

# Curriculum Vitae Zhenghong Tang

## **CONTACT INFORMATION**

Community and Regional Planning Program  
University of Nebraska–Lincoln  
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## **RESEARCH INTERESTS**

Environmental Planning, Environmental Hazards, Land Use Planning, GIS Spatial Analysis,

## **EDUCATION**

Hunan Normal University	Land Management	B.S.	1997
Huazhong Agricultural University	Soil Science	M.S.	2000
Texas A&M University	Urban and Regional Science	Ph.D.	2007

## **ACADEMIC AND PROFESSIONAL POSITIONS HELD**

**2014-Present** Associate Professor, Community and Regional Planning Program, UNL  
**2008-2014** Assistant Professor, Community and Regional Planning Program, UNL

## **ADJUNCT ACADEMIC POSITIONS HELD**

**2009-Present** Courtesy Professorship, School of Natural Resources, UNL  
**2008-Present** Faculty Fellow, Center for Advanced Land Management Information Technologies (CALMIT), UNL  
**2008-Present** Faculty Fellow, Water Center, UNL  
**2012-Present** Fellow, Center for Great Plains Studies, UNL  
**2009-Present** Research Fellow, Environmental Planning and Sustainability Research Unit, Hazard Reduction and Recovery Center, Texas A&M University

## **TEACHING**

### **Full-time Teaching at the University of Nebraska–Lincoln:**

#### **Fall Semester (2008-2014)**

CRPL 470/870 Environmental Planning and Policy (Lecture class, 3 credits);  
CRPL 471/871 Environmental Impact Assessment (Lecture class, 3 credits); or  
CRPL 495/895 Planning for Disasters and Emergency (Lecture class, 3 credits);

#### **Spring Semester (2009-2015)**

CRPL 802 Planning Theory (Lecture class, 3 credits);  
CRPL 433/833 GIS in Environmental Design and Planning (Lecture/Lab class, 3 credits);

## RESEARCH

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### Peer-Reviewed Journal Articles:

#### *In English:*

1. Qiu B., Fan Z., Zhong M., **Tang Z.**, Chen C., 2014, A New approach for Crop Identification with Wavelet Variance and JM Distance. *Environmental Monitoring and Assessment*, 186:7929–7940.
2. Qiu, B., Li, W., Zhong, M., **Tang, Z.**, Chen, C., 2014, Spatiotemporal Analysis of Vegetation Variability and its Relationship with Climate Change in China, *Geo-spatial Information Science*, 17(3): 170-180.
3. Wei, W., **Tang, Z.**, Dai, Z., Lin, Y., Ge, Z., Gao, J., 2014, Variations in Tidal Flats of the Changjiang (Yangtze) Estuary during 1950s-2010s: Future Crisis and Policy Implication, *Ocean & Coastal Management*. (in press)
4. Zhao, N., Liu, T., **Tang, Z.**, Gu, Y., 2014, Planning Towards Net-Zero Energy Communities: Lessons Learned from Local Comprehensive Plans, *Urban Planning and Design Research*, 2: 41-48.
5. Wei, T., **Tang, Z.**, 2014, Building Low-Carbon Cities: Assessing the Fast Growing U.S. Cities' Land Use Comprehensive Plans, *Journal of Environmental Assessment Policy and Management*, 16(1): 1-28.
6. Feng, S., Hu Q., Huang W., Ho, C., Li R., **Tang, Z.**, 2014, Projected Climate Regime Shift under Future Global Warming from Multi-model, Multi-scenario CMIP5 Simulations, *Global and Planetary Change*, 112: 41-52.
7. **Tang, Z.**, Li, R., Li, X., Jiang, W., Hirsh, A., 2014, Capturing LiDAR-Derived Hydrologic Spatial Parameters to Evaluate Playa Wetlands, *Journal of the American Water Resources Association*, 50(1): 234-245.
8. Qiu, B., Zhong, M., **Tang, Z.**, Chen, C., Wang, Q., 2014, A New Methodology to Map Double-cropping Croplands based on Continuous Wavelet Transform, *International Journal of Applied Earth Observation and Geoinformation*, 26:97-104.
9. Li, R., **Tang, Z.**, Li, X., Winter, J., 2013, Drainage Structure Dataset and its Effects on LiDAR-derived Surface Flow Modeling, *ISPRS (International Society for Photogrammetry and Remote Sensing) International Journal of Geo-Information*, 2, 1136-1152.
10. Fu X., Svoboda, M., **Tang, Z.**, Dai Z., Wu, J., 2013, An Overview of U.S. State Drought Plans: Crisis or Risk Management? *Natural Hazards*, 69:1607–1627.
11. Fu, X., **Tang, Z.**, Wu, J., McMillan, K., 2013, Drought Planning Research in the United States: An Overview and Outlook, *International Journal of Disaster Risk Science*, 4(2): 51-58.
12. Qiu, B., Zhong, M., **Tang, Z.**, Chen, C., 2013, Multilevel Assessment of Spatiotemporal Variability of Vegetation in Subtropical Mountain-hill Region, *Journal of Mountain Science*. 10(6): 1028-1038.
13. Fang, H., Sheng, M., **Tang, Z.**, Cai, Q., 2013, Assessment of Soil Redistribution and Spatial Patterns for a Small Catchment in the Black Soil Region, Northeastern China: Using Fallout  $^{210}\text{Pb}$ , *Soil and Tillage Research*. 133: 85-92.

