is \$14,045, period of performance is 9.26.16 to 9.25.17.
- Principal Investigator on "Technical support for updating and maintaining PdNWC Website and conservation assessment for native fish species in the Rio Grande Basin, between Caballo Reservoir and Presidio, Texas," funded by the US Bureau of Reclamation and Texas A&M University. Period of performance is 9.1.16 to 9.30.17, amount funded is \$12,010.
- Principal Investigator on "New Mexico Route 66 Alignment GIS Project," funded by the US National Park Service. Period of performance is 8.15.16 to 4.30.18, amount funded is \$20,000.
- Principal Investigator on Memorandum of Understanding between New Mexico State University and the US Army in support of the Army's Compatible Use Buffer Program. Period of performance is 9.1.16 to 9.30.18, no funding is attached to the agreement.

- Principal Investigator on Memorandum of Understanding between New Mexico State University and
 the Bureau of Land Management (BLM), "Research, Projects, and Activities in Support of Resource
 Management Planning for the Organ Mountains-Desert Peaks National Monument and Prehistoric
 Trackways National Monument." Period of performance is 4.12.16, with no end date. No funds are
 attached to this agreement, but he agreement supports submission of specific scopes of work to meet
 BLM's needs.
- Principal Investigator on "Councilor's Internship to provide Geographic Information Systems (GIS) support to City of Las Cruces Amador Redevelopment Project," funded by the City of Las Cruces for \$6,200. Period of performance is 15 June 2015 to 14 June 2016.
- Co-Principal Investigator on "Ozone Characterization and Potential Transport in the El Paso, Juarez, Southern New Mexico Airshed," funded by the El Paso Metropolitan Planning Organization. \$200,000. Period of performance is 23 February 2015 to 30 June 2016.
- Principal Investigator on "DAMDWCA ArcGIS Introduction Training 2014," submitted to the Dona Ana Mutual Domestic Water Consumers Association. Period of performance is August 5, 2014 -August 7, 2014, amount awarded \$1,474.
- Co-Principal Investigator on "IDEALS AGEISS Army Mentor Protege Program," submitted to the US.
 Department of Defense through AGEISS. \$246,931. Period of performance is August 1, 2014 July 31,
 2016.
- Principal Investigator of "Understanding and Mapping the Landscape of Businesses in Dona Ana County," submitted to the Community Foundation of Southern NM. Period of performance is May 1, 2014 - June 30, 2015, amount awarded \$15,000.
- Principal Investigator on "Developing a Shared Vision to Measure, Understand and Realize Urban Sustainability for the San Diego-Tijuana International Region," submitted to the NSF Urban SRN Program as part of a team out of San Diego State University. Total research budget was \$10M, with \$72,577 proposed for my work at NMSU as a project partner. Period of Performance is 1 January 2015 to 31 December 2019, submitted 29 April 2014, proposal was not funded.
- Principal Investigator on "Research to explore enhanced watershed management in the Tijuana River Watershed," submitted to the NMSU CLABS Travel Grant Program. Period of Performance is 1 April 2014 to 31 December 2014, amount funded was \$1,000.
- Co-Principal Investigator on "Subcontract Training Proposal from NMSU for Tribal Technical
 Assistance Program," submitted to the North Central New Mexico Economic Development District, as
 part of a TTAP proposal to the Federal Highway Administration. Proposal for \$245,518 was submitted
 25 February 2014, proposal not funded.
- Principal Investigator on "GIS support for the New Mexico portion of the EPMPO Part 3." Proposal submitted to the El Paso Metropolitan Planning Organization. Proposal in the amount of \$43,797 was submitted on 15 February 2014, proposal was funded.
- Principal Investigator on "Particulate Matter Emission Inventory for the International Border Region of Southern New Mexico Using GIS and Source Specific Emission Factors," submitted to the NMDOH/USEPA, through the NMSU College of Agricultural Consumer and Environmental Sciences. \$50,350.00. Period of performance is 1 December 2013 30 June 2014, submitted 1 September 2013, proposal was funded.
- Principal Investigator on "Environmental diplomacy & community-based efforts to enhance resilience
 of the Lake Champlain Basin Ecosystem," submitted to the NMSU Arts and Sciences Minigrant
 Program. \$1,000. Period of Performance is 1 January 2014 to 31 December 2014, submitted 1
 September 2013, proposal was funded.
- Principal Investigator on "IGNITE-Engaging Youth Initiative PDNHF 2014," submitted to the Paso del Norte Health Foundation. \$22,914. Period of performance is August 1, 2013 - March 14, 2014, submitted 27 June 2013, proposal was funded.

- Principal Investigator on "iTrees Inventory and Database Development," submitted to the City of Las Cruces, \$3,901. Period of Performance is May 28, 2013 - August 31, 2013, submitted 16 May 2013, proposal was funded.
- Principal Investigator on "Landscape Scale Patterns of Fire and Drought in the Great Plains," submitted to the US Department of Agriculture/Forest Service. \$44,880.00, Period of Performance is May 21, 2013 - December 31, 2014, submitted 7 May 2013.
- Co-Principal Investigator on "Selenium (Se) Tracking and Research Project in the San Juan Watershed," a project sponsored by BHP Billiton/San Juan Coal Company. Total Award: \$100,000. Period of performance is 15 January 2013 – 30 June 2015, proposal was funded.
- Co-Principal Investigator on "NMSU Department of Geography Participation in HUD Camino Real Regional Plan for Sustainable Development," a project funded by the U.S. Department of Housing and Urban Development through Dona Ana County. Total award: \$50,000. Period of performance is 21 November 2012 - 30 June, 2015, proposal was funded.
- Co-Principal Investigator on "Development of a Geospatial Technology Capacity Building (GTCB)
 Program," a joint project between the New Mexico State University Department of Geography and
 GSAREH LLC (Geospatial Applied Research Experts House). Total Award: \$102,185. Period of
 performance is 1 November 2012 31 October 2015, proposal was funded.
- Principal Investigator on "Examination of Risk to Groundwater from Onsite Wastewater Management Systems," a grant funded by the Border Environment Cooperation Commission, Total Award: \$113,292.
 Period of Performance is May 7, 2012 – 31 January 2014, proposal was funded.
- Co-Principal Investigator on "Geodatabase Development for the New Mexico Portion of the EPMPO,"
 a project funded by the El Paso Metropolitan Planning Organization. Total Award: \$45,875. Period of
 Performance is September 1, 2012 December 31, 2013, proposal was funded.
- Co-Principal Investigator on "Transportation Studies, Research and Evaluation for City of El Paso," a project funded by the City of El Paso Total Award: \$50,000. Period of performance is August 13, 2011 December 31, 2012, proposal was funded.
- Co-Principal Investigator on "Assessment of Land-based Sources of Air Quality Contaminants in the Binational Border Region," a project sponsored by the NM Department of Health. Total Award: \$43,470. Period of Performance is September 1, 2012 - June 30, 2013.
- Co-Principal Investigator on "GPS Field Data Collection and GIS Mapping Services for DAMDWCA Service Area", a project funded by Daniel B. Stephens & Associates, Inc. Total Award: \$26,283. Period of performance is November 2, 2011 - September 30, 2012.
- Co-Principal Investigator on "Community Transitional Grant (CTG) GIS Database Development and Mapping", a project sponsored by the NM Department of Health. Total Award: \$24,052.25 Period of performance is March 24, 2012 - June 30, 2012.
- Principal Investigator on "Land Based Sources of Air Quality Contaminants in the Binational Border Region of Southwestern New Mexico, Northwest Chihuahua, and West Texas." Overall grant funded by New Mexico Department of Health to NMSU was \$236,200, with \$41,595 coming to the NMSU Department of Geography. Period of performance is 12 August 2010 to 30 June 2011.
- Principal Investigator on "Establishment of a Binational Transportation Planning Center," a proposal
 for a federal initiative submitted to the Vice President of Research at NMSU on 19 October 2010.
 Proposal is for \$500,000/year over five years and was accepted for inclusion into the NMSU Federal
 Initiatives Portfolio to be pursued in upcoming federal budget cycle.
- Principal Investigator on proposal for ERR Funds administered by the NMSU Senior Vice President of Business and University budget Committee to support university-wide purchase of GIS and remote sensing software licenses. Proposal was for \$22,232 and was approved for funding 24 September 2010.

