# WILLIAM JAMES SMITH JR., PH.D.

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### **EDUCATION**

Ph.D. in Urban Affairs & Public Policy, with a concentration in Technology, Environment and Society Relations, Center for Energy and Environmental Policy, University of Delaware (U. of DE) in August, 2003.
MA in Geography & Environmental Planning, Towson University (U. of Maryland system) in August, 1999.
BA in History & Secondary Social Studies Education, Teaching Certificate K-12, U. of DE in May, 1992.

#### PROFESSIONAL EXPERIENCE

University of Nevada, Las Vegas (UNLV), Department of Anthropology, Associate Professor of Research (2011 – 2019), Las Vegas, NV. Multidisciplinary approach to "Coupled Natural and Human Systems" integrating the subfields of environmental studies, comparative environmental policy, spatial science, development, hazards and risk, political ecology, and geographical and anthropological research at the nature-society-sustainability nexus. Specific subtopics and fieldwork include water and biodiversity conservation, climate change perception and policies for adaptation, community based participatory research methodologies, drinking water, environmental change, environmental justice, geographic techniques, Native Americans and Pacific Islanders, appropriate technologies, and watershed and water resources management.

<u>University of Redlands, Department of Environmental Studies, Research Associate and Adjunct Professor</u> (2017 – ), Redlands, CA. Teaching two courses, EVST 260 Special Topics: Water Resources and Environment and Development.

<u>The University of Iowa, Department of Geography, Adjunct Research Professor</u> (2004 – 2016), Iowa City, IA. Research position created for institutional collaboration on research.

University of Nevada, Las Vegas, School of Environmental and Public Affairs, Assistant Professor (2005 – 2011), Las Vegas, NV. Tenure-track position with a teaching and research focus on nature-society relations, development, environmental management, GIS/GPS/RS, water, and policies and participatory strategies supporting domestic and international conservation. Course sizes ranging from 60 person undergraduate class, to seminar size courses with undergraduate, MA or MS, and Ph.D. students: 1) Introduction to Environmental Science; 2) Geographic Information Systems; 3) Environment and Development; 4) Political Economy of Technology-Environment-Development, 5) Conservation, and 6) Environmental Policy and Planning.

Water Resources Management Graduate Faculty (UNLV in cooperation with the Desert Research Institute) (2006 – 2011), Las Vegas, NV. Unit fostering multidisciplinary teaching and research with the Colleges of Science, Business, Urban Affairs, Engineering, and Liberal Arts, the Harry Reid Center for Environmental Studies, and the University of Nevada, Reno. Adjunct faculty include staff from the U.S. Environmental Protection Agency, U.S. Geological Survey, U.S. Department of Energy.

University of Nevada, Las Vegas, Founding Environmental Informatics Coordinator (2009 – 2010), Las Vegas, NV.

<u>University of Delaware, Center for Energy and Environmental Policy, Policy Fellow</u> (2004 – 2005), Newark, DE. Focus on urban environmental conservation and policy in water resource management. http://ceep.udel.edu/ceep.html

The University of Iowa, Department of Geography, Visiting Assistant Professor (2003 – 2004), Iowa City, IA. Research and teaching focus on sustainability theory, conservation history and applications, natural and technical hazards, and environmental management. Course sizes ranging from 120 person introductory undergraduate to 6 person upper-level undergraduate and graduate level classes: 1) Contemporary Environmental Issues; 2) Environmental Conservation; 3) Environment and Development; 4) Hazards; and 5) Socio-Political Aspects of Water Resource Management (my new departmental offering).

<u>University of Delaware, Center for Energy and Environmental Policy, Instructor</u> (2001 – 2003), Newark, DE. Served as an instructor in *Political Economy of the Environment, Technology Society and Environment*, and *Social Inquiry* at the graduate level. Selected by Chair to develop honors *Political Economy of the Environment* course for undergraduates.

<u>Irish National Caucus, Director: Legislative Affairs and Communications</u> (1994 – 1997), Capitol Hill, Washington D.C. Lobbied U.S. Congress and internationally for human rights, justice and peace in Northern Ireland. MacBride Principles passed in the U.S. House and Senate, states, cities, and via Executive Order by President Clinton.

Shue Middle School, Geography and International History Teacher (1992 – 1994), Newark, DE.

### NOTABLE AND RELATED WORK EXPERIENCE

- 2011 present. **Co-founder and owner of two medical clinics, CPPM and Regenerative & Pain Medicine Center**, two physician-based clinics for the treatment of chronic pain and provision of regenerative medicine. These clinics have employed over 60 personnel since its inception, positively impacted patients, and expanded to a second office in Southern California <a href="http://www.rpmcdoctor.com">http://www.rpmcdoctor.com</a>.
- 2004 and 2010. Consultant, Federated States of Micronesia Environmental Protection Agency on basin management, drinking water, and spatial analysis.
- 2004. Consultant, River Basin Engineering regarding integration of GIS in engineering.
- 1999–2000. Research Assistant, Delaware's Institute for Public Administration, Water Resource Agency focusing on Mid-Atlantic (U.S.) water policy and outreach strategies.
- 1998–1999. GIS and Internet technology and Environmental Education Consultant, Maryland Department of the Environment and Gunpowder Valley Conservancy (a non-governmental organization).

#### AWARDS AND RECOGNITION

#### Grants

#### Funded

- 2012-2015. Co-PI. \$202,525. Climate Change Vulnerability of Native Americans in the Southwest. U.S. Geological Survey and Southwest Climate Science Center. Collaboration with the University of Arizona, Pyramid Lake Paiute Tribe, U.S. Institute for Environmental Conflict Resolution, U.S. Geological Survey-Pacific Southwest Area, and California Department of Water Resources. Leveraged my previous NSF grant with NV tribes and researchers (I served as lead).
- 2008-2013. PI. \$2.5 million. Policy, Outreach and Decision Making Component lead for 3 universities for an NSF grant. Award was \$15 million and was titled, *Nevada Infrastructure for Climate Change Science, Education, and Outreach*. This was a multidisciplinary collaboration between UNLV, University of Nevada, Reno, and the Desert Research Institute. The \$2.5 million in funding allowed me to partially support 5 faculty members and fully support 5 graduate students, a post-doc, half of a GIS and Remote Sensing Director for UNLV, and co-found, equip and co-run 2 labs focusing on climate policy and spatial analysis. I also won funding for a 6<sup>th</sup> student to collaborate regarding water utilities and climate.
- 2010. Co-PI. \$75,000. City of Las Vegas. *Interlocal Agreement for Conducting the Community Facilities Energy Education Program*. UNLV GIS & Remote Sensing Laboratory Director Haroon Stephen PI in collaboration with myself as his supervisor and Co-PI Tom Piechota.
- 2010. Co-PI. \$24,987. NSF Seed Re-grant. Evaluating the Vulnerability of Pyramid Lake Paiute Indian Water Rights under Climate Change. Karletta Chief PI, Desert Research Institute, Co-PI Mahesh Gautam, Desert Research Institute.
- 2009 2010. Consultant. \$199,966. NSF Experimental Program for the Stimulation of Competitive Research (EPSCoR) grant for *Losing the Lake* focused on Lake Mead's decline in water volume.
- 2009 2010. PI. \$61,092. German Life Web (through the Conservation Society of Pohnpei, with The University of Iowa) to support "Building of a coherent national geographic information systems (GIS) data-set for the Federated States of Micronesia."
- 2008. PI. \$40,000. U.S. Forest Service (which I directed through The University of Iowa) to support tasks for our multi-university and international NGO team to create a national GIS for the Federated States of Micronesia.
- 2007. PI. \$73,335. Research Infrastructure Awards Program. To create a spatial analysis core lab for UNLV in the new Science, Engineering and Technology Building. Researchers from the three colleges were involved in the proposal.
- 2005 2008. PI. \$15,000. UNLV, New Investigator Award (university-wide). For research on, "Demand-side management for Lower Colorado Basin Sustainability: An evaluation of the present and potential role of basin-wide water conservation to sustain people and nature." I also won a separate grant of \$1,000 to present findings.