14. Qiu, B., Zeng, C., **Tang, Z.**, Li W., Hirsh, A., 2013, Identifying Scale-location Specific Control on Vegetation Distribution in Mountain-Hill Region, *Journal of Mountain Science*. 10(4): 541-552.
15. Zhang X., Li Z., **Tang, Z.**, Zeng, G., Huang, J., Guo W., Chen, X., 2013, Effects of Water Erosion on the Redistribution of Soil Organic Carbon in the Hilly Red Soil Region of Southern China, *Geomorphology* , 197:133-134.
16. Qiu, B., Zhong, M., **Tang, Z.**, Chen, C., Wang, Q., Zhang, C., 2013, Spatiotemporal Variability of Vegetation Phenology with Reference to Altitude and Climate in the Subtropical Mountain and Hill Region of Fujian Province, China, *Chinese Science Bulletin*, 58(23): 2883-2892.
17. Qiu, B., Zeng, C., **Tang, Z.**, Chen, C., 2013, Characterizing Spatiotemporal Non-Stationarity in Vegetation Dynamics in China Using MODIS EVI Dataset, *Environmental Monitoring and Assessment*, 185:9019-9035.
18. **Tang, Z.**, Dai, Z., Fu, X., Li, X., 2013, Content Analysis for the U.S. Coastal States' Climate Action Plans in Managing the Risks of Extreme Climate Events and Disasters, *Ocean & Coastal Management* 80:46-54.
19. Fu, X., **Tang, Z.**, 2013, Planning For Drought-Resilient Communities: An Evaluation of Local Comprehensive Plans in the Fastest Growing Counties in the U.S., *Cities*, 32: 60-69.
20. Qiu, B., Zhong, M., Zeng, C., **Tang, Z.**, Chen, C., 2012, Effect of Topography and Accessibility on Vegetation Dynamic Pattern in Mountain-Hill Region. *Journal of Mountain Science*, 9: 879-890.
21. **Tang, Z.**, X. Li, Zhao, N., Li, R., Harvey, F.E., 2012, Developing A Restorable Wetland Index for the Rainwater Basin Wetlands in South-Central Nebraska: A Multi-Criteria Spatial Analysis, *Wetlands*, 32:975-984.
22. **Tang, Z.**, Zhao, N., Lei, Z., 2012, Can Planners Take the Leadership in Local Environmental Management? *Journal of Environmental Assessment Policy and Management* 14(2): 1-24.
23. Wang Y., Li, Z., **Tang, Z.**, Zeng, G., 2011, A GIS-Based Spatial Multi-Criteria Approach for Flood Risk Assessment in the Dongting Lake Region, Hunan, Central China, *Water Resources Management* 25(13): 3465-3484.
24. **Tang, Z.**, Wei, T., Quinn, C., Zhao, N., 2011, Surveying Local Planning Directors' Actions For Climate Change, *International Journal of Climate Change Strategies and Management* 4(1): 81-103.
25. **Tang, Z.**, Brody, S. D., Li, R., Quinn, C., Zhao, N., 2011, Examining Locally-Driven Climate Change Policy Efforts In Three Pacific States, *Ocean & Coastal Management* 54: 415-426.
26. **Tang, Z.**, Zhao, N., 2011, Assessing the Principles of Community-based Natural Resources Management in Local Environmental Conservation Plans, *Journal of Environmental Assessment Policy and Management* 13(3):405-433.
27. Zhou, X., Brandle, J. R., Awada, T., Schoeneberger, M. M., Xin, Y., **Tang, Z.**, 2011, The Use of Forest-derived Specific Gravity for the Conversion of Volume to Biomass for Open-grown Trees on Agricultural Land, *Biomass and Bioenergy* 35:1721-1731.
28. **Tang, Z.**, Lindell, M. K., Prater, C.S., Wei, T., Hussey, C., 2011, Examining Local Coastal Zone Management Capacity in U.S. Pacific Coastal Counties, *Coastal Management* 39(2):105-132.

29. **Tang, Z.**, Wang, J., Koperski, T., 2010, Measuring Local Climate Change Response Capacity and Bridging Gaps between Local Action Plans and Land Use Plans, *International Journal of Climate Change Strategies and Management* 3(1):74-100
30. **Tang, Z.**, Burbach, M. E., Wei, T., 2010, Bridging the Gap Between Environmental Planning Education and Practice, *International Journal of Sustainable Development & Planning* 5(4): 430-442.
31. Li, R., Zhao, L. M., Haigh, T., **Tang, Z.**, 2010, Monitoring Watershed Drought Conditions through the Landsat Imagery Interpretation, *Disaster Advances* 3(4):40-46.
32. **Tang, Z.**, 2010, Assessing Sustainable Development Gaps between the State and Local Jurisdictions, *Journal of Environmental Assessment Policy and Management* 12(3): 263–289.
33. **Tang, Z.**, 2010, Building Climate-Resilient Cities: Examining Climate Change Actions and Hazard Vulnerability in U.S. Coast, *Journal of US-China Public Administration* 7(8): 25-29. (Invited paper)
34. **Tang, Z.**, Brody, S.D., Quinn, C., Chang, L., Wei, T., 2010, Moving from Agenda to Action: Evaluating Local Climate Change Action Plans, *Journal of Environmental Planning and Management* 53(1): 43-62. (Highlighted as one of the “most cited” articles in *Journal of Environmental Planning and Management*)
35. Chang, L., **Tang, Z.**, 2010, Using Remote Sensing Technology to Assess Land-Use Changes after the Northridge Earthquake, *Disaster Advances* 3(1): 5-10.
36. **Tang, Z.**, Hussey, C. M., Wei, T., 2009, Assessing Local Land Use Planning’s Awareness, Analysis, and Actions for Climate Change, *International Journal of Climate Change Strategies and Management* 1(4): 368-381.
37. **Tang, Z.**, Bright, E., Brody, S. D., 2009, Evaluating California Local Land Use Plans’ Environmental Impact Reports, *Environmental Impact Assessment Review* 29: 96–106.
38. **Tang, Z.**, 2009, How are California Local Jurisdictions Incorporating a Strategic Environmental Assessment in Local Comprehensive Land Use Plans? *Local Environment: The International Journal of Justice and Sustainability* 14(4): 313-328.
39. **Tang, Z.**, Brody, S. D., 2009, Link Planning Theories with Factors Influencing Local Environmental Plan Quality, *Environment and Planning B: Planning and Design* 36: 522-537.
40. **Tang, Z.**, 2008, Integrating the Principles of Strategic Environmental Assessment into Local Comprehensive Land Use Planning, *Journal of Environmental Assessment Policy and Management* 10(2): 143-171.
41. **Tang, Z.**, 2008, Evaluating the Capacities of Local Jurisdictions’ Coastal Zone Land Use Planning in California, *Ocean and Coastal Management* 51(7): 544-555. (**SCI, IF=1.747**)
42. **Tang, Z.**, Lindell, M., Prater, C., Brody, S. D., 2008, Measuring Tsunami Hazard Planning Capacity on the U.S. Pacific Coast, *Natural Hazards Review* 9(2): 91-100.
43. Brody, S. D., Grover, H., Bernhardt, S., **Tang, Z.**, Whitaker, B., Spencer, C., 2006, Identifying Potential Conflict Associated with Oil and Gas Exploration in Texas State Coastal Waters: A Multicriteria Spatial Analysis. *Environmental Management* 38:597-617.