- Principal Investigator on "Exploring the impacts of the built environment on energy balance behaviors
 and human health outcomes in Dona Ana County, NM," a grant proposal submitted to the National
 Institutes of Health, R21 FOA Geographic and Contextual Influences on Energy Balance-Related
 Health Behaviors. Proposal was submitted on 15 June 2010, amount requested was \$240,000.
- Principal Investigator on "Exploring Flood Risk in the Paso del Norte Region Through the Use of Hydrologic Models, Geographic Information Systems, and Remote Sensing," a proposal funded by the Southwest Consortium for Environmental Research and Policy. Proposal was funded on 10 November 2009 in the amount of \$44,006.
- Principal Investigator on "Research into Transboundary Water Resource Management in North America, A Comparative Perspective," a proposal submitted to the Canadian Studies Grant Program, Canadian Embassy, Washington, DC. Proposal was funded on 1 February 2010 in the amount of \$9,400.
- Team leader on Assessment Project for Non-Native Phreatophyte/Watershed Management Plan developed by the New Mexico Soil and Water Conservation Commission. Total funding is \$152,610, with \$20,000 coming to our team. Project started 31 August 2007 and runs until 30 June 2008.
- Principal Investigator on "Binational Transportation Infrastructure Needs Assessment Study," a proposal submitted to the New Mexico Department of Transportation and the U.S. Federal Highway Administration. Amount of grant is \$140,000, which was awarded on 1 February 2007.
- Principal Investigator on "A Comparative Examination of the Acequia Water Resource Regime in New Mexico and Spain," a travel grant submitted to the NMSU International Programs Travel Grant Program. Grant of \$2,500 was awarded on 1 November 2006.
- Principal Investigator on "A Comparative Examination of the Acequia Water Resource Regime in New Mexico and Spain, a travel grant submitted to the NMSU College of Arts and Sciences Minigrant Program. Grant of \$1,200 was awarded on 20 November 2006.
- Co-Principal Investigator on "The Development of a Coordinated Database and GIS for Water Related Resources in the Paso del Norte Watershed," a project submitted to the U.S. Army Corps of Engineers. Amount of proposal is \$110,071, and the award was granted 1 September 2006.
- Principal Investigator on "Installation of River and Drain Instrumentation Stations to Monitor Flow and Water Quality and Internet Data Sharing," NMSU/WRRI and Texas A&M University Research Project Cooperative Agreement Task Order #10. Amount of Overall grant with the US Bureau of Reclamation is \$165,000, and the portion of this coming to NMSU is \$56,000. Award received 1 February 2006.
- Award of a Travel Grant by the NMSU Center for Latin America and Border Studies on 12 December 2005. Amount of grant was \$300, which supported conference travel in 2005.
- Principal Investigator of "The Impacts of Land Use Change on Water Resources and Traditional Acequia Culture in North Central New Mexico," an NMSU Research Mini-Grant Program Round 2 Proposal submitted through the NMSU Water Science and Education Center of the Natural Resources Cluster. The amount of the grant was \$25,000, and the award was made on 1 December 2005.
- Co-Principal Investigator on "Development of a Riverware Model of the Rio Grande Flow and a
 Coordinated Database for Water Related Resources in the Rio Grande Watershed," a project funded
 by the U.S. Army Corps of Engineers. Performed Under the Memorandum of Agreement between the
 Agricultural Research and Extension Center at El Paso (AREC) Texas Agricultural Experiment Station
 (TAES), The Texas A&M University System (TAMU) and The Board of Regents of New Mexico State
 University (NMSU) New Mexico Water Resources Research Institute (NMWRRI). Amount of award is
 \$66,210, awarded 1 August 2005.
- Co-Principal Investigator on "The Cost-sharing of Transboundary Wastewater Treatment: the US-Mexico Case Study and its Applicability to the Israeli/Palestinian Situation," a proposal funded by the International Arid Lands Consortium (IALC). Total amount of the award is \$100,000, granted on 11 March 2005.

- Principal Investigator on "An Assessment, Inventory, and Strategy for a Coordinated United States –
 Mexico Border Region Water Resource Geographic Information System." a funding proposal
 submitted to the Southwest Center for Environmental Research and Policy. Proposal was submitted for
 \$103,025, and the amount awarded on 15 March 2005 was \$90,000.
- Award of a Travel Grant by the NMSU Center for Latin America and Border Studies on 14 November 2004. Amount of grant was \$300, which supported conference travel in 2005.
- Co-Principal Investigator on "Enhancement of Data Portal Capabilities of the Paso del Norte Watershed Council Coordinated Water Resources Database Project," a funding proposal submitted to the United States Army Corps of Engineers through the Texas A&M University. Total amount of the project is \$100,000, with \$61,668 being awarded to NMSU on 29 July 2004.
- Principal Investigator on "Binational GIS Mapping Project in Support of SCERP Border Institute VI on Transboundary Ecosystem Management," a contract with the Southwest Center for Environmental Research and Policy for mapping services in support of SCERP conference. Amount of project was \$3,000, awarded on 24 May 2004; contract paid a student to complete the work.
- Principal Investigator on "Proposal to Enhance Library Holdings in Support of Geo-Spatial Research in the Physical and Social Sciences," a funding proposal to the NMSU Library to obtain a share of the 2003-2004 New Mexico General Obligation Bond Monies. Amount granted on 27 April 2004 was \$20,320.
- Co-Principal Investigator on "Development of a Coordinated Database and GIS for Water Related Resources in the Rio Grande Watershed," a funding proposal submitted to the United States Army Corps of Engineers through the Texas A&M University. Total amount of the project is \$70,000, with \$43,610 being awarded to NMSU on 16 April 2003.
- Co-Principal Investigator on "Phase II Development of a Coordinated Water Resources Database for the Paso del Norte Watershed Council," a funding proposal submitted to the El Paso Water Utilities through the Texas A&M University. Total amount of the contract is \$65,665, with \$39,698 being awarded to NMSU on 19 February 2004.
- Award of a Travel Grant by the NMSU Center for Latin America and Border Studies on 23 December 2003. Amount of grant was \$300, which supported conference travel in 2004.
- Principal Investigator on "Vulnerability of Borderland Water Resources: Developing Indicators for Selected Watersheds on the U.S. Mexico Border – The Paso del Norte Region," a funding proposal submitted to the Southwest Center for Environmental Research and Policy. Proposal was submitted for \$96,550, and the amount awarded on 7 May 2003 was \$77,602.
- Co-principal Investigator on the "NMSU Border + 20 Grant" awarded by the Southwest Center for Environmental Research and Policy. Total amount of the grant is \$90,000 for the 12 month grant period, 1 September 2002-1 September 2003.
- Co-Principal Investigator of a contract awarded by the El Paso Water Utilities through the Paso del Norte Watershed Council to NMSU and Texas A&M University to fund "Development of a Prototype Coordinated Database Project for the Paso del Norte Watershed Council." Total amount of the contract is \$50,000, with \$28,250 being awarded to NMSU.
- Award of a travel grant by the National Science Foundation and the American Geophysical Union to support participation in the First International Symposium on Transboundary Waters Management, hosted by la Associación Mexicana Hidraulica, Monterrey, Nuevo Leon, Mexico. Grant of \$1500 was awarded on 26 August 2002.
- Co-principal Investigator on a contract with the Dona Ana County Community Development
 Department. Project is entitled, "Transportation and Major Thoroughfare Plan for Southern Dona
 Ana County." Nine-month project ran from June 2001 to March 2002, with a total budget of \$30,000.
- Award of New Mexico State University Mexico Small Grant Program grant, supporting exploration of water resource issues in the Paso del Norte. Awarded 1 December 2001.

- Award of a grant from the U.S. Department of State, Public Affairs Office of the U.S. Consulate
 general in Monterrey to support my participation in a conference entitled, <u>Conflicto Urbano-Rural por
 el Agua: Ejemplos de Mexico y los Estados Unidos</u>. Grant was for \$1,159.53 and was awarded on 11
 June 2001.
- Award of New Mexico State University Small Grant Program grant, supporting exploration of water resource issues in the Paso del Norte. Awarded 1 December 2000.
- Award of a Francis H. Green Library General Education Materials Award, West Chester University, Spring term, 2000.
- Award of Research Related Reassigned Time by the School of Business and Public Affairs, West Chester University, Spring term, 2000.
- Award of a Ford Foundation/Udall Center Fellowship in Environmental Conflict Resolution in the U.S. Mexico Border Region, The Udall Center, University of Arizona. Term of Fellowship was 1 July 1999 - 31 December 1999 and included an \$18,300 stipend.
- Award of a WCUPA Legislative Initiative Grant for the acquisition of multi-media equipment to support teaching. Amount awarded on 1 April 1999 is \$8,000.
- Award of Research Related Reassigned Time by the School of Business and Public Affairs, West Chester University, Fall Term, 1998.
- Award of Research Related Reassigned Time by the Faculty Development Committee, West Chester University, Fall Term, 1998.
- Co-Principal Investigator with Richard Gersberg, "Predictive Modeling of the Interactions Between Land Use and Storm Water Quality in the Tijuana River Watershed." Southwest Center for Environmental Research and Policy (SCERP) Project # WQ96-2, funding amount \$100,000, funding period: 1 September, 1997-31 August, 1998.
- Co-Principal Investigator with Richard Gersberg, "Monitoring and Modeling of Water Quality in the Tijuana River Watershed." SCERP Project #WQ96-2, funding amount \$81,659, funding period: 1 September, 1996-31 August, 1997.
- Co-Principal Investigator, "Near Term Project for Development of CIESIN/MSU Management Products." with Consortium for International Earth Science Information Network (CIESIN) and Michigan State University (MSU), CIESIN Task Order no. 401-91, MSU, 1992.
- Co-Principal Investigator, "Regional Watershed Demonstration Project for an Environmental Information System for Data Integration in the Saginaw Bay Area." Work Undertaken Under NASA/CIESIN Grant No. NAGW-2901, MSU, 1992.
- Co-Principal Investigator, "Global Change Data Assessment and Integration Project" with the USDA and CIESIN, CIESIN Task Order No. 411-92, MSU, 1992.

Conference Presentations and Invited Papers

- Islam, K. and C. Brown, 2019. "Water informatics approach to analyze the dynamics of surface water runoff with climate change." Poster to be presented to the Annual Meeting of the American Geophysical Union, San Francisco, CA, 9-13 December 2019. Paper submitted 31 July 2019.
- Brown, C and S. Mumme. 2019. "Comparative examination of watershed management efforts in select basins on the US-Mexico border." Paper presented at the 2019 Annual Meeting of the Association for Borderland Studies, San Diego, CA. 26 April 2019.
- Brown, C. ""Making the Case for the Relevance of Social Science in Addressing Current Global, National, and Regional Challenges." Roundtable chaired by C. Brown at the 2019 Annual Meeting of the Association for Borderland Studies, San Diego, CA. 24 April 2019.