- 2004. PI. \$5,000. The University of Iowa, International Research Travel Grant. For research regarding access to safe drinking water and related technologies in Micronesia.
- 2002 2003. PI. \$19,500. U.S. Department of Interior 104B Grant. For GIS training to improve small island natural resources and hazards management in Micronesia.
- 2002. PI. Equivalent value approximately \$15,000. Environmental Systems Research Institute, Inc. Conservation Program Grant. For geographical information system implementation in Micronesia, with satellite data donated by the U.S. government.

#### Submitted, awaiting results and in preparation

- 2021. PI. \$50,000. For drone and sensor data collection and early warning systems for the Federated States of Micronesia, building previous work and previous funding.
- 2021. PI. \$50,000. For drone and sensor data collection and early warning systems for Native American lands in northern Nevada/California/Oregon boundary area building previous work and previous funding.

#### **Honors**

- 2015. USGS Science Features Top Story: Climate Change, Coastal Tribes and Indigenous Communities, March 11, 2015. http://www.usgs.gov/blogs/features/usgs\_top\_story/climate-change-coastal-tribes-and-indigenous-communities/.
- 2011. Selected through refereed process to participate in NSF Become the Messenger program.
- 2009. Outstanding Research Award, College of Urban Affairs.
- 2005. At the annual national meeting in Philadelphia, PA, American Sociological Association *Robert Boguslaw Award for Technology and Humanism* for, "Filling a gap in international water development discourse: Challenges to capacity building at the rural, remote and least-wealthy small island scale in Chuuk, Federated States of Micronesia."
- 2003. Best Doctoral Student, College of Human Services, Education, & Public Policy.
- 2002. School of Urban Affairs & Public Policy's Peter A. Larson Award for Scholarship.
- 2001. U. of DE's Excellence in Water Resources Scholarship Award.
- 2001. Social Science Research Council Fellowships on Conflict, Peace, and Social Transformations (national finalist).
- 2000. American Water Works Association's Best Doctoral Dissertation Proposal.
- 2000. Annual Meeting of the Association of American Geographers' (AAG), Energy and Environment Specialty Group's Annual *Luten/Cook Award* (open to faculty).
- 1999. AAG Water Resource Specialty Group Paper Competition.
- 1999. AAG Asian Geography Specialty Group Paper Competition and Travel Grant.
- 1998. AAG Water Resource Specialty Group Paper Competition (based on MA thesis on watershed management).

#### **Fellowships**

- 2003. U. of DE School of Urban Affairs & Public Policy Competitive Fellowship.
- 2002. U. of DE Competitive Semester Fellowship for Dissertation Research Abroad.
- 2001. School of Urban Affairs & Public Policy Competitive Fellowship.

#### LAB LEADERSHIP

Co-Founder of GIS lab to support biodiversity conservation in Pohnpei, Federated States of Micronesia, as well as country-wide Internet GIS clearinghouse "GEOMICRONESIA"

Director and Co-Founder of UNLV Climate Change Research Laboratory

Co-Founder of UNLV GIS and Remote Sensing Laboratory focusing on sustainability

### **PUBLICATIONS**

#### **Books**

#### **Published**

Wang, Y.D., W. Smith Jr., J. Byrne. 2005. *Water Conservation-Oriented Rates: Strategies to Extend Supply, Promote Equity, & Meet Minimum Flow Levels*. American Water Works Association. Denver, CO. (2<sup>nd</sup> printing available from AWWA.)

#### Contract signed

Smith Jr., W. Social, Political and Economic Dimensions of Water Resources Development. Springer. New York and the Netherlands.

### Refereed Journal Articles

#### Published and accepted

- Guida, R., S. Abella, C. Roberts and W. Smith Jr. 2019. "Assessing historical and future habitat models for four conservation-priority Mojave Desert species." *Journal of Biogeography*, 46: 2081-2097. DOI: 10.1111/jbi.13645. Impact Factor (ISI) 3.884, ranking: 2018: 34/165 Ecology & 12/50 Geography, Physical. Double-blind refereed academic journal.
- Safi, A., W. Smith Jr., and Z. Liu. 2016. "Vulnerability to Climate Change and Desire for Mitigation." *Journal of Environmental Studies and Sciences*, 6: 503-514. Flagship journal, Association for Environmental Studies and Sciences. DOI: 10.1007/s13412-016-0384-7. Mentoring doctoral student and post-doc. Double-blind refereed academic journal.
- Smith Jr., W., J. Mount, D. Bennett and P. Shed. 2014. "Collaborative research and the construction of the national geospatial clearinghouse for the Federated States of Micronesia: Technology, Small Island Society, and Biodiversity." *Applied Geography*, 54: 198-208. Mentored doctoral student and then post-doc at U. Iowa. ISI 5-year Impact Factor 3.395. (P. Shed represented the Conservation Society of Pohnpei.) DOI: 10.1016/j.apgeog.2014.07.011 http://authors.elsevier.com/sd/article/S0143622814001672 free for 40 days at http://authors.elsevier.com/a/1PeE3Wf-Apse8
- Smith Jr., W., Z. Liu, A. Safi, K. Chief. 2014. "Climate Change Perception and Policy Support in Rural Nevada: A Comparative Analysis of Native Americans, Ranchers, Farmers and Mainstream America." *Environmental Science and Policy*, 42: 101-122. Paid for *free access at* http://authors.elsevier.com/sd/article/S1462901114000641. Mentored 1 graduate student and 2 post-docs under my supervision. ISI 5-year Impact Factor 3.461. My work was featured in an article by the Soil Science Society of America at https://www.soils.org/publications/sh/articles/55/4/sh2014-55-4-f.
- Liu, Z., W. Smith Jr., and A. Safi. 2014. "Rancher and Farmer Perceptions of Climate Change in Nevada, USA." *Climatic Change*, 122: 313–327. DOI 10.1007/s10584-013-0979-x. Mentoring doctoral student and post-doc. #1 climate journal that includes policy, Meteorology & Atmospheric Sciences #7/71, 17/205 Environmental Sciences, ISI 5-year Impact Factor 4.906. Double-blind refereed academic journal.
- Guida, R.J., S.R. Abella, W.J. Smith, Jr., H. Stephen, and C.L. Roberts. 2014. Climatic change and desert vegetation distribution: Assessing 30 years of change in southern Nevada's Mojave Desert. *The Professional Geographer*, 66 (2): 311-322. DOI: 10.1080/00330124.2013.787007. Mentoring 2 graduate students as lead. Geography 18/67, ISI Impact Factor 1.516. Double-blind refereed academic journal. <a href="http://www.tandfonline.com/doi/full/10.1080/00330124.2013.787007#.U0xyzVca1TY">http://www.tandfonline.com/doi/full/10.1080/00330124.2013.787007#.U0xyzVca1TY</a>