***In Chinese:***

44. Liu, Y., Li, Z., **Tang, Z.**, Zhang, Y., Ren, P., 2012, Greenway Networks Design Based on Suitability Analysis and GIS — A Case Study of Changsha Great West River Pilot Area,

- Chinese Journal of Ecology* 32(2): 426-432. (In Chinese)
45. **Tang, Z.**, 2010, US Climate Change Response Research Progress and Implications, *Disaster Reduction in China* 23:40-42. (In Chinese)
  46. **Tang, Z.**, Cai, Q. G., Zhang, G.Y., Chen, N., Liu, G. H., Feng, J. L., 2000, Soil Erosion and Sediment Yield of Physiognomy Zonations of Small Watershed in Loess Hilly and Gully Region, *Journal of Soil and Water Conservation* 14(4): 34-37. (In Chinese with English abstract)
  47. **Tang, Z.**, Cai, Q. G., Zhang, G.Y., Chen, N., Liu, G. H., Feng, J. L., 2001, Soil Erosion and Sediment Yield Models of Different Land Types in Small Basins in the Hilly Loess Region, *Journal of Mountain Science* 19(2): 120-124. (In Chinese with English abstract)
  48. **Tang, Z.**, Cai, Q. G., Zhang, G.Y., Chen, N., Li, Z.W., Liu, G.H., Feng, J. L., 2001, Soil Erosion and Sediment Yield Models Based On the Networks of Runoff and Sediment Transport between Plots in Small Basins in the Hilly Loess Region, *Journal of Sediment Research* 10(5): 48-53. (In Chinese with English abstract)
  49. **Tang, Z.**, Cai, Q. G., Li, Z.W., Zhao, H.Y., 2001, Study on Interaction Among Wind Erosion Hydraulic Erosion and Gravity Erosion in the Sediment-Rock Region in Inner Mongolia, *Journal of Soil and Water Conservation* 15(2): 25-29. (In Chinese with English abstract)
  50. **Tang, Z.**, Cai, Q.G., Xu, F., Li, S. L., Wang, Z. K., 2001, Mechanism of Contour Hedgerow's Control for Non-point Pollution in the Semiarid Region in Northwest Hebei Province, *Environmental Science* 22(6): 86-90. (In Chinese with English abstract)
  51. **Tang, Z.**, Cai, Q. G., Xu, F., Wang, Z. K., Wu, S. A., 2001, GIS-based Simulation of Erosion Control for Agroforestry in Catchment - Using Qibianko Catchment in Northwest of Hebei Province as example, *Journal of Soil and Water Conservation* 15(6):70-73. (In Chinese with English abstract)
  52. **Tang, Z.**, Cai, Q. G., Li, Z.W., Feng, J. L., 2002, Application of GIS and Soil Erosion and Sediment Yield in Design of Check-Dam, *Journal of Soil and Water Conservation* 16(1): 55-58. (In Chinese with English abstract)
  53. **Tang, Z.**, Cai, Q.G., Xu, F., Li, Z. W., Wang, Z. K., 2001, A Simulation Study on the Hedgerow's Control Process of Erosion and Nutrient in Semiarid Region, *Geographical Research* 20(5): 593-600. (In Chinese with English abstract)
  54. **Tang, Z.**, Cai, Q. G., 2002, Study Process of the GIS-Based Soil Erosion and Sediment Yield Models, *Journal of Sediment Research*, 5: 59-66. (In Chinese with English Abstract)
  55. **Tang, Z.**, Cai, Q. G., Xu, F., Zhu, Y. D., 2002, Study on Soil Erosion Experiment, Monitoring and Modeling of Various Scale Conditions, *Advances in Water Science* 13(6): 781-786. (In Chinese with English abstract)
  56. **Tang, Z.**, Cai, Q. G., 2002, Review on the Studies of Chinese Main Soil Erosion and Sediment Yield Models, *Journal of Mountain Science* 20(4): 466-475. (In Chinese with English abstract)
  57. **Tang, Z.**, Cai, Q. G., Xu, F., 2004, Study on the Rules of Scales' Changes on Soil Erosion and Sediment yield in Catchments, *Sciences of Soil and Water Conservation* 2(1): 56-61. (In Chinese with English abstract)
  58. Liu, G.H., Cai, Q. G., Zhu, H.Y., **Tang, Z.**, 2003, Simulation of Runoff and Sediment Flow in a Catchment Based On Landunit Flow Networks, *Progress in Geography* 22(1): 71-78. (In Chinese with English abstract)
  59. Li, Z.W, Cai, Q. G., Mitchell, S., **Tang, Z.**, Csillag, F., 2002, A GIS-based Simulation of