- Islam, K. and C. Brown. 2018. "An approach for efficient surface prediction of water-quality parameters." Poster presented at the 2018 Annual Meeting of the American Geophysical Union, Washington DC, 10-14 December 2018.
- Islam, K. and C. Brown. 2018. "An approach to efficient forecast of hydrologic extremes under climate change." Poster presented at the 2018 Annual Conference of the New Mexico Water Resources Research Institute, Las Cruces, NM, 17-18 October 2018.
- Madson, L., J. McAteer, P. Furth, L. Keleher, C. Brown, and C. Brewer, 2018. "Flips and Flops: Using Team-Based Learning to Flip Your Classroom." Panel chaired at The NMSU Teaching Academy, date of panel was 15 October 2018.
- Brown, C., M. van der Velde, and D. Herchner. 2018. "Cross-border Cooperation and Perception," paper presented at the 2018 meetings of the Association for Borderland Studies, San Antonio, TX, 5 April 2018.
- Burke, R., K. Stoner, J. Frey, and C. Brown. 2017. "Predicting seasonal distribution and migratory pathways for neotropical nectar-feeding bats," paper presented at The Wildlife Society Annual Meetings, Albuquerque, NM, 25 September 2017.
- Brown, C. 2017. "Exploring the use of Human Ecology Mapping to advance resource management planning in Organ Mountain Desert Peaks National Monument," paper presented at the 2017 meetings of the Association for Borderland Studies, San Francisco, CA, 13 April 2017.
- Brown, C. 2016. "Public participation in watershed management on the US-Mexico border: lessons from the Colorado and Tijuana River Basins." Paper presented at the Annual Meeting of the Association for Borderlands Studies, Portland, OR. 14 April 2016.
- Brown, C. 2015. "Ideas towards exploring the health care needs of older adults," Invited paper at the 2015 Southwest Institute for Health Disparities Research Conference, NMSU Main Campus, Las Cruces, NM. 11 September 2015.
- Brown, C. 2015. "Comparative examination of binational watershed research in North America from
 case studies to a continental gestalt." Invited paper at UT Brownsville Comparative Border Studies
 Conference, 8 May 2015.
- Brown, C., R. Carr, M. Shoderbek, and R Martin. 2015. "The spatial distribution of assets and challenges driving the quality of life in Doña Ana County, New Mexico", paper presented at the 2015 Annual Meeting of the Southwest Division of the AAG/Applied Geography Conference, San Antonio Texas. 6 November 2015.
- D. Clark, C. Brown, J. Garlisch, M. Patrick, S. Walker, and M. Uchanski. 2015. "County Food System Assessment and Post Harvest Food Infrastructure Asset Mapping in New Mexico. Paper presented at the American Society for Horticultural Sciences Annual Meeting. New Orleans, August 4-7 2015.
- Brown, C. 2015. "Water resource issues and potential for an emerging management framework in the Tijuana River Watershed." Paper presented at the 2015 Annual Meeting of the Association for Borderlands Studies. Portland, Oregon. 11 April 2015.
- Brown, C., S. Mumme, P. Ganster, and C. de la Parra. 2015. "Ideas for a Roundtable Panel on the emerging IBWC/CILA Minute on Watershed Management in the Tijuana River Watershed. Roundtable session hosted at the 2015 Annual Meeting of the Association for Borderlands Studies. Portland, Oregon. 11 April 2015.
- Brown, C., C. Hammond, and A. Zia. 2014. "Examining resiliency-based approaches to watershed management in the Lake Champlain Basin." Paper presented at the 2014 Annual Meeting of the Southwest Division of the Association for American Geographers, Albuquerque, NM. 25 October 2014.
- Brown, C., C. Hammond, and A. Zia. 2014. "Environmental diplomacy & community-based efforts to enhance resilience of the Lake Champlain Basin Ecosystem." Invited paper at the Borders In Globalization Conference, Carlton University, Ottawa, Ontario, Canada. 24 September 2014.

- Brown, C. P. and Bardwell, B. 2014. "Best practices for water resource management in the arid Southwestern Borderlands." Annual Meeting, Association for Borderland Studies, Albuquerque, NM. April 5, 2014.
- Brown, C. P., 2014. "Water Policy in the US-Canada Borderlands: Insights into a North American Perspective." Annual Meeting, Association for Borderland Studies, Albuquerque, NM. April 5, 2014.
- Brown, C. P., Van Arnum, S., McClone, J., Carr, R. 2014. "Mapping resources to support disconnected youth in the Paso del Norte Region." Annual Meeting, Association for Borderland Studies, Albuquerque, NM. April 3, 2014.
- Brown, C. P. 2014. "Basic development concepts and current work on human development."
 Seminario de Doctorado en Estudios Urbanos, UACJ, Ciudad Juarez, Chihuahua, Mexico. March 12, 2014.
- Brown, C. P. 2014. "Watershed Management Activities and ideas from the Paso del Norte."
 Seminario de Doctorado en Estudios Urbanos, UACJ, Ciudad Juarez, Chihuahua, Mexico. March 12, 2014
- Brown, C. P. 2013. "Border 2012 Project Examination of risk to groundwater from onsite wastewater management systems." Border 2012 Water Task Force Meeting, USEPA, El Paso, Texas. November 19, 2013
- Brown, C. 2013. "Some insights on interdisciplinary (ID) graduate degree programs, both near and
 far." White paper delivered at the 2013 AAG Workshop, Innovations in Master's Programs: Changes,
 Challenges and Strategies for the Future. 20 June 2013 Boulder. CO.
- Brown, C., R. Carr, and M. Schoderbek. 2013. "Mapping the Landscape of Human Development in Dona Ana County," a paper presented at the 2013 Annual Meeting of the Association for Borderlands Studies. 12 April 2013, Denver, CO.
- Brown, C. 2012. "Enhancing the relevance of Geography in exploring human-environment relationships in the Rocky Mountain West," a paper presented at the 2012 SWAAG Annual Conference. 28 October 2012. Las Cruces, NM.
- Brown, C., R. Martin, and R. Carr. 2012. "Mapping the landscape of quality of life in Dona Ana County," a paper presented at the 2012 SWAAG Annual Conference. 28 October 2012.
- Brown, C. 2012. "Watershed Management Activities and ideas from the Paso del Norte," an invited paper presented at the IBWC/CILA Binational Summit on Water Resource Management on the US-Mexico Border, IBWC/CILA, El Paso, Texas/Ciudad Juarez, Chihuahua, Mexico. 27 September 2012.
- Brown, C. 2102. "Comparative Examination of Water Policy in the US-Canada Borderlands: The Cases of Cascadia and the Red River Basin," paper presented at the Annual Meeting of the Association for Borderlands Studies. Houston, TX. April 14, 2012.
- Brown, C, 2011. "Collaborative Research on Transboundary Water Resources in North America: A
 Comparative Perspective," Paper Presented at the 2011 Biannual Meeting of the Association of
 Canadian Studies in the U.S., Ottawa, Ontario, Canada, 18 November 2011.
- Brown, C. 2011. "Balancing security and Environmental issues on the US-Mexico; Ideas from the GNEB." Paper presented at the 2011 Annual Meeting of the Association of Borderland Studies, Salt Lake City, UT, 14 April 2011.
- Brown, C. 2011. "Water Policy in the U.S.-Canada Borderlands: Early Explorations in Cascadia."
 Paper presented at the 2011 Annual Meeting of the Association of Borderland Studies, Salt Lake City, UT, 15 April 2011.
- Brown, C. and L Ojeda. 2010. "The Protection of Environmental Services at the U.S. Mexico Border." Paper presented at the 2010 Meeting of A Community for Ecosystems Services. Phoenix, AZ. 5 December 2010.

- Brown, C. 2010. "Environment, Energy Balance Behaviors, & Human Health Outcomes in Dona Ana County, NM." Invited paper presented at the NMSU Minority Biomedical Research Support Research Initiative for Scientific Enhancement (MBRS-RISE) Health Disparities Symposium held at New Mexico State University, Las Cruces, NM, 8 July 2010.
- Brown, C. 2010. "Ideas Towards a Renewed Environmental Agenda on the US-Mexico Border in the Post 9/11 and Post Bush Era." Paper presented at the 2010 Annual Meetings of the Association for Borderland Studies, Reno, NV, 15 April 2010.
- Brown, C. 2009. "Usos de SIG en Manejo y Gestión del Agua en Regiones Transfronterizas." Invited plenary paper presented at el Simposio Internacional, Geografía y Desarrollo, Simposio Internacional con Motivo del 25 Aniversario del Centro de Investigación en Geografía Aplicada, La Pontificia Universidad Católica del Peru, Lima Peru, 9 December 2009.
- Brown, C. 2009. "Ideas Towards a North American Environmental Research Agenda." Paper presented at the 2009 Annual Meeting of the Association for Canadian Studies in the United States, San Diego, CA., 20 November 2009.
- Brown, C. 2009. "Comparative Approaches to Governance and Management of Water Resources in North America." Invited paper presented at the Conference on Water Governance in the Americas, Université Laval, Québec, Québec, Canada, 16 October 2009.
- Glaze, S., B. Creel, and C. Brown, 2009. "Potential Impacts of the Increases in Rainfall Intensity on the Lower Rio Grande." Paper presented at the 2009 Annual Meeting of the American Water Resources Association, Anchorage, Alaska, 4-6May 2009.
- Brown, C., 2009. "Challenges and Opportunities for International Studies and Research in North American University Environments." Panel session chaired at the 2009 Annual Meetings of the Association for Borderland Studies, Albuquerque, NM. 16 April 2009.
- Brown, C. 2009. "Collaborative Research on Transboundary Water Resources: US-Mexico and US-Canada Cases." Invited paper presented at a workshop on North American Borders and Security hosted by the Association for Canadian Studies in the U.S. and the North American Center on Transboundary Studies, San Diego, CA, 12 January 2009.
- Brown, C. 2008. "International water resource management: Comparative discussions of the US-Mexico Border & the Middle East." Invited keynote paper presented at the Student World Water Forum, The University of Nevada at Reno. 20 November 2008.
- Brown, C. 2008. "What is border environmental security? Perspectives from the U.S., Mexico, and Canada." Invited paper presented at The Border Research Policy Institute 2008-2009 Speaker Series, Western Washington University. 30 October 2008.
- Brown, C. and B. Lloyd. 2008. "Initial Explorations into a Border Security Buffer on the U.S.-Mexico Border." Paper presented at the 2008 Annual Meetings of the Association for Borderland Studies. Denver, CO. 23-27 April 2008.
- Brown, C. 2008. "Security and Environmental Issues on the US-Mexico Border in the Post 9/11 Era."
 Invited briefing at the U.S Department of State, Office of Mexican Affairs. 17 March 2008. Washington, DC.
- Brown, C. 2008. "Collaborative Research on Transboundary Water Resources: Case Studies in North America," an invited paper and presentation for the *Border Officials Cross Talk, 2008*, hosted by the North American Center for Transboundary Studies, Arizona State University, 13 February 2008.
- Brown, C. and Q. Korbulic, 2007. "Actualización de las actividades de BGIS/BINS II," an invited paper
 presented at the December 2007 meeting of the Joint Working Committee on Binational Transportation
 Planning hosted by la Secretaría de Communicaciones y Transporte and the Federal Highway
 Administration, Tampico, Tamaulipas, Mexico. 4 December 2007.