- Gautam, M., K. Chief, and W. Smith, Jr. 2013. "Climate Change in Arid Lands and Native American Socioeconomic Vulnerability: The Case of the Pyramid Lake Paiute Tribe." *Climatic Change*, 120 (3): 585-589. Open Access http://link.springer.com/article/10.1007%2Fs10584-013-0737-0, 120: DOI 10.1007/s10584-013-0737-0. #1 climate journal that includes policy, Meteorology & Atmospheric Sciences 7/71, 17/205 Environmental Sciences, ISI 5-year Impact Factor 4.906. Double-blind refereed academic journal. http://link.springer.com/journal/10584/120/3/page/1
- Safi A., W. Smith Jr. and Z. Liu. 2012. "Nevada Ranchers and Farmers: Perceived Risks of the Impacts of Climate Change." *Risk Analysis*, 32 (6): 1041-1059. Mentored my doctoral student as lead. #1 risk journal, Social Sciences Mathematical Methods 4/45 and Mathematics Interdisciplinary Applications 7/92, ISI Impact Factor 2.366. Double-blind refereed academic journal.
- Smith Jr., W. and A. Safi. 2009. "Las Vegas-The Perils of Deception-Fueled Growth." *Human Geography: A Radical Journal*, 2 (2): 10-14. Mentored my doctoral student. Richard Peet, Editor. Double-blind refereed academic journal.
- Smith Jr., W. 2009. "Improving access to safe drinking water in rural, remote, and least-wealthy small islands: Non-traditional methods in Chuuk State, Federated States of Micronesia." *International Journal of Environmental Technology and Management* (special volume on small island developing states), 10 (2): 167-189. Double-blind refereed academic journal.
- Smith Jr., W. 2009. "Disaster on Pacific Islands: Contextualizing External Emergency Response and Technology." *Earthzine* serving the *Global Earth Observation System of Systems (GEOSS)*. IEEE and ICEO. Online as the refereed Featured Article and in Disasters at http://www.earthzine.org/?s=micronesia&x=0&y=0 and http://www.earthobservations.org/. Indicator of quality: "The intergovernmental Group on Earth Observation (GEO) comprises 80 member countries, the European Union, and 56 mission-related organizations, the IEEE among them. The IEEE is the world's largest professional association dedicated to advancing technological innovation and excellence for the benefit of humanity. The IEEE Committee on Earth Observation (ICEO) is a GEO designated capacity-building subtask to support GEOSS. Earthzine is the main publication outlet, with approximately 3,000 readers monthly in 118 countries." Blind refereed academic journal.
- Smith Jr., W. 2009. "Problem-centered vs. Discipline-centered Research for the Exploration of Sustainability." *Journal of Contemporary Water Research and Education*, 142: 76-82. Journal of the Universities Council on Water Resources, "a multi-disciplinary association of primarily North American universities dedicated to the advancement of research." Double-blind refereed academic journal.
- Smith Jr., W. 2009. "Geographic Research in Water Resources: A Vibrant Research Agenda for the Next 20 Years." *Journal of Contemporary Water Research and Education*, 142: 83-88. Journal of the Universities Council on Water Resources, "a multi-disciplinary association of primarily North American universities dedicated to the advancement of research." Double-blind refereed academic journal.
- Smith Jr., W. 2009. Lead Guest Editor in highly distinguished 12 person and 11 institution U.S. and EU group writing on, "A Vibrant Research Agenda for Water Resources Management for the next 20 years." For special volume focusing on future tense analysis of water resources, *Journal of Contemporary Water Research and Education*, 142. Journal of the Universities Council on Water Resources, "a multi-disciplinary association of primarily North American universities dedicated to the advancement of research." Double-blind refereed academic journal.
- Smith Jr., W. 2008. "A Geographic Analysis of the Impact of Scale and Isolation on Coping with Hazards on Small Islands." *Technology and Society, Journal of the IEEE Society on Social Implications of Technology,* 27 (3): 39-47. Journal of the IEEE, "an association advancing innovation and technological excellence to benefit humanity and the world's largest technical prof. society." Double-blind refereed academic journal.
- Smith Jr., W. 2008. "The place of rural, remote and least wealthy small islands in international water development: The nexus of geography-technology-sustainability in Chuuk State, Federated States of Micronesia." *The Geographical Journal*, 174 (3): 251-268. Geography 13/73, ISI Impact Factor 1.925 and 5-year 1.956. Double-blind refereed academic journal.
- Smith Jr., W. and Y.D. Wang. 2007. "Conservation rates: the best 'new' source of urban water during drought." *Water & Environment Journal*, 22 (2): 100-116. Water Resources 55/78 and Environmental Sciences 169/205, ISI Impact Factor 0.792. Double-blind refereed academic journal.
- Wang, Y.D., H. Lee, J. Byrne, W. Smith Jr., S. Wozniak, M. Scozzafava, and J. Lee. 2003. "An Institutional Approach to River Basin Management: Conflict Resolution in the U.S. and South Korea." *Korean Journal of Environmental Studies*, 41: 139-155. Double-blind refereed academic journal.

- Smith Jr., W. 2003. "The Clearinghouse Approach to Enhancing Public Participation in Watershed Management Utilizing GIS & Internet." *Water International*, 27 (4): 558-567. Water Resources 35/76, ISI Impact Factor 1.4. Double-blind refereed academic journal.
- Smith Jr., W. 2000. "The Relationship between Politics and Public Drinking Water in the District of Columbia." *The Geographic Bulletin*, 42 (2): 73-83. A journal of Gamma Theta Upsilon. Double-blind refereed academic journal.
- Smith Jr., W. 1999. "Drinking Water Issues and Management in the Republic of the Philippines." *The Geographic Bulletin*, 41 (1): 8-25. A journal of Gamma Theta Upsilon. Double-blind refereed academic journal.
- Smith Jr., W. 1998. "The Rise of Gateway States." *TU Journal of International Affairs*, 33 (2): 1-7. Blind refereed academic journal.

### Submitted and in preparation

Smith Jr., W. In preparation. An 8 year study based on multi-year interviews in Manila, Philippines on, "The impact of neoliberalism and technology on the human right to water: The case of the Privatization of Manila's Water." *Water Policy*. To be submitted after final visit to study area.