- Crop Potential Productivity in Hilly Loess Region, *Acta Ecologica Sinica* 22(3): 311-317. (In Chinese with English abstract)
60. Li, Z.W, Cai, Q.G., **Tang, Z.**, 2002, Research on Crop Productivity Model Based On Soil Erosion, *Journal of Soil and Water Conservation* 16(1): 50-54. (In Chinese with English abstract)
  61. Li, Z. W, Cai, Q. G., **Tang, Z.**, Wu, S. A., Wang, H., 2002, Crop Productivity Model and Its Application. *Chinese Journal of Applied Ecology* 13 (9):1174~1178. (In Chinese with English abstract)
  62. Li, Z.W, Cai, Q. G., **Tang, Z.**, Wang, H., 2001, Precision Agriculture and Its Research and Application in China, *Scientia Geographica Sinica* 21(6): 564-569.
  63. Li, Z.W, Cai, Q. G., Wu, S. A., **Tang, Z.**, 2001, Simulation on Soil Erosion of Different Underlying Surface in the Construction Period of Nei-Kun Railway, *Journal of Soil and Water Conservation* 15(2):5-9. (In Chinese with English abstract)
  64. Li, Z.W, Cai, Q. G., **Tang, Z.**, 2001, Factor Analysis Affecting Crop Productivity in Hilly Loess Region—Taking Wangjiagou Watershed as an Example, *Geographical Research* 20(5): 601-608. (In Chinese with English abstract)

### **Abstracts in Journals:**

1. **Tang, Z.**, 2007. Integrating the Principles of Strategic Environmental Assessment (SEA) into Local Comprehensive Land Use Plans in California. *Journal of Planning Literature* (22) 2: 142-143. (Abstract only)
2. **Tang, Z.**, Cai, Q. G., 2002, The Processes for Digital Elevation Models Extraction and Soil Erosion Simulation, *Chinese Soil and Water Conservation* 7:37. (Abstract only)

### **Books:**

1. **Tang, Z.** (As the lead editor), Dong, W., Nam, Y., 2013, *Towards Green Growth and Local Carbon Urban Development*, NOVA Science Publisher, Hauppauge, NY, U.S. (ISBN-10: 1624178588; ISBN-13: 978-1624178580)
2. **Tang, Z.** (As the editor), 2010, *Eco-City and Green Community: The Evolution of Planning Theory and Practice*, NOVA Science Publisher, Hauppauge, NY, U.S. (ISBN-10: 1608768112; ISBN-13: 978-1608768110)
3. **Tang, Z.**, 2008, *Integrate Strategic Environmental Assessment in Local Land Use Planning: Thinking Globally, Acting Locally*, Germany. (ISBN-10: 3639056728; ISBN-13: 978-3639056723)
4. **Tang, Z.** (As an editorial committee member), 2001, *Eco-Agricultural Development: Theory and Practice*, Meteorology Press of China.

### **Book Chapters:**

1. **Tang, Z.**, 2013, Book Chapter 8, Section 8.2.3: Integrating SEA and Planning, page 229-239, in Book: *Impact Assessment: Practical Solutions to Recurrent Problems, and Contemporary Challenges*, (Second Edition), Wiley Publisher, (ISBN-10: 1118097378)

2. Glanz, T., Nam, Y., **Tang, Z.**, 2012, Book chapter: Sustainable Urban Design and Walkable Neighborhoods, in *Sustainable Development / Book 3*, InTech Publisher. (ISBN 979-953-307-650-7)
3. Grover, H., **Tang, Z.**, Zhao, N., 2012, Book chapter: Incorporating Climate Change Mitigation and Adaptation Into Local Land Use Planning, in *Land Use: Planning, Regulations, and Environment*, NOVA Science Publisher, Hauppauge, NY, U.S., pp. 101-124. (ISBN-10: 1622573579; ISBN-13: 978-1622573578)
4. Szatko, A., **Tang, Z.**, Tian, S., Rodie, S., 2012, Book chapter: Gray or Green Infrastructure Approaches: Regulating Stormwater Management in Land Use Development, in *Land Use: Planning, Regulations, and Environment*, NOVA Science Publisher, Hauppauge, NY, U.S., pp. 13-33. (ISBN: 978-1-62257-357-8)
5. Weaver, K.L., Burbach, M. E., **Tang, Z.**, 2012, Book chapter: Reviewing the Community Watershed Planning Approach in Local Environmental Land Use Management, in *Land Use: Planning, Regulations, and Environment*, NOVA Science Publisher, Hauppauge, NY, U.S., pp. 35-51. (ISBN: 978-1-62257-357-8)
6. Hitchcock, J., **Tang, Z.**, 2012, Book chapter: Developing An Ecosystem-based Habitat Conservation Planning Protocol in Saline Wetland, in *Environmental Management: Systems, Sustainability and Current Issues*, NOVA Science Publisher, Hauppauge, NY, U.S., pp. 237-252. (ISBN: 978-1-61324-733-4)
7. Svoboda, M., **Tang, Z.**, 2011, Book chapter: Developing a Drought Planning Evaluation System in the United States, in *Environmental Planning* (Editor: Newton, R. D.), NOVA Science Publisher, Hauppauge, NY, U.S., pp. 221-231. (ISBN: 978-1-61728-654-4)
8. **Tang, Z.**, 2009, Book chapter: Incorporating Environmental Hazards Mitigation into Local Land Use Planning, in *Handbook on Environmental Quality*, NOVA Science Publisher, Hauppauge, NY, U.S. (ISBN: 978-1-60741-492-6)
9. **Tang, Z.**, Hussey, C., 2009, Book chapter: Stakeholder Assessment in Environmental Policy Analysis, in *Handbook on Environmental Policy*, NOVA Science Publisher, Hauppauge, NY, U.S. (ISBN: 978-1-60741-635-7)