- Brown, C. 2007. "Innovaciones en la Administración Ambiental de la Frontera Estadounidense-Mexicana: el Caso del Good Neighbor Environmental Board." Invited paper presented at Seminar in Celebration of the 25th Anniversary of El Colegio de la Frontera Norte. 23 August 2007. Tijuana, Baja California, Mexico.
- Ortiz, M. and C. Brown. 2007. "The Impacts of Land Use Change on Water Resources and Traditional Acequia Culture in Northern New Mexico." Paper presented at the 2007 Annual Meetings of the Association of American Geographers. 17 April 2007. San Francisco, CA.
- Brown, C. 2007. "Some Insights into US-Canada Environmental Research." Paper presented at he 2007 Annual Meetings of the Association for Borderland Studies. 13 April, 2007. Calgary, Alberta, Canada.
- Van Schoik, R. and C. Brown. 2006. "Collaborative Mechanisms for Planning and Operation of Transboundary and Shared Watersheds." Paper presented at the 2006 International Conference on Water in Arid and Semiarid Lands hosted by the International Center for Arid and Semiarid Land Studies at Texas Tech University. 15-17 November, 2006. Lubbuck, Texas.
- Brown, C. and Q. Korbulic, 2006. "Update of BGIS Activities; Update of 2003-2005 Workplan for the FHWA Joint Working Committee." Invited paper presented at the May 2006 meeting of the Joint Working Committee, a binational transportation-planning group convened by the U.S. Federal Highways Administration. 31 May 2006. Tucson, AZ.
- Brown, C. 2006. "The Use of GIS to Advance Transboundary Water Resources Management." Invited
 paper at Border Institute VIII, hosted by the Southwest Consortium for Environmental Research and
 Policy. 22 May, 2006. Rio Rico, AZ.
- Brown, C. and H. Gonzalez, 2006. "The Role of Decentralization in Financing Wastewater and Water Infrastructure on the US-Mexico Border." Paper presented at the 2006 Annual Meetings of the Association for Borderland Studies. 20 April 2006. Phoenix, AZ.
- Brown, C. 2006. "SCERP Nodes on a Network: Starting point for la Red Integrada de los Bancos de Datos." Invited paper at the USGS/SCERP Binational Border GIS Summit, 10 April 2006. University of Texas, El Paso, Texas.
- Brown, C. 2006. "SCERP Efforts Employing GIS in Water Resources Research on the U.S.-Mexico Border." Invited paper at the USGS/SCERP Binational Border GIS Summit, 10 April 2006. University of Texas, El Paso, Texas.
- Fischhendler, I. And C. Brown, 2006. "Financing Wastewater Treatment: Case Studies on the US-Mexico/Israel-Palestine Borders." Paper presented at the Lineae Terrarum International Border Research Conference, being held at the University of Texas, El Paso, New Mexico State University, and la Universidad Autonoma de Ciudad Juárez, 30 March 2006.
- Brown. C. 2006. "Establishing a GIS Infrastructure to Advance Water Resource Management on the US-Mexico Border." Paper presented at the 2006 Annual Meetings of the Association of American Geographers. 9 March 2006. Chicago, IL.
- Brown, C. "Bio-regional and Watershed Approaches to Environmental Conflict Resolution: Case Studies
 on the U.S.-Mexico Border.' Invited paper presented at el Semanario de Especialidad en Gestión
 Integrada de Cuencas Hidrográficas, El Colegio de Sonora. 27 January 2006, Hermosillo, Sonora,
 Mexico.
- Brown, C., A. Granados, J. Greenlee, and B. Hurd. 2005. "Usos de las Sistemas de Información Geográfica para Examinar la Vulnerabilidad de los Recursos Hídricos Regioinales en la Frontéra de México y los Estados Unidos," a paper presented at the XVII Semana Internacional de Agronomía, la Universidad Juárez del Estado del Durango, Facultad de Agronomía y Zootecnia, Gomez Palacio, Mexico. 9 September 2005.

- Granados, A., A. Priego Santander, B. Hibbs, C. Brown, J. Hawley, and B. Creel. 2005. "Delimitación del Paisaje Geográfico Espacial en la Sustentabilidad de Acuíferos," a paper presented at the XVII Semana Internacional de Agronomía, la Universidad Juárez del Estado del Durango, Facultad de Agronomía y Zootecnia, Gomez Palacio, Mexico. 9 September 2005.
- Curry, B., R. Van Schoik, R. Wright, F. Lozano, C. Brown, and G. Foster. 2005. "Use of Transboundary
 and Border-Wide Water GIS to Examine Significant U.S-Mexican Binational Water Resource and
 Security Issues." Paper presented at the 2005 New Mexico Water Research Symposium, hosted by the
 New Mexico Water Resources Research Institute, New Mexico Tech, Socorro, NM, 16 August 2005.
- Brown, C. A. Granados, J. Greenlee, and B. Hurd. 2005. "An Analysis of Water Resource Vulnerability in the Paso del Norte Region of the Rio Grande Watershed," an invited paper presented at a binational conference, *La Corporación Universitaria para Desarrolo de Internet (CUDI), 2005*, held in Veracruz, Mexico, 29 April 2005. The paper was delivered via video-conference to the other participants of the conference in the U.S. and Mexico.
- Brown, C. 2005. "Borderwide GIS Activities for the U.S.-Mexico Border: Preliminary Ideas for an Integrated Research Program," a paper presented at the 2005 Annual Meeting of the Association of Borderland Studies, 14 April 2005. Albuquerque, NM.
- Brown, C. 2005. "An Examination of Large River Basin Management: The Case of Rio Grande Basin,"
 a paper presented at the 2005 Annual Meeting of the Association of American Geographers, 9 April
 2005, Denver, CO.
- Brown, C. 2005. "The Paso del Norte Watershed Council Coordinated Database Project," an invited briefing given to U.S. Senator Jeff Bingaman, New Mexico Water Resources Research Institute, 31 March 2005.
- Brown, C. A. Granados, J. Greenlee, and B. Hurd. 2005. "An Analysis of Water Resource Vulnerability
 in the Paso del Norte Region of the Rio Grande Watershed," a project update report presented at the
 International Conference on Environment and Human Health, 30 March 2005, El Paso, Texas.
- Brown, C. 2005. "Paso del Norte Watershed Council Phase II Coordinated Water Resources Database Workshop Presentation," presented at New Mexico State University, 11 March 2005.
- Brown, C. 2005. "Reflections on Collaborative Research on the U.S.-Mexican Border," an invited paper
 presented at El Porque y El How Not To, A U.S.-Mexico Collaborative Workshop held at New Mexico
 State University, Las Cruces, NM. 3 February 2005.
- Brown, C. 2004. "Basin Approaches to Transboundary Water Resource Management Challenges on the U.S.-Mexico Border," an invited paper presented to the Department of Geography at Texas State University, San Marcos, 19 November 2004.
- Sheng, Z. J. Villalobos, A. Michelsen, C. Brown, M. Bourdon, B. Creel, A Granados, and N. Hanks, 2005. "Coordinated Water Resources Database and GIS for Paso del Norte Watershed Management." Paper presented at the PdNMAPA GIS Day Conference, El Paso, Texas. 15 November 2005.
- Brown, C. 2004. "Transboundary Water Resources on the U.S.-Mexico Border: Opportunities and Challenges in the 21st Century." Invited Plenary Paper at Water in the Americas: Confrontation, Cooperation or Solidarity, an international conference hosted by Observatoire de recherches internationales sur l'eau and Institut québécois des hautes études internationales of Laval University. 15 October 2004. Laval University, Quebec City, Quebec.
- Madson, L., C. Brown, and A. Mann. 2004. "Using Team Based Learning in University Classes: Lessons from the Trenches." Paper being presented at the New Mexico Association of Community Colleges/Western States Consortium for Faculty Development Faculty Development Conference, 1 October 2004. Doña Ann Branch Community College, Las Cruces, NM.
- Brown, C. 2004. "The Use of Team Based Learning in a General Education Class The Example of World Regional Geography." Invited paper presented at the NMSU Graduate School Professional Conference. 18 August 2004. Las Cruces, NM.