#### Book Chapters, Encyclopedia Pieces, and Focus Sections

- Smith, Jr., W., Z. Liu, L. Fossile, K. Wilde. "Water-Energy-Climate Change Nexus in Nevada." In Smith Jr., ed. *Social*, *Political and Economic Dimensions of Water Resources Development*. Springer. New York. Forthcoming. Mentoring two graduate students.
- Safi, A. and W. Smith Jr. 2013. "Public Attitudes towards Climate Change in the U.S." In *Climate Change: An Encyclopedia of Science and History*. Eds. Brian Black, David Hassenzahl, Jennie Stephens, Gary Weisel and Nancy Gift.
- Liu, Z. and W. Smith Jr. 2013. "Geography and Climate Change." In *Climate Change: An Encyclopedia of Science and History*. Eds. Brian Black, David Hassenzahl, Jennie Stephens, Gary Weisel.
- Smith Jr., W. and P. Shed. 2010. *Conservation Society of Pohnpei Newsletter*. "Enhanced Mapping Capacity Supports Biodiversity Conservation."
- Smith Jr., W. and Y.D. Wang. 2010. *Encyclopedia of Geography*. "Differences in Vulnerability to Hazards." Ed. Barney Warf, Volume 2: 742-744. (The *Encyclopedia of Geography* received an "Outstanding Reference Source" award from the American Library Association.)
- Smith Jr., W. and A. Safi. 2010. *Encyclopedia of Geography*. "Environmental Rights." Ed. Barney Warf, Volume 2: 994-998. Mentored graduate student publication. (The *Encyclopedia of Geography* received an "Outstanding Reference Source" award from the American Library Association.)
- Smith Jr., W. and N. Grenier. 2010. *Encyclopedia of Geography*. "Indigenous Water Methods." Ed. Barney Warf, Volume 3: 1573-1576. Mentored graduate student publication. (The *Encyclopedia of Geography* received an "Outstanding Reference Source" award from the American Library Association.)
- Smith Jr., W. and R. Perkins. 2010. *Encyclopedia of Geography*. "Small Islands." Ed. Barney Warf, Volume 3: 1634-1637. (The *Encyclopedia of Geography* received an "Outstanding Reference Source" award from the American Library Association.)
- Smith Jr., W. 2008. Focus section on "Linkages between water conservation and human rights" and edited 2 sections in *Manual on the Right to Water and Sanitation*. Centre on Housing Rights and Evictions, Right to Water Programme, American Association for Advancement of Science Science and Human Rights Programme, Swiss Agency for Development and Cooperation, United Nations Human Settlements Programme (UN-HABITAT Water, Sanitation and Infrastructure Branch). http://www.cohre.org/store/attachments/RWP-Manual-water.pdf
- Wang, Y.D. and W. Smith Jr. 2007. Chapter on "Enhancing Sustainability in River Basin Management Through Conflict Resolution: Comparative Analysis from the U.S. and South Korea." In *Water: Source for Cooperation or Conflict*, ed. Velma I. Grover. Published in India by Oxford and IBH Ltd. and in the U.S. by Science Publishers Ltd.

Wang, Y.D., W. Smith Jr., J. Byrne, M. Scozzafava and J.S. Song. 2006. Chapter on "Freshwater Management in Industrialized Urban Areas: The Role of Water Conservation." In *Water: Global Common and Global Problems*, Velma I. Grover, 459-491. Published in India by Oxford and IBH Ltd. and in the U.S. by Science Publishers Ltd.

#### Dissertation

2003. University of Delaware, Urban Affairs and Public Policy, Center for Energy and Environmental Policy. The Human Right to Water: Low Cost, Low Tech and Participatory Alternative Practice in Chuuk State, Federated States of Micronesia.

### Refereed Proceedings

#### Published

- Smith Jr., W. 2007. "A comparative geographic analysis of the impact of scale on hazards and vulnerability in industrialized continental lands and small Pacific Islands." *Proceedings of the International Symposium on Technology and Society*, Las Vegas. Refereed conference of the Society on Social Implications of Technology.
- Smith Jr., W. 2006. "Designing the best new source of water during drought." An abstract for a highly selective proceedings and poster for discussion for *Managing Drought and Water Scarcity in Vulnerable Environments: Creating a Roadmap for Change in the United States*, Longmont, Colorado. Refereed conference hosted by the Geological Society of America and 21 major governmental and research institutions that guide U.S. drought policy and science.
- Smith Jr., W. 2006. "GIS and Resource Management Capacity Building: The Case of Chuuk, Federated States of Micronesia." *Proceedings of ISLANDS OF THE WORLD IX: Sustainable Islands Sustainable Strategies*, Maui, Hawai'i. Refereed proceedings of the International Small Islands Studies Association.
- Smith Jr., W., M. Scozzafava, and J. Heung. 2003. "Institutional Basin Conflict Resolution in the U.S. & South Korea." *Proceedings of the Conference on International Watershed Management*, New York City. Refereed proceedings of the American Water Resources Association.
- Smith Jr., W. 2002. "A Human Right to Water." *Proceedings-American Water Works Association Water Sources Conference: Reuse, Resources Conservation*, Las Vegas, NV. Refereed conference of the American Water Resources Association.
- Wang, Y.D., W. Smith Jr., J. Byrne, G. Gopakumar, A. Roe, and J. Kulkarni. 2001. "Implementing Water Conservation During Periods of Drought." *Proceedings of Drinking Water 2001*, Newark, DE (invited author). Refereed proceedings of the Water Resources Center.
- Smith Jr., W. 2000. "Enhancing Public Participation in Watershed Management Utilizing GIS and Internet Technology." *Proceedings of the Conference on Water Quantity & Quality in Coastal Urban Areas*, Miami, FL. Refereed proceedings of the American Water Resources Association.
- Smith Jr., W. 2000. "Public Participation in Watershed Management Utilizing GIS and Internet Technology." In *Papers and Proceedings of the Applied Geography Conference*, ed. F. Andrew Schoolmaster.

### Monographs, Technical Reports, Posters

- Conservation Society of Pohnpei with W. Smith Jr. 2010. Technical Report to funding agency: *Building of a coherent national geographic information systems (GIS) laboratory, and accompanying public access site(s), outreach capacity, and data-sets.* German Life Web/MCT.
- 2010. Guida, R.J., H. Stephen, C.L. Roberts, S.R. Abella, W. Smith Jr. and J.S. Holland. *Vegetation change in the Newberry Mountains, southern Nevada*. Poster presentation at the 2nd Annual Tri-State Western Consortium Meeting, National Science Foundation Experimental Program to Stimulate Competitive Research (EPSCoR), Incline Village, NV. (My student was the best winner of best poster of conference award).
- 2010. Liu, Z., W. Smith Jr., and A. Safi. *Perceptions of ranchers and farmers on climate change impacts and adaptation strategies in Nevada*. Great Basin / Mojave Desert Climate Change Workshop: Research, Adaptation, Mitigation. Las Vegas, NV. Poster.