### **Project Reports:**

1. **Tang, Z.**, Rodie, S., Li, X., Szatko, A., 2014, Building a Living Laboratory and an Evidence-Based Education Toolkit to Improve Omaha's Urban Water Quality, U.S. Environmental Protection Agency.
2. **Tang, Z.**, Li, X. Harvey, F. E. 2011, Developing LiDAR-Derived Wetland Maps to Assess Conservation Design Practices for Playa Wetland in Rainwater Basin, U.S. Environmental Protection Agency.
3. **Tang, Z.**, Camacho, J., Hart, T., Desai, A.R., 2005, History and Effects of Strip Mining and Reclamation Focusing on the Big Brown Mine, Department of Renewable Natural Resources, Texas A & M University.
4. **Tang, Z.**, 2004, Public Policies in Brazos County's Flood Plan, Hazard Reduction & Recovery Center, Texas A & M University.
5. **Tang, Z.**, Daniel, B., 2003, Influence of the Extensional Faulting on Fan Sedimentation and Landscape Evolution in the Mecca Hills, Department of Earth Sciences, University of California–Riverside.

## **Projects Funded:**

### ***External Funding Processed Through the UNL Office of Sponsored Programs:***

**Project Title:** Develop A Climate-Wetland Vulnerability Assessment Model to Evaluate Playa Wetland Response to Climate Variability

**Funding Agency:** U.S. Environmental Protection Agency (EPA) (Grant ID: CD 97746701-0)

**Time:** 2015-2016

**Role:** Principal Investigator

**Project Title:** Upgrade An Integrated Network of Scientific Information & GeoHydrologic Tools (INSIGHT) to An Advanced Web-GIS Platform

**Funding Agency:** Nebraska Department of Natural Resources

**Time:** 2014-2015

**Role:** Principal Investigator

**Project Title:** WSC Category 1: Influence of Climate and Agricultural Clustering On Groundwater Contamination by Trace Organics

**Funding Agency:** U.S. Department of Agriculture (A National Science Foundation/U.S. Department of Agriculture, National Institute of Food Agriculture (NIFA) Joint Program) (Awarding Number: 2014-67003-22072)

**Time:** 2014-2017

**Role:** Senior Personnel

**Project Title:** Develop an Interactive Mobile Information Platform to Promote Wetland Education and Outreach

**Funding Agency:** U.S. Environmental Protection Agency (EPA) (Grant ID: CD 97742201-0)

**Time:** 2014-2015

**Role:** Principal Investigator

**Project Title:** Use LiDAR to Assess the Effectiveness of Grass Plantings and Buffers on Playa Natural Inundation and Sedimentation Control in the Rainwater Basin

**Funding Agency:** Great Plains Landscape Conservation Cooperative (U.S. Department of Interior)

**Time:** 2013-2015

**Role:** Principal Investigator

**Project Title:** Use RUSLE2 to Assess Sedimentation and Water Quality Conditions in the Rainwater Basin's Playa Wetlands

**Funding Agency:** U.S. Environmental Protection Agency (EPA) (Grant ID: CD-97738501)

**Time:** 2012-2014



**Role:** Principal Investigator  
**Project website:** <http://www.unl.edu/playawetlands/>

**Project Title:** Analysis of Basin Consumptive Water Use  
**Funding Agency:** Nebraska Department of Natural Resources  
**Time:** 2012-2013  
**Role:** Principal Investigator

**Project Title:** Building a Living Laboratory and an Evidence-Based Education Toolkit to Improve Omaha's Urban Water Quality  
**Funding Agency:** U.S. Environmental Protection Agency (EPA) (Grant ID: UW-97735101)  
**Time:** 2012-2014  
**Role:** Principal Investigator  
**Project website:** <http://www.unl.edu/greeninfrastructure/>

**Project Title:** Using Social Media and Social Network to Promote Nebraskans' Public Education and Behavior Changes in Litter Reduction and Recycling  
**Funding Agency:** Nebraska Department of Environmental Quality  
**Time:** 2012-2013  
**Role:** Principal Investigator

**Project Title:** Use Social Media to Promote Nebraska's Waste Recycling Programs  
**Funding Agency:** Nebraska Environmental Trust  
**Time:** 2011-2012  
**Role:** Principal Investigator  
**Project website:** <http://re4now.unl.edu/>

**Project Title:** A Feasibility Assessment for Net-Zero Energy Efficiency Technologies in Residential Housing Development in North China  
**Funding Agency:** Weihai, China  
**Time:** 2011-2012  
**Role:** Principal Investigator

**Project Title:** Developing LiDAR-Derived Wetland Maps to Assess Conservation Design Practices for Playa Wetlands In Rainwater Basin  
**Funding Agency:** U.S. Environmental Protection Agency (EPA) (Grant ID: CD-97723501)  
**Time:** 2010-2011  
**Role:** Principal Investigator

***Projects Funded Internally at the University of Nebraska–Lincoln:***

**Project Title:** Engaging Nebraska, Impacting Communities, Transforming Students  
**Funding Agency:** University of Nebraska Rural Futures Institute  
**Time:** 2013-2014  
**Role:** Co-Investigator

**Project Title:** Fate of Trace Organics in Groundwater under Climate Change Scenarios  
**Funding Agency:** University of Nebraska–Lincoln  
**Time:** 2012-2013  
**Role:** Co-Investigator

**Project Title:** Big Idea Seminars: Scenery as a Natural Resource  
**Funding Agency:** University of Nebraska–Lincoln  
**Time:** 2012-2013  
**Role:** Co-Investigator