- Brown, C., A. Granados, J. Greenlee, M. Hendrie, and B. Hurd. 2004. "Developing Indicators of Water Resource Vulnerability in the Paso del Norte Region." Paper presented at the 2004 Annual Meeting of the Universities Council on Water Resources. 19 July 2004. Portland, OR.
- Ping, Z., P. King, and C. Brown. 2004. "Development of a Riverware Model for Flood Control in the Paso del Norte Watershed." Paper presented at the 2004 Annual Meeting of the Universities Council on Water Resources. 21 July 2004. Portland, OR.
- Brown, C. 2004. "Water, Geography, and Equity Issues on the U.S.-Mexico Border." Invited paper
 presented for the George Mason University U.S.-Mexico Border Studies Summer Institute. 8 June
 2004. University of Texas at El Paso: El Paso, TX.
- Granados, A., C. Brown, and Juan Martínez-Ríos. 2004. "Mapping Ecohydrological Regions with GIS and Remote Sensing for Vulnerability Assessment in the Mexico-US Transboundary Paso del Norte."
 Paper presented at the 2004 Annual Meeting of the American Society of Photogrammetry and Remote Sensing, May 2004. Denver, CO.
- Brown, C., C. Buscaglia, R. Czerniak, and M. Rich. 2004. "A GIS Approach to Exploring Areas of Ecological Concern on the U.S.-Mexico Border." Invited paper presented at Border Institute VI, an international conference sponsored by the Southwest Center for Environmental Research and Policy, 26 April 2004. Rio Rico, AZ.
- Brown, C., A. Granados, J. Greenlee, M. Hendrie, and B. Hurd. 2004. "Preliminary Results of a Study
 of Water Resource Vulnerability in the Paso del Norte." Paper presented at the 2004 Annual Meeting
 of the Association for Borderland Studies, 22 April 2004. Salt Lake City, Utah.
- Brown, C., Granados, J. Greenlee, M. Hendrie, B. Hurd, and J. Kennedy. 2004. "A GIS Analysis of Water Resource Vulnerability in the Paso del Norte." Invited paper presented at the New Mexico Tech Hydrology Seminar. 12 April 2004. Socorro, NM.
- Brown, C., A. Granados, J. Greenlee, M. Hendrie, B. Hurd, H. Johnson, and R. Wright. 2004. "An
 Appropriate Regionalization for Studying Water Resource Vulnerability: The Case of the Paso del
 Norte." Paper presented at the 2004 Centennial Meeting of the Association of American Geographers,
 18 March 2004. Philadelphia, PA.
- Brown, C. and R. Czerniak. 2004. "Wine, Regional Geography, and Student Learning: Where Art Meets Science." Paper presented at the 2004 Centennial Meeting of the Association of America Geographers, 17 March 2004. Philadelphia, PA.
- Brown, C. 2004. "Water Resources and Watershed Vulnerability in the Paso del Norte." Invited paper
 presented at *El Taller de Evaluación Ecohidrológica en Cuencas Transfronterizas en la Frontera México-Estados Unidos*, an international workshop hosted by la Universidad Autonoma de Ciudad Juarez
 on 3 February 2004.
- Brown, C. 2003. "The Hydroregionalization of an Anthropogenic Hydrosphere." Invited paper
 presented at the Southwestern Region Geospatial Workshop and Seminar held at the New Mexico
 Farm and Ranch Museum, 18-20 November 2004.
- Brown, C. 2003. "The Use of the Internet to Host a Binational Water Resource Cooperative
 Database." An invited paper presented at a binational conference, *La Corporación Universitaria para
 Desarrolo de Internet (CUDI)*, held in Puebla, Mexico, 1-3 October 2003. The paper was delivered via
 video-conference to the other participants of the conference in the U.S. and Mexico.
- Brown, C. 2003. "PdNWC Coordinated Database Project: Discussion of Work Plan and Progress to Date." An invited paper given to the Paso del Norte Water Task Force on 16 May 2003 in Ciudad Juarez, Mexico.
- Brown, C. 2003. "New Directions in Binational Water Resource Management in the U.S.-Mexico Borderlands." Paper presented at the 2003 Annual Meeting of the Association for Borderlands Studies, 11 April 2003, Las Vegas, NV.

- Brown, C. 2003. "Innovative Ideas for Teaching Border Classes in University Settings." Panel session I
 moderated and in which I presented at the 2003 Annual Meeting of the Association for Borderlands
 Studies, 11 April 2003, Las Vegas, NV.
- Brown, C. 2003. "Water Transfers in the Paso del Norte Region: Opportunities and Impediments to Institutional Innovation." Paper presented at the 2003 Annual Meeting of the Association of American Geographers. 7 March 2003, New Orleans, LA.
- Brown, C., A. Browning-Aiken, R. Varady, and D. Moreno. 2002. "Comparative Analysis of Water Resources Management on the U.S.-Mexico Border: the Case of the Rio Bravo/Rio Grande Basin."
 Paper presented at the First International Symposium on Transboundary Waters Management, hosted by la Associación Mexicana Hidraulica, 20 November 2002, Monterrey, Nuevo Leon, Mexico.
- Browning-Aiken, A., C. Brown, R. Varady, and D. Moreno. 2002. "Comparative Analysis of Water Resources Management on the U.S.-Mexico Border: the Case of the San Pedro Basin." Paper presented at the First International Symposium on Transboundary Waters Management, hosted by la Associación Mexicana Hidraulica, 20 November 2002, Monterrey, Nuevo Leon, Mexico.
- Brown, C., R. Van Schoik, and E. Lee. 2002. "Binational Water Management Planning: Opportunities, Costs, Benefits, and Unintended Consequences - Secure and Sustainable Water by 2002." Paper presented at the 2002 Water Symposium, hosted by the New Mexico Water Resources Research Institute, Socorro, NM. 13 August 2002.
- A. Killgore, W. Whitford, and C. Brown. 2002. "A GIS Model for a Biological Soil Process." Paper
 presented at the 87th Annual Meeting of the Ecological Society of America, Tuscon, AZ. August 9,
 2002.
- Brown, C., R. Wright, N. Lowery, and J.L. Castro. 2002. "Comparative Analysis of Transborder Water Management Strategies: Case Studies on The United States – Mexico Border." Invited paper presented at the 2002 Border Institute IV, an international conference sponsored by the Southwest Center for Environmental Research and Policy, Rio Rico, AZ. 5-8 May 2002.
- Brown, C. 2002. "Innovations in Water Resource Management on the U.S.-Mexico Border: The Case for a Binational Groundwater Recharge District in the Ambos Nogales Region." Paper presented at the 2002 Annual Meeting of the Association for Borderlands Studies, Albuquerque, NM. 10-13 April 2002.
- Brown, C. 2002. "Exploring the Potential for a Binational Watershed Council Along the U.S-Mexico Border." Paper presented at the 2002 Annual Meeting of the Association of American Geographers, Los Angeles, CA. 19-23 March 2002.
- Brown, C. 2002. "Opportunities and Challenges for Regional Water Resource Management in the Paso del Norte." Invited paper presented at the <u>Works in Progress</u> series hosted by the New Mexico State University's Center for Latin American and Border Studies." 13 March 2002.
- Brown, C and R. Czerniak, 2001. "Water Conflicts Between New Mexico and Texas: Historical Perspectives and the "State of the Conflict," invited paper presented at U.S. Department of Statesponsored conference, *Conflicto Urbano-Rural por el Agua: Ejemplos de Mexico y los Estados Unidos*, 28 June 2001, Monterrey, NL, Mexico.
- Brown, C. 2001. "A Comparative Examination of Tools for Binational Water Resource Management on the U.S.-Mexico Border," invited paper presented at Workshop on Population, Water and the Future of the U.S.-Mexico Border, hosted by the University of Michigan Population-Environment Fellows Program, 9 May, 2001, Tijuana, BC, Mexico.
- Brown, C. 2001. "Exploration of the Border Liaison Mechanism as an Option for Binational Water Resources Management on the U.S.-Mexico Border," paper presented at the 2001 Annual Meeting of the Association for Borderland Studies, 19 April 2001, Reno, Nevada.