- 2010. Guida, R., Z. Liu, H. Stephen, S. Abella, and W. Smith Jr. *Modeling vegetation communities in the Newberry Mountains, southern Nevada: Climate change implications and habitat management policies*. Annual Meeting of the AAG, Washington, DC. Poster.
- 2010. Stephen, H. and W. Smith Jr. *Land Surface Changes in the Great Basin observed by Spaceborne Microwave Sensors*. Annual Meeting of the AAG, Washington, DC. Poster.
- 2010. Stephen, H. and W. Smith Jr. *Temporal analysis of Great Basin using spaceborne microwave backscatter and radiometric temperature* Great Basin / Mojave Desert Climate Change Workshop: Research, Adaptation, Mitigation. Las Vegas, NV. Poster.
- 2010. Liu, Z., W. Smith Jr. and A. Safi. *Perceptions of ranchers and farmers on climate change impacts and adaptation strategies in Nevada*. Annual Meeting of the AAG, Washington, DC. Poster.
- Smith Jr., W. 2007. *Integrating Demand-Side and Coupled-Systems Models into Water and Drought Research*. Responding to Water Resource Challenges Posed by Climate Change, Nevada Water Resources Association, Las Vegas, NV. Poster.
- Smith Jr. W. and D. Martin. 2007. *Demand-Side Measures and Drought Policies for Water Conservation in the Lower Colorado River Basin*. Report sponsored by a New Investigator Award, State of Nevada includes database.
- Smith Jr. W. 2006. Highly competitive refereed conference hosted by the Geological Society of America and 21 major governmental and research institutions that guide U.S. drought policy and science titled, *Managing Drought and Water Scarcity in Vulnerable Environments: Creating a Roadmap for Change in the United States* in Longmont, Colorado.
- Smith Jr., W. 2003. Invited poster exhibitor *Christina Basin Management*, *Vision for Tomorrow*: Delaware GIS, Newark, DE.
- Smith Jr., W. 2003. Improving Access to Safe Water in Chuuk State, Federated States of Micronesia: GIS Capacity Building for Environmental Outreach via Low Cost, Low Tech & Participatory Basin Management, Guam. Technical Report for the U.S. Department of the Interior.
- Wang, Y.D., J. Byrne, and W. Smith Jr. 2002. *Designing Water Conservation-Oriented Rates to Mitigate Drought*. Technical report sponsored by the Delaware Department of Natural Resources.
- Wang, Y.D., R. Scattone, W. Smith Jr. 2001. Securing Delaware's Future Through Sustainable Water Resource Management: Survey of State Programs. Technical report sponsored by the Delaware Legislature.
- Byrne, J., Y.D. Wang, B. Shen, A. Zhou, T. Yamaguchi, J. Manuta, W. Smith Jr., G. Gopakumar, S. Wagley, C, Linn, J. Gregory, K. Wicker, V. Iyer. 2001. *Off-Grid Renewable Options for Electrification in Western China*. Report sponsored by the National Renewable Energy Laboratory of the U.S. Department of Energy, W. Alton Jones Foundation and Chinese Government's Ministry of Agriculture. Available at <a href="http://www.nrel.gov/docs/fy05osti/37678.pdf">http://www.nrel.gov/docs/fy05osti/37678.pdf</a>. This work led to "Evaluating the potential of small-scale renewable energy options to meet rural livelihoods needs: A GIS- and lifecycle cost-based assessment of Western China's options." 2007. *Energy Policy*, Vol. 35 (8): 4391-4401. When I left Delaware I was left off the list of authors.

### Non-Refereed Publications and On-Line Works

- Smith Jr., W. 2002. Contributed upon invitation to *United Nations* "General Comment" (details confidential).
- Smith Jr., W. 2000. "The Christina River Basin" at http://www.wr.udel.edu/. Public watershed outreach Web site sponsored by the Delaware Water Resources Agency.
- Smith Jr., W. 2000. Basin education poster series on spatial analysis of water resources. Sponsored by the Delaware Water Resource Agency for its public school outreach campaign.
- Smith Jr., W. 2000. "Water Conservation Part of Solution to Shortfall," editorial, Wilmington News Journal.
- Quoted: 2000. Jeffersonian & two other regional papers, Baltimore; 1996, The Irish Voice, New York.
- Works appeared: 1996 New York Post, Washington Times, & Irish Times, 1995 Irish News.

Smith Jr., W. 1998. "Gunpowder Basin On-Line Clearinghouse." Sponsored by the Maryland Department of Environment and Gunpowder Valley Conservancy (a non-governmental organization).

### Television, Radio and Online Video Coverage

- NPR panelist, radio and online. April 2, 2014. How Will Nevada Adapt To Climate Change? <a href="http://www.knpr.org/son/archive/detail2.cfm?SegmentID=11094">http://www.knpr.org/son/archive/detail2.cfm?SegmentID=11094</a>
- Soil Science Society of America feature article about my research <a href="https://www.soils.org/publications/sh/articles/55/4/sh2014-55-4-f">https://www.soils.org/publications/sh/articles/55/4/sh2014-55-4-f</a>
- GRIST Magazine. Interview on climate change and urban sustainability. http://www.Grist.org
- Smith, Jr., W. 2012. CAMEL (Climate, Adaptation, Mitigation, E-Learning. 2012. Climate Change Continuing Education Symposium. *Climate Change in Rural Nevada: Multi-method research regarding indigenous people and their rancher neighbors*. NCSE sponsor.
- Smith, Jr., W. 2012. NSF-funded video focusing on doing Climate Change research with Native American tribes used by the U.S. government, tribes, and by classes (statistics collected for research) <a href="https://www.youtube.com/watch?v=3BU4xaIHJE8">https://www.youtube.com/watch?v=3BU4xaIHJE8</a>
- Xavier Durant featuring Smith Jr., W. 2012. Spanish TV Channel 3 broadcast over TV and Internet of a short version of the NSF video I created about Native Americans and Climate Change, "El medi ambient" c/ de TV3 s/n, <a href="https://www.tv3.cat/pprogrames/elmediambient/meaSeccio.jsp?seccio=reportatge&id=21152">www.tv3.cat/pprogrames/elmediambient/meaSeccio.jsp?seccio=reportatge&id=21152</a>
- Smith Jr., W. 2008-present. Internet: NSF-funded Policy, Decision Making and Outreach Component led by Smith, Jr. <a href="https://www.facebook.com/pages/NV-Policy-Outreach-and-Decision-Making-Component/115451351838166">https://www.facebook.com/pages/NV-Policy-Outreach-and-Decision-Making-Component/115451351838166</a>
- Smith Jr., W. 2008. Two *television interviews* with CNN regarding the sustainability of development and water management in Las Vegas and the Lower Colorado River Basin.
- Smith Jr., W. 2007. *Television interview* with RTE (the Irish equivalent of CNN) regarding the sustainability of development and water management in Las Vegas and the Lower Colorado River Basin.
- Smith Jr., W. 2007. *Television interview* with The Society on Social Implications of Technology of the Institute of Electrical and Electronics Engineers on appropriate technology in the less-wealthy world and sustainability in the U.S. S.W.