**Project Title:** Develop a Climate-wetland Vulnerability Assessment Model for Playa Wetlands  
**Funding Agency:** Grant-In-Aid from the University of Nebraska–Lincoln  
**Time:** 2011-2012  
**Role:** Principal Investigator

**Project Title:** Examining the Impact of Neighborhood Characteristics on Low-Income Children’s Physical Activity and Rates of Obesity  
**Funding Agency:** Hyde Professorship Award from University of Nebraska–Lincoln  
**Time:** 2010-2012  
**Role:** Principal Investigator

**Project Title:** Reconstructing Soil Erosion Vulnerability and Landscape Evolution through Spatio-Temporal Modeling: A Useful Tool for Watershed Conservation Planning  
**Funding Agency:** Layman Award from the University of Nebraska–Lincoln  
**Time:** 2009-2010  
**Role:** Principal Investigator

**Project Title:** An Early Warning Information System for Discharge and Water Quality of Nebraska Bioethanol Production Plants  
**Funding Agency:** Faculty Seed Fund from the University of Nebraska–Lincoln  
**Time:** 2010-2011  
**Role:** Principal Investigator

**Project Title:** Evaluating Local Land Use Capacity for Climate Change  
**Funding Agency:** Hyde Professorship Award from University of Nebraska–Lincoln  
**Time:** 2008-2009  
**Role:** Principal Investigator

***Undergraduate Students Supervised by Dr. Tang and Funded by the UCARE (Undergraduate Creative Activities & Research Experiences) Program at UNL:***

**Project Title:** An Early Warning System for Discharge  
**Funding Agency:** UCARE program from the University of Nebraska–Lincoln

**Time:** 2010-2011

**Role:** Research supervisor and mentor for A. Ingunza, an undergraduate student

**Project Title:** Net Zero Energy to China

**Funding Agency:** UCARE program from the University of Nebraska–Lincoln

**Time:** 2011-2012

**Role:** Research supervisor and mentor for E. Frederiksen, an undergraduate student

**Project Title:** Renewable Energy Planning

**Funding Agency:** UCARE program from the University of Nebraska–Lincoln

**Time:** 2012-2013

**Role:** Research supervisor and mentor for L. Yu, an undergraduate student

***MCRP Students Supervised by Dr. Tang and Funded Through Services Agreements (Not through the UNL Office of Sponsored Programs):***

**Project Title:** Plans for Johnson Lake State Recreation Area, Bridgeport State Recreation Area, Chadron State Park

**Funding Agency:** Nebraska Game and Parks Commission

**Time:** 2012-2013

**Role:** Mentor and Project Manager

***International Collaboration Funds (Not through the UNL Office of Sponsored Programs)***

**Project Title:** Rill Erosion Development Process and 3-D Digital Simulation of Spatial Morphology (Project Approval Number/Application Code: 40971165/D010505)

**Funding Agency:** National Natural Science Foundation of China

**Time:** 2010-2012

**Role:** Co-Investigator

**Project Title:** Examining Local Climate Adaptation/Action Planning Capacity for Coastal Zone Vulnerability: A Comparison Study of the Houston-Galveston Bay Area in U.S. and the Yangtze River Estuary in China

**Funding Agency:** State Key Laboratory of Estuarine & Coastal Research, East China Normal University

**Time:** 2012-2014

**Role:** Principal Investigator

**Participation in Other Research Projects:**

1. **Project Title:** The Monitoring-Preparedness System of Critical Chemical Risk Sources in City of Dalian  
**Time:** 2009-2011  
**Agency:** Bureau of Environmental Protection in City of Dalian, China  
**Role:** Core research member

2. **Project Title:** Collaborative Research: DRU: Community Risk Management of Hurricane and Tsunami Surge Hazards  
**Time:** 2006-2007  
**Agency:** U.S. National Science Foundation (No. 0527699)  
**Role:** Graduate Research Assistant
3. **Project Title:** The Texas Urban Triangle: Framework for Future Growth  
**Time:** 2006-2007  
**Agency:** Southwest Region University Transportation Center  
**Role:** Graduate Research Assistant
4. **Project Title:** Develop an Evacuation Management Decision Support System  
**Time:** 2005-2006  
**Agency:** U.S. National Science Foundation (No. 0219155)  
**Role:** Graduate Research Assistant
5. **Project Title:** City of Lewisville with I-35 Highway Development Project  
**Time:** 2005-2006  
**Agency:** City of Lewisville, Texas  
**Role:** Graduate Research Assistant
6. **Project Title:** City of Castle Hills Economic Development Plan  
**Time:** 2005-2006  
**Agency:** City of Castle Hills  
**Role:** Graduate Research Assistant
7. **Project Title:** Modeling Watershed Flooding and Adaptive Flood Management: An Integrative Plan for Research, Teaching and Learning  
**Time:** 2004-2005  
**Agency:** U.S. National Science Foundation (No. 0346673)  
**Role:** Graduate Research Assistant
8. **Project Title:** Understanding Organizational and Technological Capabilities in Public and Private Planning Agencies in Texas for Applications of GIS/PSS to Practice and Decision Making  
**Time:** 2004-2005  
**Agency:** Texas A&M University  
**Role:** Graduate Research Assistant
9. **Project Title:** Examining the Impacts of Wetland Development on Coastal Flooding: A pilot Study  
**Time:** 2003-2004  
**Agency:** Texas A&M University  
**Role:** Graduate Research Assistant
10. **Project Title:** A Quaternary Chronostratigraphy for Alluvial Fans, Pediments and Terraces