- Brown, C. 2000. "A Comparative Analysis of Reform Options for Water Resource Management on the U.S.-Mexico Border." 2000 Annual Meeting of the Association of Borderland Scholars. 27 April 2000. San Diego, CA.
- Brown, C. 2000. "Towards More Holistic River Basin Management in the Santa Cruz River Basin: The
 Case for a Binational Consejo de Cuenca." 2000 Annual Meeting of the Association of American
 Geographers. 6 April 2000. Pittsburgh, PA.
- Brown, C. and C. Placchi. 2000. "A Tool for Binational Environmental Conflict Resolution on the U.S.-Mexico Border: A Spatial Decision Support System Application in the Santa Cruz Watershed." Illustrated paper, 2000 Annual Meeting of the Association of American Geographers. 5 April 2000. Pittsburgh, PA.
- Brown, C. 1999. "Reform Options for Improved Water Resource Management on the US-Mexico Border." Invited paper for Santa Cruz Active Management Area Settlement Group Meeting, 30 November 1999.
- Brown, C. 1999. "River Basin Commissions and Watershed Councils: Perspectives from the Large and the Small." Invited paper for the Santa Cruz River Alliance, 3 November 1999.
- Brown, C. 1999. "Consejos de Cuencas as Tools for Environmental Conflict Resolution: Preliminary Work in the Upper Santa Cruz Basin." Invited paper for Udall Center Fellows Colloquia Series, 6 October 1999.
- Brown, C. 1999. "Reform Options for Improved Water Resource Management in the Tijuana River Basin." 1999 Annual Meeting of the Association of Borderland Scholars. 22 April 1999. Fort Worth, TX.
- Brown, C. 1999. "A Watershed Approach to Transboundary Wastewater Management in the Tijuana River Watershed." Invited paper presented as a Doctoral Dissertation Colloquia Presentation, San Diego State University, 9 April 1999. San Diego, CA.
- Brown, C. 1999. "Consejos de Cuencas and US-Mexico Border Water Resource Issues: A Tool for Exploring Equity Concerns." 1999 Annual Meeting of the Association of American Geographers. 26 March 1999. Honolulu, Hawaii.
- Brown, C. 1999. "Linking Course Outcomes and Employment Opportunities with Internet and Webbased Tools." 1999 Annual Meeting of the Association of American Geographers. 26 March 1999. Honolulu, Hawaii.
- Brown, C. and R. Gersberg. 1998. "Predictive Modeling of Interactions Between Land Use and Storm Water Quality in the Tijuana River Watershed." 1998 SCERP Technical Conference. El Paso, TX. 28-30 October, 1998.
- Brown, C. and C. Placchi. 1998. "Exploring Water Quality Challenges Along the US-Mexico Border: Issues in the Tijuana River Watershed." Poster prepared for the 1998 Middle States Conference, Association of American Geographers. Rutgers University. 9-10 October, 1998.
- Brown, C. 1998. "Introduction to GIS and Use in Water Resources Management." Invited paper at the Seminar on GIS and Water Resources hosted by the Water Resources Association of the Delaware River Basin. PSU Great Valley Campus, Great Valley, PA. 20 August, 1998.
- Brown, C., R. Gersberg, and C. Placchi. 1998. "Modeling the Impacts of Surface Water Hydrology and Land Use on Water Quality in the Tijuana River Watershed." Paper presented at the Water Environment Federation Specialty Conference, Watershed Management: Moving from Theory to Implementation, 4 May, 1998, Denver, CO.
- Brown, C. and C. Placchi. 1998. "Advancing a Watershed Approach to Water Quality in the Tijuana River Watershed." Paper presented at the Association of American Geographers Annual Meeting, 26 March, 1998, Boston, MA.

- Brown, C. and B. McCormick. 1998. "Internet and Web-Based Tools for Job Searches in Geography."
 Workshop presentation at the Association of American Geographers Annual Meeting, 28 March, 1998, Boston, MA.
- Brown, C. 1997. "Cross-Border Bio-regional Research in the Tijuana River Basin." Invited paper at Second International Workshop; North American Consortium for Community Based Biodiversity Conservation. McGill University, Montreal, Quebec. 11-13 December, 1997.
- Brown, C. and C. Placchi. 1997. "Geographic Information Systems, Hydrologic Modeling, and Watershed Approaches in the Management of Surface Water Quality." Paper presented at meeting of the 1997 Middle States Division of the Association of American Geographers, 17-18, October, 1997. Buffalo, NY.
- Gersberg, R. and C. Brown. 1997. "Monitoring and Modeling of Water Quality in the Tijuana River Watershed." Paper presented at the Southwest Center for Environmental Research and Policy (SCERP) Technical Conference, 10-12 September, 1997. El Paso, TX.
- Brown, C. 1997. "Hydro-regionalism and Wastewater Management Challenges in the Tijuana River Basin." Paper presented at the Annual Meeting of the Association of Borderland Scholars, 25 April, 1997. Albuquerque, NM.
- Brown, C. 1997. "Appropriate Technologies for Wastewater Management in the Tijuana River Basin."
 Paper presented at the Association of American Geographers Annual Meeting, Ft. Worth, Texas. 4
 April, 1997.
- Wright, R., E. Griffin, C. Brown, S. McElroy, M. Brown, and A. Obee. 1996. "GIS Applications in the San Diego-Tijuana Interface." Paper presented at the 1996 Annual GIS/LIS Conference, 19-21 November, 1996. Denver, CO.
- Wright, D., C. Brown, and A. Obee. 1996. "An Integrated Cross-Border Geographic Information System for the San Diego-Tijuana Interface; Final Results and Products." SCERP and Border XXI: Current Research and Future Priorities for Applied Research on the Border Environment, San Diego, CA. 11-13 September, 1996.
- Brown, C. 1996. "San Diego/Tijuana Wastewater Management: A Puzzle of Asymmetries." North American Water and Environment Congress, hosted by the American Society of Civil Engineers, Anaheim, California, 27 June, 1996.
- Brown, C. & C. López. 1996. "Characterization of Water Quality in the Tijuana River Watershed."
 Assoc. of Borderland Scholars Annual Meeting, Reno, Nevada, 17 April, 1996.
- Brown, C., S. McElroy, E. Griffin, and R. Wright. 1996. "Modeling of Urban Structure and Population in Tijuana, BC, Mexico." Association of American Geographers Annual Meeting, Charlotte, North Carolina, 10 April, 1996.
- Brown, C. 1996. "Transborder Geographic Information Systems as an Important Planning Tool."
 Invited Paper at Border Affairs Commission Meeting, Mexican Federal Chamber of Deputies, San Diego, California, 9 February, 1996.
- Brown, C. 1995. "Increasing the Range of Policy Options for Management of Transboundary Wastewater in the Tijuana River Basin: A Political Ecology Approach." Association of Borderland Scholars Annual Meeting, Oakland, California, 28 April, 1995.
- Brown, C. and R. Wright. 1995. "Data, Data Bases, and Modeling in the San Diego-Tijuana Region."
 Californias in Transition Seminar, San Diego State University, San Diego, California, 27 October,
 1995.
- Brown, C. 1994. "Policy Options for Management of Transboundary Wastewater Flows in the Tijuana River Watershed: A Regional Political Ecology Approach." NATO Advanced Study Institute: Transboundary Water Resources Management, Institutional and Technical Issues, Skopelos Island, Greece, 15-25 May, 1994.

- Brown, C. 1994. "Development of a Trans-boundary Data Cooperative for Geographic Data Sets Along the California-Baja California Portion of the US-Mexico Border". Association of American Geographers Annual Meeting, San Francisco, California, 31 March, 1994.
- Griffin, E., R. Wright, and C. Brown. 1993. "US-Mexico Border GIS Databases: Current Activities and Future Needs". US-Mexico Border GIS Database Workshop, Institute for Regional Studies of the Californias, San Diego, California, August, 1993.
- Griffin, E., R. Wright, & C. Brown. 1993. "An Integrated Cross Border Geographical Information System for San Diego Interface: System Development Issues & Research Questions." Conference on Water Quality/Provision in the Tijuana/San Diego & Mexicali/Imperial Valley Regions. Inst. for Regional Studies of the California, San Diego, CA.
- Griffin, E., R. Wright, and C. Brown. 1993. "An Integrated Cross Border Geographical Information System for the San Diego Interface: First Year Schedule of Tasks." Southwest Center for Environmental Research and Policy Technical Conference. Phoenix, Arizona, March, 1993.
- Brown, C. 1993. "Water Resources Along the California-Baja California Region of the US-Mexico Border: Issues of Sustainability, Economic Development, and the North American Free Trade Agreement." Invited Paper at the San Diego Dialogue Meeting, University of California, San Diego Extension, San Diego, California, 8 January, 1993.
- Brown, C. 1990. "An Examination of a Distance Decay Function Relating Air Quality to Power Plant Location." Association of American Geographers Annual Meeting, Toronto, Ontario, Canada, April, 1990.
- Brown, C. and J. Westphal 1990. "A Preliminary Examination of Perceptions Relating to Power Plant Locations and Air Quality in Urban Areas." Council for Education of Landscape Architects (CELA) Annual Meeting. Denver, Colorado.

Honors, Awards, and Scholarships

- Award of the New Mexico State University Research Council's Award for Exceptional Achievements in Creative Scholarly Activity. Awarded in August of 2006 by Dr. Vimal Chitanya, Vice President of Research, NMSU.
- Designation on 5 May 2004 as Member of the NMSU Teaching Academy by Provost William V. Flores
 and Dr. Tara Gray, Director of The Teaching Academy. Membership reflects at least 15 hours of faculty
 development activities undertaken at The Teaching Academy.
- Designation as a member of the "Who's Who Among America's Teachers, 2002" a national honor that is bestowed on only 5% of teachers in the United States.
- Award of the Intergraph Young Scholars Award for the 2002 UCGIS Assembly, awarded by the Intergraph Corporation for participation in the 2002 UCGIS Assembly, 17 June 2002.
- Award of an opening within the Institute for Technology-Assisted Learning, New Mexico State University, Summer 2000. Award granted on 7 June 2000.
- Sigma Xi Grant-in-Aid Award, San Diego Chapter of Sigma Xi, San Diego State University, May, 1997.
- National Center for Geographic Information and Analysis Travel Scholarship, University of California, Santa Barbara, January, 1996.
- California State University Student Research Competition and Conference, Second Place Award, Social Science Session, CSU San Bernardino, May, 1995.
- Phi Beta Delta ~ Honor Society for International Scholars ~ Scholarship Award, San Diego State University, Fall, 1995 and Spring, 1994.
- Sierra Club, North San Diego County, Bob Davey Memorial Scholarship, August, 1995 and May, 1993.

- National Science Foundation (NSF) International Travel Award, Graduate Fellowship Program of the NSF, May, 1994.
- Graduate Fellowship, Office of Graduate Studies, San Diego State University, 1992-1993.
- Graduate Fellowship, Graduate School, Michigan State University, 1986-1987.
- Center for Public Economics Scholarship, San Diego State University, 1985 and 1986.