#### Reviews

- 2015. Details confidential, Applied Geography.
- 2009. Book review of Small Island States and Territories: Sustainable Development Issues and Strategies Challenges for Changing Islands in a Changing World. In Island Studies Journal, Vol. 4, No. 1, May 2009 (pages 101-118).
- 2009. A manuscript for a refereed journal: The Geographic Bulletin.
- 2009. A manuscript for a refereed journal: International Journal of Human Rights.
- 2008. A manuscript for a refereed journal: Southeastern Geographer.
- 2007. A grant submission to the Hudson River Foundation regarding tradable thermal water permits.
- 2007. A manuscript for a refereed journal: Annals of the Association of American Geographers.
- 2005-2006. Recruited to review and contribute to two chapters of a book, *The Manual on the Right to Water*. American Association for the Advancement of Science, Centre on Housing Rights and Evictions, and World Health Organization <a href="http://www.cohre.org/store/attachments/RWP-Manual-water.pdf">http://www.cohre.org/store/attachments/RWP-Manual-water.pdf</a>.

#### WORKSHOPS

2013. Pyramid Lake Paiute Tribe Environmental Department, UNLV, U of AZ Climate Change Planning Workshop.

- 2011. Selected through refereed process to participate in NSF Become the Messenger program.
- 2010-2011. Created 4 workshops for Native American tribes in Northern Nevada.
- 2009. Created 2 workshops for a Federated States of Micronesia Spatial Data Clearinghouse: 1) Hawaii for the USGS, USFS, and NOAA; and 2) in the Federated States of Micronesia for government, grassroots NGOS and The Nature Conservancy.
- 2003. Four workshops. Briefed the Federated States of Micronesia Environmental Protection Agency on community hygiene, water and land management.
- 1999. Chinese Department of Agriculture on mapping renewable energy opportunities.

# **PRESENTATIONS**

- Smith, Jr., W., Liu, Z and A. Safi. 2016. Society for Human Ecology. *Dissecting climate change in Nevada using multidisciplinary methods*. Santa Ana, California.
- Smith, Jr., W. 2014-2015. Conservation lectures at multiple elementary and middle schools in CA.
- Smith, Jr., W., Z. Liu, A. Safi, D. Koracin, and R. Guida. 2013. *Mixed methods and multicultural teams for climate change perception research in Nevada*. A paper presented at the Association of American Geographers Meeting, Los Angeles, CA.
- Liu, Z. (my post-doc) and W. Smith Jr. 2013. *Spatial analysis of climate change perceptions of the general public in Nevada*. A paper presented at the Association of American Geographers Meeting, Los Angeles, CA.
- Liu, Z. (my post-doc) and W. Smith Jr. 2013. A comparison of climate change adaptation/mitigation strategies: Ranchers and farmers vs. the general public in Nevada. Workshop: Climate Change Science for Effective Resource Management and Public Policy in the Western United States. Las Vegas, NV.
- Smith, Jr., W., D. Koracin, A. Safi, Z. Liu, K. Chief, M. Gautam. 2012. *Societal Knowledge, Assumptions and Preferences Regarding Climate Change in Nevada*. A paper presented at the Meteorology in Public Eye Conference. Croatian Meteorological Society, Zagreb, Croatia.
- Smith Jr., W. 2012. *Nevada's Native American tribes and climate change: What they know, want, and are ready for -- and how to collaborate*. Invited to panel at Association for the Association of Environmental Studies and Sciences annual meeting, Santa Clara, CA.
- Safi, Ahmad S. (my Ph.D. student) and W. Smith, Jr. 2012. *Rural Nevada: Vulnerability, Politics and Willingness to Decrease Fossil Fuel Consumption*. A paper at the Interdisciplinary Science of Consumption Meeting, Ann Arbor, MI.
- Smith Jr., W., Z. Liu and A. Safi. 2012. Rural societal knowledge, assumptions & preferences regarding climate change in Nevada. A paper presented at the Association of American Geographers Meeting, New York, NY.
- Fossile, L. (my MS student) and W. Smith Jr. 2012. *Energy Purveyors and Climate Change in Nevada: Knowledge, Needs, and Perspectives*. A paper presented at the Association of American Geographers Meeting, New York, NY.
- Liu, Z. (my post-doc) and W. Smith Jr. 2011. *Climate change belief and perception of Nevada residents*. A paper presented at Association of American Geographers Meeting, New York, NY.
- Wilde, K. (my MS student) and W. Smith Jr. 2012. Water Purveyor's Perceptions and Attitudes Towards Climate Change: A Survey of Nevada. A paper presented at the Association of American Geographers Meeting, New York, NY.
- Smith Jr., W., A. Safi, Z. Liu, K. Chief, K. Wilde, and M. Gautam. 2011. *Societal knowledge, assumptions & preferences regarding climate change in Nevada*. A paper presented at the Association of Environmental Studies and Sciences 2011 Meeting, Burlington, VE.
- Safi, A. and W. Smith Jr. 2011. *Rural Nevada: Vulnerability, Environmental Behavior and Risk Perception*. A paper presented at the Association of American Geographers Meeting, Seattle, WA.

- Safi, A., W. Smith Jr., K. Chief and Z. Liu. April 7, 2011. *Native Americans and Climate Change: Beliefs, Risk Perceptions and Policy Preferences*. A poster presented at the 3rd Annual Tri-State Western Consortium Meeting, National Science Foundation Experimental Program to Stimulate Competitive Research, Albuquerque, NM.
- Safi, A., Z. Liu, W. Smith Jr., and K. Chief. 2011. *Rural Nevada: Climate Change Perception, policy and vulnerability*. A poster presented at the Nevada NSF EPSCOR 2011 meeting, Reno, NV.
- Gautam, M., K. Chief, K.Wilde, and W. Smith Jr. 2011. *Climate change vulnerabilities- an integrated assessment in Pyramid Lake Paiute Indian Reservation*. A paper presented at American Geophysical Union meeting, San Francisco, CA.
- Wilde, K., M. Gautam, R., K. Chief, and W. Smith Jr. 2011. *Analysis of Stakeholder Influence in Truckee River Operating Agreement Negotiations*. Presented in Truckee River Symposium, Desert Research Institute, Reno, NV.
- Gautam, M., K. Chief, K. Wilde, and W. Smith Jr. 2011. *The Vulnerability of Pyramid Lake Paiute Tribal Water Resources to Climate Change: Analysis of Perception, Power, and Influence*. Vine Deloria, Jr. Distinguished Indigenous Scholarship Series. American Indian Studies Program, University of Arizona, Tucson, AZ.
- Safi, A., W. Smith Jr., and Z. Liu. December 7, 2010. Rural Nevada: The Influence of Vulnerablity on Risk Perception with the Context of Climate Change. A paper presented at the Society of Risk Analysis 2010 Meeting, Salt Lake City, UT.
- Smith Jr., W. 2010. Chair, *Multiscale assessments in water resources: Challenges in current research*. A paper presented at the Association of American Geographers Meeting, Washington, D.C.
- Safi, A. (my Ph.D. student) and W. Smith Jr. 2010. *Collaborative Environmental Research with Native American Nations:* The Roles of History, Culture and Science. A paper presented at the Association of American Geographers Meeting, Washington, D.C.
- Zhongwei, L. and W. Smith, Jr. 2010. *Development of a geodatabase on Native American tribes in Nevada, USA*. A paper presented at the Association of American Geographers Meeting, Washington, D.C.
- Smith Jr., W. 2010. *Native Americans in NW Nevada: Impacts of Contested Identities and Historical Context on Options to Enhance Resilience*. NSF 2nd Annual Tri-State Western Consortium Meeting: Collaborative and Interdisciplinary Climate Change Science. Incline Village, NV.
- Liu, Z., W. Smith Jr. and A. Safi. 2010. *Analysis of farmer/rancher Climate Change surveys in Nevada*. NSF 2nd Annual Tri-State Western Consortium Meeting: Collaborative and Interdisciplinary Climate Change Science. Incline Village, NV.
- Smith Jr., W. 2009. Consultation and lead presentation with government and non-government stakeholders on *creation of spatial data umbrella for the Federated States of Micronesia*. Workshop, Pohnpei, FSM.
- Smith Jr., W. 2009. Association for Environmental Studies and Sciences, Chairing panel on *Environmental Management as Home Defense*. Madison, WI.
- Smith Jr., W. 2009. Organizer of two panels with climate change experts from around the U.S., and supported a graduate student in his presentation at a paper presented at the Association of American Geographers Meeting, Las Vegas, NV.
- Smith Jr., W. 2008. *Greening hospital development*. To two major hospital systems in the CA and NV area on Green Hospitals and Sustainability, Apple Valley, CA.
- Smith Jr., W. 2008. Organized session and presented regarding *Exploring future research gaps: Water resources, climate change, and world regions, with experts in climate science, water and regional research.* A paper presented at the Association of American Geographers Meeting, Boston, MA.
- Smith Jr., W. 2008. *GIS and conservation for sustainability of Micronesia*. A paper presented at the Association of American Geographers Meeting, Boston, MA.
- Smith Jr., W. 2008. Invited panelist on appropriate technology and *North-South issues in collaboration for water resources management in Water Resources* panel at the Southwestern Social Science Meeting in Las Vegas, NV.
- Smith Jr., W. 2007. Invited to give plenary speech to the Association for Humanist Sociology 31<sup>st</sup> Annual Meeting, *The peculiar nature of water resources in Nevada: Cooperation, conflict and climate*, Las Vegas, NV.