- in the Mecca Hills (Salton Trough): A Framework for Defining Rates of Crustal Displacement and Landscape Evolution  
**Time:** 2002-2003  
**Agency:** University of California–Riverside  
**Role:** Graduate Research Assistant
12. **Project Title:** Environmental Effects of Regional Soil and Water Conservation, Evolvement of Ecological Environment and Sustainable Utilization of Soil and Water Resources in West China  
**Time:** 2001-2002  
**Agency:** Innovative Project of the Chinese Academy of Sciences  
**Role:** Graduate Research Assistant
13. **Project Title:** Erosion Processes in Steep Slopeland in the Loess Plateau  
**Time:** 2001-2002  
**Agency:** Innovative Project of the Chinese Academy of Sciences (No. CXIOG-A00-05-02)  
**Role:** Graduate Research Assistant
14. **Project Title:** Desertification Control and Sandstorm Mitigation in the Area Encircling Beijing  
**Time:** 2001-2002  
**Agency:** China Ministry of Science and Technology (No. FS2000-007)  
**Role:** Graduate Research Assistant
15. **Project Title:** The Process of Soil Erosion in Slope and the Mechanisms of Sediment Yield in Small Basins  
**Time:** 2000-2001  
**Agency:** Chinese Academy of Sciences and Sciences & Technology Committee of Hebei Province (No. GXIOG-A00-05-020)  
**Role:** Graduate Research Assistant
16. **Project Title:** Agricultural Expert Decision Making and Information System, Precision  
**Time:** 2000-2001  
**Agency:** China Ministry of Science and Technology, (No. 95-019-01-01-01)  
**Role:** Graduate Research Assistant
17. **Project Title:** Modeling Loess Erosion and Geomorphologic Evolution Using Digital Photogrammetric Method and GIS technology  
**Time:** 2000-2001  
**Agency:** Earmarked Research Grant from Hong Kong University (No. ERG 2102)  
**Role:** Graduate Research Assistant
18. **Project Title:** Three-Gorges Reservoir's Region's Terrace Constructing and Land Using and Improvement through Agroforestry  
**Time:** 1999-2001  
**Agency:** Three-Gorges Construction and Management Committee

**Role:** Graduate Research Assistant

19. **Project Title:** Soil Erosion Management and Application of Geographical Information System in North China  
**Time:** 1998-2001  
**Agency:** Canadian International Development Agency  
**Role:** Graduate Research Assistant
20. **Project Title:** Soil Nutrients Loss Law in Agroforestry in Slope Land  
**Time:** 1998-2001  
**Agency:** National Key Laboratory of Soil Erosion and Arid Agriculture of the Loess Plateau  
**Role:** Graduate Research Assistant
21. **Project Title:** Soil and Water Conservation Management Information System in the Upper Reaches Region of the Fenhe River Reservoir  
**Time:** 1997-1998  
**Agency:** Soil and Water Conservation Bureau of Water Resources Department of Shanxi Province  
**Role:** Graduate Research Assistant

### **Conference Presentations:**

(\* denotes invited talks)

#### **2014**

1. \***Tang, Z.**, Develop An Interactive Mobile Information Platform to Promote Public Engagement in Wetland Conservation, 2014 Region 7 ESTP Wetland Information Sharing Workshop, Lenexa, KS. (invited presentation)
2. \***Tang, Z.**, Fu, X., Planning for Crisis or Risk? Lessons learned from Recent Severe Droughts in the U.S. Urban Metropolitan Areas, Third International Conference on Urban Disaster Reduction, September 28 – October 1, 2014, Boulder, Colorado. (invited presentation)
3. \***Tang, Z.**, Integrating Drought Risk Management Into Local Planning Framework, Community Capitals Framework workshop, November 5-7, 2014, Lincoln, NE. (invited presentation)
4. \***Tang, Z.**, Use LiDAR to Assess the Effectiveness of Grass Plantings and Buffers on Playa Natural Inundation and Sedimentation Control in the Rainwater Basin, Nebraska, Great Plains Landscape Conservation Cooperative Steering Committee Meeting, August 20-21, 2014, Gering, Nebraska (invited presentation)
5. \***Tang, Z.**, Mobile Information Platform: A Robust Tool to Integrate Environmental Big Data and Citizen Science, Beijing Normal University, June 27, 2014. (invited presentation)
6. \***Tang, Z.**, Zhou, Y., Yu, H., Gu, Y., Liu, T., 2014, Developing an Interactive Mobile Information Platform to Integrate Environmental Big Data and Citizen Science in Urban Environmental Management, Big Data and Urban Informatics Workshop, University of Illinois at Chicago, Chicago, IL, August 11-12, 2014 (invited presentation and full paper)

7. **Tang, Z.**, Fu, X., 2014, Planning for Crisis or Risk? Lessons learned from Recent Severe Droughts in the U.S. Urban Metropolitan Areas, The Third International Conference on Urban Disaster Reduction, September 28-October 1, 2014, Boulder, Colorado (abstract and presentation)
8. **Tang, Z.**, Liu, T., 2014, Integrating Crowdsourcing Citizen Science into Environmental Planning" to The 8th International Association for China Planning (IACP) Conference - Urban Regeneration, Guangzhou, China, June 21-22, 2014 (abstract)
9. \* **Tang, Z.**, 2014, Integrating Hazard Mitigation into Comprehensive Planning; Planning for Disaster Resilience Symposium, Texas A&M University, College Station, TX, April 5-6, 2014, (invited panelist)
10. **Tang, Z.**, 2014, What They Didn't Tell You: Transitioning from Academia to Hazard Mitigation Practitioner, 39th Annual Natural Hazards Research and Application Workshop and 2014 National Hazard Mitigation Association Conference, June 22-26, 2014 (Panel organizer)
11. Zhou Y., **Tang, Z.**, 2014, Mobile Applications for Planning, Nebraska Planning and Zoning Association annual conference, Kearney, NE, March 27, 2014 (Presentation)
12. \* **Tang, Z.**, 2014, Assess Soil Erosion Ratio and Sediment Deposition of Playa Wetlands in the Rainwater Basin, RWBJV 19th Annual Informational Seminar, Grand Island, NE, February, 11, 2014 (invited presentation)