Service Committees and Activities

- Chair, NMSU Faculty Senate Library Advisory (reconstituted in fall of 2018); position is elected, term
 of service is fall 2018 to present.
- Member of the Executive Committee of the Western Social Science Association (WSSA). Term of service is 2018-2011 and 2016-2019.
- President Elect, President, and Past President, Western Social Science Association. Term of service is 2017-2020.
- Member of the NMSU Graduate Council. Position is elected, and the terms of service are Fall 2014present and Fall 2006-Fall 2009. Also served as the Vice Chair Fall 2007-Fall 2008, and Chair from Fall
 2008-Fall 2009.
- Chair of the NMSU Faculty Senate, an elected position. Period of service is 16 May 2016 to 15 May 2018.
- Co-Chair of the Association for Borderlands Studies (ABS) Bylaws Revision Committee, date of service was 1 July 2013 to 30 April 2014.
- Member of the Board of Directors of the Ocotillo Institute for Social Justice, a community committee
 committed to improving the quality of life of residents of Dona Ana County. Service is as invitation of
 DAC Commission Chairperson, Billy, Garrett, period of service was 1 June 2013 to 31 May 2016, with
 intent to expand on the work of the J. Paul Taylor Symposium on Social Justice and stand up a 501©3
 non-profit.
- Member of Steering Committee for the J. Paul Taylor Symposium on Social Justice, Las Cruces, NM. Working with Steering Committee members, hosted a very successful symposium that reached ~300 people. Period of service is February 15, 2011 to 3 April 2013.
- Service to White Sands Elementary School, Las Cruces, NM. Provided outreach support for two
 programs, the White Sands School Science Fair, and the White Sands School Geography Bee. Period
 of service is October 2011 Present.
- Member of the Journal Editor Search Committee for *The Social Science Journal*, Western Social Science Association, term of service is from 15 April until 31 December 2011.
- Member of BECC Steering Committee to Explore Options for North Valley Regional Water and Wastewater Project, Doña Ana Mutual Domestic Water Consumers Association, date of service is 1 March 2010 - May 2012.
- Service to the El Paso Metropolitan Planning Organization (EPMPO) in support of their long-range planning effort, Forecast Workgroup for Demographics. Activities included participation in focus groups and online planning modules, with period of service being May 2011 to September 2011.
- Member of the NMSU Building the Vision (BTV) Committee. BTV is the current University comprehensive master planning effort, and term of service was 1 April 2011 to 15 August 2013.
- Member of the NMSU Domenici Institute Advisory Board, representing the College of Arts and Sciences on this campus wide advisory committee. Term of service is 1 November 2010 to present.
- Member of the NMSU Sustainability Council, a campus group with charge to advance sustainability principles in campus operations and curriculum. Term of service was 15 August 2010 to 15 May 2012.

- Chair of the NMSU College of Arts and Sciences Senior Senator Review Committee, charged by NMSU Provost Waded Cruzado to settle appeals by an NMSU faculty member terminated for cause. Named as chair on 15 May 2008, and period of service was to 15 May 2010.
- Member of the Advisory Committee to the Office of International and Border Programs to support the
 formation of the NMSU International Relations Institute. Term of service is from Spring 2007 to
 Spring 2010, appointment was by Delano Lewis, Senior Fellow, Office of the President.
- Associate Editor of The Social Sciences Journal, Term of service is from 15 September 2007-31 May 2010.
 Duties include manuscript review and providing guidance to the WSSA Executive Board on issues related to the Journal.
- Member of the Technical Advisory Panel for the Non-Native Phreatophyte/Watershed Management Plan, New Mexico Soil and Water Conservation Commission, the term of service is from 15 July 2007 14 July 2010.
- Member of the Executive Committee for the NMSU Center for Latin American and Border Studies.
 Term of service was fall 2006 to present.
- Chair of the NMSU Ad Hoc Committee on Plagiarism and Academic Misconduct, an NMSU campus wide committee reporting directly to the Chair of the NMSU Faculty Senate. Term of service was 15 February 2006 to 15 May 2010.
- Member of the Good Neighbor Environment Board, an independent advisory committee supported by the U.S. Environmental Protection Agency (USEPA). Its mission is to advise the U.S. President and Congress on environmental issues along the U.S. border with Mexico. Appointment is by the USEPA Administrator, term of service was 1 February 2006 to March 2010.
- Member of the Board of the Association of Borderland Studies (ABS). Term of service was 14 April 2008 to 13 April 2011 and 14 April 2001-13 April 2004. During this period, I also served as President of the ABS from 14 April 2006 to 13 April 2007.
- Member of the NMSU Living the Vision Implementation Committee. Committee was chaired by Vice Provost Garrey Carruthers and reported directly to the President of NMSU. Term of service was August 2005 to 1 April 2011.
- Member of the NMSU Faculty Advisory Committee on Technology, a university-wide committee to provide faculty input to NMSU Chief Information Officer, term of service is fall 2005 to fall 2008.
- Member of the Steering Committee of the NMSU Border Research Cluster, August 2005 to 15 May 2008. Duties include providing leadership to the cluster and working with the Graduate School and Vice Provost for Research in making Cluster funding decisions.
- Director of the NMSU Spatial Applications Research Center, term of service is 1 January 2005 to present.
- Member of NMSU Task Force chaired by Dr. Everett Eggington, NMSU Vice Provost for International Programs, to organize a regional conference on U.S.-Mexico border issues to be held in Spring of 2006.
- Jury Member for the 2004 Graduate Research and Arts Symposium, hosted by The NMSU Graduate School and the NMSU Graduate Student Council.
- Service as faculty mentor to Ms. Olivia Montalvo in the NMSU McNair Scholars Program, administered through the NMSU Office for Learning Assistance. The McNair Program works to advance under-represented students in graduate work toward a Ph.D., period of service was March 2003 to May 2004.
- Member of the NMSU Library General Obligation Bond Proposal Committee from 15 November 2003 to May 2004.
- Member of the Board of Directors of the Water Resources Specialty Group of the Association of American Geographers, period of service was March 2003 to February 2006.
- Alternative Delegate to the Universities Council on Water Resources, appointed by NMSU Provost,
 Dr. William V. Flores, period of service was 16 September 2002-15 September 2003.

- Invited member of an International Experts Panel on Binational Collaborative Partnerships for Water Conservation in the Paso del Norte Region, hosted by Environmental Defense and el Instituto Nacional de Investigacioines Forestales, Agrícolas y Pecuarios, Ciudad Juárez, 29-30 September 2003.
- Member of the NMSU Faculty Senate Library Advisory Committee, period of service was 15 August 2003 to 15 May 2006.
- Member of the Las Cruces Metropolitan Planning Organization Bicycle Facilities Advisory Committee,
 1 January 2003 to December 2008.
- Member of Teaching Academy Focus Group on Teaching Excellence, convened by Provost William Flores in Summer of 2002.
- Member of the Rio Grande Citizen's Forum, a citizens' forum providing input to the International Boundary and Water Commission, Spring 2002 to 2006.
- Member of the Paso del Norte Watershed Council Executive Committee, a regional bi-national water resource planning effort in the Paso del Norte region, 19 October 2001 to present.
- Member of the Paso del Norte Water Task Force Support Team, a tri-lateral, bi-national water resource planning effort in the Paso del Norte, 1 January 2001 to 30 June 2010.
- Departmental Faculty Coordinator to Department Instructional Computer Laboratory, Spring 2001 to Summer 2002.
- Member of the NMSU Arts and Sciences Faculty Senate Information Technology Committee, term of service is 1 May 2001 to 15 August 2002.
- Library Liaison on behalf of the NMSU Department of Geography, aiding in collections assessment and development, August 2000 to May 2010.
- Member of joint NMSU-Universidad Autonoma de Ciudad Juarez Task Force exploring collaborative research efforts, fall 2001 - spring 2002. Membership on this committee was at the personal appointment of University President Jay Gogue and Provost William Flores.
- Member of NMSU College of Arts and Sciences (A&S) Committee to develop the A&S U.S.-Mexico Border Studies Minor, Spring 2001-Fall 2001.
- NMSU Department of Geography's Coordinator for the 2002 NMSU United Way Pledge Drive, fall 2001 – summer of 2002.
- Chair of Student Participation Committee, Association for Borderland Studies, April 1999 to April 2002.
- Member of the Ford Foundation/Udall Center Fellowship Competition Committee to review applications for the year 2000.
- Appointed member of the Employment Opportunities and Career Development Committee, Association of American Geographers, for a three-year term, 1 July, 1997-1 July, 2000.

Article, Book, Grant, and Tenure Reviews

Book Reviews

- Brown, C. 2010. Invited review of Nonprofits and their Networks: Cleaning the Waters along Mexico's Northern Border, by Daniel Sabet. Review submitted to the *Journal of Borderland Studies* on 1 April 2010, published in summer of 2010.
- Brown, C. 2002. Invited review of advanced materials for Concepts and Regions, a new text book written
 by de Blij and Muller and published by John Wiley and Sons, Inc. Review was submitted to Mark Gerber,
 Wiley Senior Editor, on 27 January 2002.
- Brown, C. 2001. Book Review of "Geographic Information Systems: An Introduction," by Tor Bernhardsen. *The Professional Geographer*. 53(3):460-462.

- Brown, C. 2001. Book Review of "Geographical Information Systems: Principles, Techniques, Applications and Management," Second Edition. Paul A. Longley, Michael F. Goodchild, David J. Maguire, and David W. Rhind (eds). The Annals of the Association of American Geographers. 91(3):590-592.
- Brown, C. 1998. Book review of "Water Boundaries" by George Cole. *The Professional Geographer*, 50(4): 535-536.