- Smith Jr., W. 2007. As a Director with the Water Resources Specialty Group of the AAG, I organized, and participated in, two panels with 12 highly prominent water resources geographers from around the world to discuss *A vibrant research agenda for the next 20 years* at the Annual Meeting in San Francisco, CA. My initial remarks focused on dynamic feedbacks between demographic, land cover, climate and elasticity of demand change, as well as ecology and economy in water conservation in desert cities; and ways to readdress the lack of access to safe drinking water in the less-wealthy world. A special volume was produced from these panels (please see publication list). San Francisco, CA.
- Smith Jr., W. 2007. Invited to chair session on *enhancing sustainability through community initiatives* at A paper presented at the Association of American Geographers Meeting, San Francisco, CA.
- Smith Jr., W. 2006. Refereed conference hosted by the Geological Society of America and 21 major governmental and research institutions that guide U.S. drought policy and science titled, *Managing Drought and Water Scarcity in Vulnerable Environments: Creating a Roadmap for Change in the United States*. A paper presented regarding how conservation can form the most intelligent "new" source of water, and methods to achieve Longmont, Colorado.
- Smith Jr., W. 2006. *GIS and water resource capacity building*. A paper presented at refereed conference of the International Small Islands Studies Association, Maui, Hawai'i.
- Smith Jr., W. 2006. Working across physical and cultural geographies, and scaling technologies from multiple disciplines appropriately to improve access to safe drinking water in the Pacific. Invited, Anthropology Colloquium. A paper presented at the Department of Anthropology, University of Nevada, Las Vegas, Las Vegas, NV.
- Smith Jr., W. 2006. *Linkages between water conservation and social justice*. Organizer and Chair. A panel at the Association of American Geographers Meeting, Chicago, IL.
- Smith Jr., W. 2004. Academia, equity, and environmental outreach. Organizer and Chair. A paper presented at the Association of American Geographers Meeting, Philadelphia, PA.
- Smith Jr., W. 2004. *GIS capacity building in the Federated States of Micronesia*. Invited speaker at The University of Iowa's Kohn Colloquium, Iowa City, IA.
- Smith Jr., W. 2003. Low tech and participatory water resource management in Chuuk State, Federated States of Micronesia. A paper presented at the Association of American Geographers Meeting, Louisiana, LA.
- Smith Jr., W. and M. Scozzafava. 2003. Presented at American Water Resources Association International Watershed Management Conference in New York City, NY on *South Korean watershed conflict management*.
- Smith Jr., W. 2003. *The impact of neoliberalism on water resources management*. Invited by Green Party to speak at University of Iowa teach-in at Iowa City, IA.
- Smith Jr., W. 2002. 1) Original models for water conservation oriented rates to mitigate drought; and 2) Impacts of free trade agreements on water. Two papers presented at the American Water Works Association Conference: Reuse, Resources, Conservation in Las Vegas, NV.
- Smith Jr., W. 2002. 1) Establishing theoretical underpinnings for a human right to water; and, 2) Applying a human right to water. (Panelists: Oxford, Johns Hopkins, 2 UN accredited NGOs.) Organized, chaired, and presented at the Association of American Geographers Meeting, Los Angeles, CA.
- Smith Jr., W. 2001. *The commodification of water*. A paper presented at the National Association of Science, Technology and Society Annual Meeting in Baltimore, MD.
- Smith Jr., W. 2001. Developing low cost and equity-centered source water protection plans with communities in less wealthy countries. A paper presented at the Association of American Geographers Meeting, New York, NY.
- Smith Jr. 2000. *The roles of Education and information dissemination in watershed management*. A paper presented at the Applied Geography Conference Annual Meeting in Tampa, FL.
- Smith Jr., W. 2000. *Stakeholder participation in water resource management*. A paper presented at the American Water Resources Association Annual Meeting in Miami, FL.

- Smith Jr., W. 2000. *Enhancing informed public participation in watershed management utilizing GIS and Internet technology*. A paper presented at the Association of American Geographers Meeting, Pittsburgh, PA.
- Smith Jr., W. 1999. 1) Sociopolitical aspects of drinking water management in the Philippines; and 2) Politics and public drinking water management in the District of Columbia. Two papers presented at the Association of American Geographers Meeting, Honolulu, HI.
- Smith Jr., W. 1999. *Drinking water issues in the Philippines*. A paper presented at the Geography Graduate Student Conference in Morgantown, WV.
- Smith Jr., W. 1999. *Involving the public in watershed preservation and restoration*. A paper presented at the Gunpowder Watershed Coalition Leadership Conference in Baltimore County, MD.

## SELECTED ACHIEVEMENTS BY STUDENTS AND POST-DOC

- 2015. Chair for my former student Ross Guida, now a tenure-track faculty member at Sam Houston State University, who was funded by my NSF grant and later on an IGERT and UN fellowships to work in Eastern Europe on the cross-national issues surrounding the Danube River.
- 2013. My former Post-Doc Zhongwei Liu, Ph.D., was an Assistant Professor, Department of Geography and Regional Planning, Indiana University of Pennsylvania, Indiana, PA and then entered the private sector.
- 2013. Chair for my former Ph.D. student Ahmad Safi, who served as a Post-Doc in regional climate change at the University of Michigan, and is now a professors at Al Azhar University, Gaza and works for an NGO in water and food security based in Jordan, Turkey and Germany.
- 2011. Chair for Ph.D. student Ahmad Safi, who won the Risk Policy and Law Student Merit Award from the Society for Risk Analysis based on his dissertation work with me.
- 2010. Chair for Fulbright Ph.D. student Ahmad Safi, who won the Ph.D. Jeanne Kasperson Award for research on vulnerability and hazards based on his dissertation work with me.
- 2010. Chair for Guida, R. et al. *Vegetation change in the Newberry Mountains, southern Nevada*. Poster presentation at the 2nd Annual NSF Tri-State Western Consortium Meeting, Incline Village, NV. *Winner of best poster of conference award*. Used accomplishments to attain an NSF IGERT Fellowship with an internship at the UN's International Commission for the Protection of the Danube River while he pursues his Ph.D. at Southern Illinois University.
- 2009. Chair for Fulbright Student Ahmad Safi. Ph.D. Candidate Safi won the Ph.D. student paper competition for the Water Resources Specialty Group of the AAG for a manuscript based on my class.
- 2006. Served as advisor to C. Calimlim et al. on a civil and environmental engineering senior design project based on my research which won a 2<sup>nd</sup> place award in the *Cox Engineering Design Award*, College of Civil Engineering.

### **SERVICE EXAMPLES**

- 2008-2020. Advised regarding school STEM lab development and provided over 25 science lectures and hands on lab / modeling experiences at k-12 level.
- 2009-2010. Chair on two hiring committees, member of two hiring committees.
- 2010. UNLV Undergraduate College Curriculum Committee.
- 2007-2010. Fully funded 7 graduate students and my Post-Doc to attend conferences (and all of my own travel).
- 2009. Mentored community college faculty member Mark Bird through an NSF "Summer Climate Fellowship" in support of his work to publish and do public outreach through the media on 10 ways climate could impact Nevada.
- 2009. AAG Las Vegas Annual Meeting Local Committee. Arranged two field trips to Hoover Dam and Springs Preserve, membership reception, travel and student awards.
- 2007-2008. UNLV Urban 21 Initiative to create a research nexus and a regional resource focusing on sustainability.

- 2006. Established co-funding with the American Chemical Society to bring a prominent scholar to UNLV to make three presentations to: 1) U.S. Environmental Protection Agency; 2) American Chemical Society; and 3) My ENV 205 class. He spoke with our Environmental Studies Department students and faculty. Topics included his work with the Grameen Bank (Nobel Prize 2006) on micro-finance, gender, and development, innovative screening methods.
- 2006. Created a department student recruitment booth at UNLV.
- 2006. Initiated a system so that faculty could mentor and share lesson plans and multimedia content with teaching assistants.
- 2006. Organized 3 students to participate in an academic conference and student paper competitions, and secured full funding.
- 2006. Volunteer for graduation ceremonies.
- 2006-present. Created two listserves exclusively for faculty, graduate students, and alumni to strengthen communication across generations in our academic community, and for nurturing research, internship, and professional opportunities.
- 2006. Advisor to the UNLV Student Chapter of Engineers without Borders.
- 2002. Relief volunteer for the Federal Emergency Management Agency in FSM following Super Typhoon Chataan.

### PROFESSIONAL OFFICES AND AFFILIATIONS

- 2010-2012 Elected Chairman, Water Resources Specialty Group of the Association of American Geographers.
- 2011-2015 Co-Owner/Founder of two pain medicine clinics in Apple Valley, CA and Barstow, CA.
- 2012-2014 Past Chair, Water Resources Specialty Group of the Association of American Geographers http://www.aag.org.
- 2010-2011 Editorial Board, Journal of Contemporary Water Research and Education.
- 2008-2010 Elected Treasurer and Secretary, Water Resources Specialty Group of the Association of American Geographers.
- 2008-2009 Local Arrangements Committee Member for the Association of American Geographers annual meeting in Las Vegas. Also ran field trips to Hoover Dam and Springs Preserve.
- 2006 2008 Elected Director, Water Resources Specialty Group of the Association of American Geographers.
- 2005 2008. Advisory Committee Member American Association for the Advancement of Science, Centre on Housing Rights and Evictions, and World Health Organization Right to Water Group.
- 2001 2003. Micronesian Source Water Protection Coalition (Chuuk EPA, The Nature Conservancy, and civil society).
- 2001 2003. Chair U. of DE Doctoral Student Dissertation Research Meetings.
- 1998. Press Officer Project SHARE (an international medical aid program at Johns Hopkins University).

# RELATED SKILLS AND EXPERIENCES

Language – Native in English and moderate ability to communicate in Tagalog, some Spanish.

Advanced Scuba diver.

GIS and GPS, as well as moderate remote sensing experience.

Medical clinic business operations.

Travel – AUT, CAN, CHN, CZE, DOM, GBR, GER, FSM, IRL, ISL, LUX, Native American sovereign reservations, MEX, NED, PHI, ROM, SWZ, USA and its territory of CNMI.

Youth coach for over 10 years in wrestling, taekwondo, and football.

### GRADUATE STUDENT ADVISES, COMMITTEES, AND THEIR FOCI

Ph.D.

Chair for Ahmad Safi, University of Nevada, Las Vegas, Fulbright Scholar, Rural Nevada: *The Influence of Vulnerability on Risk Perception and Environmental Behavior within the Context of Climate Change*. Professor, Al Azhar University, Gaza.

William Paul Miller, Climate Change Impacts to Colorado River Basin Headwaters.

Tricia Mynster, Resistance of Rural Conservatives to Climate Change Science and Policies.

M.S.

Chair for Ross Guida, Environmental Science, *State Scale Best Management Practices in Climate Change*. Completing Ph.D. through NSF IGERT funding at Southern Illinois University in 2015, and presently seeking a faculty position.

Kiersten Miranda, Environmental Science, Synergies between Water Resource and Climate Change Policies and Implications for Nevada.

Lauren Fossile, Renewable Energy Storage and Climate Change.

Chair for Tara Jacob, Environmental Science, exam option focusing on development.

Chris Manning, History Department, History of American Urbanization and its impacts on Agriculture in the 18th Century.

Adria DeCorte, Environmental Science, Fire Policy in the American Southwest.

Javier Albert Escamilla, Political Science, Democracy and the Environment in Latin America.

Peter Van Lin, Environmental Science, USGS Policy Gaps.

Daniel Bunk, Climate Change Effects on Demand in the Lower Colorado River System.

Jeffery Tilton, Political Science, Managing the Colorado River, from Uncertainty to Risk.

Luke Giovine, Water Management Program, Tributary Water Rights along the Lower Colorado River.

Gowa Borzigan, Brownfield Cleanup Impacts on Land Values.

Nathaniel Gee, Lower Colorado River Water Quantity Modeling.

Mary Anila, Water Conservation and Development in Las Vegas, NV.