Article reviews

- Brown, C. 2018. Invited anonymous review of "Agglomeration Economics: A Method for Measuring Bi-National City Integration," article submitted to *GeoJournal*, review submitted 11.18.18.
- Brown, C. 2015. Invited anonymous review of "Emerging Information Networks Between Mexico and the U.S.A," a paper submitted to the *Journal of Borderland Studies*. Review was submitted to the editor on 14 July 2015. R&R follow up review submitted 11 October 2016.
- Brown, C. 2015. Invited anonymous review of "Recent Demographic Change in the Rio Grande Valley
 of Texas: The Importance of Domestic Migration," a paper submitted to the Journal of Borderland Studies.
 Review was submitted to the editor on 13 July 2015.
- Brown, C. 2014. Invited anonymous review of "The La Paz Agreement Thirty Years On: The Politics of Environmental Cooperation Along the U.S.-Mexican Border," a paper submitted to the *Journal of Environment and Development*. Review was submitted to the editor on 4 February 2014.
- Brown, C. 2013. Invited anonymous review of "Borderlands Studies and Comparative Public Administration: A Model Transdisciplinary Nexus," an article submitted to the *Journal of Borderland Studies*. Review was submitted to the editor on 22 November 2013.
- Brown, C. 2011. Invited anonymous review of "The limits of borders. Stages of transboundary water management," an article submitted to the *Journal of Borderland Studies*. Review was submitted to the editor on 20 February 2012.
- Brown, C. 2011. Anonymous review of "Context and differentiation: development of the wine industry in three Canadian regions," an article submitted to *The Social Science Journal*. Review submitted online at http://ees.elsevier.com/socsci/default.asp on 8 June 2011.
- Brown, C. 2011. Anonymous review of "Water Infrastructures in the Mexico-US Borderlands," a
 paper submitted to Sustainability on the Border: Water, Climate and Social Change in a Fragile Landscape, a
 conference sponsored by the National Science Foundation at the University of Texas, El Paso. Review
 submitted to Dr. Josiah Heyman, 5 May 2011.
- Brown, C. 2010. Anonymous review of "Water Conservation from Israeli and Palestinian Perspectives:
 Conservation as a Way of Life," a book chapter submitted to the Water Resources Research Center at
 the University of Arizona, to be published by UNESCO in a book on Israeli-Palestinian water
 management. Review submitted electronically on 12.26.10.
- Brown, C. 2010. Anonymous review of "Spatially varying relationships between land use and water quality across an urbanization gradient explored by geographically weighted regression," a paper submitted to Applied Geographer (http://ees.elsevier.com/japg). Review submitted online on 7.12.10.
- Brown, C. 2010. Anonymous review of "Assessing the Human-Environment Relationship: A Complex-Systems Methodology to Modeling Climate Change," an anonymous review of an article submitted to The Social Science Journal. Review was submitted to the editor on 8 February 2010.
- Brown, C. 2009. Invited anonymous review of "United States-Mexican Border Watershed Assessment: Modeling Non-Point-Source Pollution in Ambos Nogales," an article submitted to the *Journal of Borderland Studies*. Review was submitted to the editor on 15 September 2009.
- Brown, C. 2009. Invited anonymous review of "A Descriptive Overview of the Rio Grande-Rio Bravo Watershed," an article submitted to *Transboundary Water Resource*. Review of article was submitted to the editor on 12 July 2009.
- Brown, C. 2007. Invited anonymous review of "NAFTA and the Border Environmental Cooperation Commission: Assessing Activism in the Environmental Infrastructure Project Certification Process (1996-2004)," an article submitted to the *Journal of Borderlands Studies (JBS)*. Review of article was submitted to the JBS editor on 27 October 2007.

- Brown, C. 2006. Anonymous review of "Sharing Water Resources Data in the Bi-National Rio Grande/Río Bravo," a manuscript submitted to the American Society of Civil Engineers, Journal of Water Resources Planning and Management Engineering. Review of article submitted to Stephen Draper on 24 September 2006.
- Brown, C. 2006. Invited anonymous review of "United States-Mexican Border Watershed Assessment:
 Modeling Non-Point-Source Pollution in Ambos Nogales," an article submitted to the *Journal of Borderlands Studies*. Review of revised article was submitted 15 September 2006.
- Brown, C. 2006. Invited anonymous review of "The Contribution of Physical Geography to Environmental Public Policy in Mexico," an article submitted to *The Professional Geographer*.
- Brown, C. 2005. Invited anonymous review of "Site Suitability of Southwest Topeka, Kansas," an article
 submitted for publication in *Papers of the Applied Geography Conferences*. Review submitted on 10 July 2005
 to Dr. Graham Tobin, Editor of Papers of the Applied Geography Conferences.
- Brown, C. 2004. Invited anonymous review of "Biological Assessment of Tecate Creek (U.S.-Mexico) with Special Regard to Self Purification," an article submitted to The Bulletin of the Southern California Academy of Sciences. Review submitted 3 September 2004 to Mr. Dan Guthrie, Editor.
- Brown, C. 2004. Invited anonymous review of "Agricultural Producers' Perception and Use of Sources
 Water Quality Information," an article that was submitted for publication in Papers of Applied Geography
 Conferences. Review submitted 14 July 2004 to Dr. Burrell Montz.
- Brown, C. 2003. Invited anonymous review of "Equity and Justice in Binational Environmental Policy, an article submitted to Regional Reflections on the World Summit in Johannesburg: Equity and Sustainable Development in the U.S.-Mexico Border Region, a book published by the Center for U.S.-Mexico Studies, University of California, San Diego. Review submitted 19 December 2003.
- Brown, C. 2002. Invited anonymous review of "Spatial Adjustment as a Mechanism for Resolving River Basin Conflicts: The U.S.-Mexico Case," an article submitted to *Political Geography*. Review submitted 1 October 2002.
- Brown, C. 2002. Invited anonymous review of "The Maquiladora Industry and Issues of Hazardous Waste during the Pre- and Post-NAFTA Years," an article submitted to *The Southwest Geographer*. Review submitted 16 September 2002.
- Brown, C. 2002. Invited anonymous review of a revised version of "Land Use Planning in the USA-Mexico Border: A Comparison of the Legal Framework," an article submitted to the *Journal of Borderlands Studies*. Review of revised article was submitted 15 June 2002.
- Brown, C. 2002. Invited anonymous review of "Land Use Planning in the USA-Mexico Border: A
 Comparison of the Legal Framework," an article submitted to the *Journal of Borderlands Studies*. Review
 was submitted 12 February 2002.
- Brown, C. 2001. Invited Anonymous review of "Informal Transborder Recycling on the U.S.-Mexico Border: The Cartoneros of Nuevo Laredo," an article submitted to the *Journal of Borderlands Studies*, review submitted 21 April 2001.
- Brown, C. 2000. Invited anonymous review of "Cultivating a Geographic Perspective on World Water Problems Through Problem Based Inquiry in Large Undergraduate Classes," an article submitted to <u>The</u> <u>Journal of Geography</u>. Review submitted 5 November 2000.
- Brown, C. 1997. Invited anonymous review of "A Runoff Index: Impervious Cover, Watershed Runoff, and Flooding in Urban Creeks, Austin, Texas," an article submitted to *The Professional Geographer*. Review submitted 15 May 2000.
- Brown, C. 1997. Invited anonymous review of "Freshwater Use, Freshwater Scarcity, and Socio-Economic Development," for *The Journal of Environment and Development*, a journal published by the Graduate School of International Relations and Pacific Studies, University of California, San Diego. Review submitted 24 November 1997.

Grant Reviews

- Brown, C. 2011. Anonymous review of "Water Redistribution Among Surface, Vadose, and Saturated Zones due to Climate Change and its Impact on Water Supply," a funding proposal submitted to the 104 (g) National Competitive Grants Program hosted by the U.S. Geological Survey and the National Institutes for Water Resource. Review submitted on 5 July 2011.
- Brown, C. 2011. Anonymous reviews of "Human and Environmental Security in Border Regions: Cross-regional Perspectives," a funding proposal submitted to the University of Luxembourg. Review submitted on 6 July 2011.
- Brown, C. 2010. Anonymous review of "Development of a Long-Term Water Availability Record in the Southern Midwestern US," a funding proposal submitted to the 104 (g) National Competitive Grants Program hosted by the U.S. Geological Survey and the National Institutes for Water Resource. Review submitted on 11 June 2010.

Tenure Reviews

- Brown, C. 2015. External review of post tenure review packet for Dr. George Hepner, Professor in the
 Department of Geography, University of Utah. Review was submitted to Dr. Tom Cova, Director of the
 Department of Geography, University of Utah post tenure review process on 23 April 2015.
- Brown, C. 2014. External review of packet submitted by Dr. Heather Nicol, Department of Geography
 at Trent University, Ontario Canada, for consideration of promotion to Professor. Review was requested
 by Dr. Holger Hintelmann, Dean, College of Arts and Sciences, Trent University, on 26 November 2013,
 and review was submitted 13 January 2014.
- Brown, C. 2012. External review of tenure packet for Dr. Brian Hurd, Department of NMSU
 Department of Agricultural Economics and Agricultural Business (AgEAgBus). Review was requested by
 Dr. Terry Crawford, Department Head of AgEAgBus, in August of 2012, and review was submitted 15
 September 2012.
- Brown, C. 2010. External review of tenure packet for Dr. Jill Heaton, Department of Geography, University of Nevada, Reno (UNR). Review was requested by Dr. Kate Berry, Department Head at UNR, in July of 2010, and review was submitted on 24 August 2010.

References: Available upon request.

Vitae revised: 1 May 2019.