#### 2013:

1. Li, R., **Tang, Z.**, and X. Li, 2013. Drainage Structure Dataset and its Effects on Surface Flow Modeling with LiDAR, Association of American Geographers (AAG) Great Plains/Rocky Mountains Division Meeting. Oct 10-12, 2013, Omaha, NE. (Full paper, presentation)
2. Zhou, Y., **Tang, Z.**, 2013, "U.S. Green Infrastructure Reporter": A Volunteered Geographical Information (VGI) Platform for Citizen Engagement In Mobile Web Era, Great Plains/Rocky Mountain Division, Association of American Geographers annual meeting, October 10-12, 2013, in Omaha, Nebraska (Poster)
3. \* **Tang, Z.**, 2013, Lessons Learned on Plan Evaluation Research, Renming University of China, Beijing, China, July 1, 2013 (Invited presentation)
4. \* **Tang, Z.**, 2013, Sedimentation on Wetland and Wetland Real-time Monitoring System, State Key Laboratory of Earth Surface Processes and Resource Ecology, Beijing Normal University, Beijing, China, June 27, 2013 (Invited presentation)
5. Li, Y., Liu, C., **Tang, Z.**, 2013, Residential Water Use/Consumptive Water Use in Nebraska: Case Study in City of Lincoln, 2013 Water for Food Conference: Too Hot, Too Wet, Too Dry: Building Resilient Agroecosystems, May 5-8, 2013, Lincoln, Nebraska. (Poster)
6. Li, Y., Liu, C., **Tang, Z.**, 2013, Analysis of Urban Consumptive Water Use in Nebraska: Case Study in City of Lincoln, American Planning Association National Planning Conference, 2013, Chicago, Illinois. (Poster)
7. Fu, X., Svoboda, M., **Tang, Z.**, 2013, Planning for Water Shortage: An Assessment of State-level Drought Plans in the U.S., 2013 Water for Food Conference: Too Hot, Too Wet, Too Dry: Building Resilient Agroecosystems, May 5-8, 2013, Lincoln, Nebraska. (Poster)

8. Zhou, Y., **Tang, Z.**, 2013, Using Volunteered Geographic Information (VGI) System to Promote National Grassroots Engagement in Stormwater Management, 2013 Water for Food Conference: Too Hot, Too Wet, Too Dry: Building Resilient Agroecosystems, May 5-8, 2013, Lincoln, Nebraska. (Poster)
9. **\*Tang, Z.**, 2013, Planning for Climate Change: A Planner's Perspective, North Central Climate Science Center, Fort Collins, Colorado, April 5, 2013. (Invited presentation)
10. Qiu, B., Zhong, M., **Tang, Z.**, Chen, C., 2013, Vegetation Dynamic Pattern and its Relationship with Climate Change in a Subtropical Humid Region of China, 2013 IEEE International Geoscience and Remote Sensing Symposium, July 21-26, 2013, Melbourne, Australia. (Full paper)
11. Qiu, B., Zhong, M., **Tang, Z.**, Chen, C., 2013, Mapping Agricultural Crops Using MODIS EVI Time Series Datasets Through Wavelet Variance, 2013 IEEE International Geoscience and Remote Sensing Symposium, July 21-26, 2013, Melbourne, Australia. (Full paper)
12. Wei, T., **Tang, Z.**, 2013, Planning for Local Resilience Through Low-Carbon Initiatives: Learning from the U.S. Fast Growing Cities, 7th International Association for China Planning (IACP) Conference: Building Resilient Cities in China, Shanghai, China, June 28-July 1, 2013. (Abstract and presentation)
13. Fu, X., **Tang, Z.**, 2013, Are We Planning For Future Droughts or Water Shortage? Investigating the Principles of the Drought-Ready Communities in the Top 100 U.S. Fastest Growing Counties, 7th International Association for China Planning (IACP) Conference: Building Resilient Cities in China, Shanghai, China, June 28-July 1, 2013. (Abstract and presentation)

## 2012:

14. **\*Tang, Z.**, 2012, LiDAR Technology in Wetland Management, Beijing Normal University, Beijing, China. (Invited presentation)
15. **\*Tang, Z.**, 2012, Examining the U.S. Coastal Planning Capacity on Climate Change and Extreme Disasters, East China Normal University, Shanghai, China. (Invited presentation)
16. **\*Tang, Z.**, 2012, U.S. Experience on Laws and Regulations in Disaster Preparedness, Planning, and Management, EAS Seminar on Capacity Building for Disaster Preparedness, National Disaster Reduction Center of China, Beijing, China, September 17-21, 2012. (Invited presentation)
17. Bergman, C. J., Hayes, M. J., Bathke, D. J., Knutson, C. L., **Tang, Z.**, 2012, Investigating the Experiences of Watersheds and Hydrologic Basins to Improve Drought Planning in the U.S., 92nd American Meteorological Society Annual Meeting, January 24, 2012, New Orleans. (Abstract and presentation)
18. **\*Tang, Z.**, 2012, Local Planning Response to Drought Emergency, 37th Annual Natural Hazards Research and Applications Workshop, Broomfield, Colorado, July 14-17, 2012. (Panelist presentation)
19. Zhao, N., **Tang, Z.**, 2012, Assessing the Energy Efficiency Strategies Incorporating in Local Comprehensive Plans in Oregon State, Association of Collegiate Schools of Planning (ACSP) 53rd Annual Conference, November 1-4, 2012, Cincinnati, Ohio.
20. **Tang, Z.**, Henson, J., Fu, X., 2012, Are the U.S. Top 100 Fastest Growing Counties Ready for Future Droughts? International Workshop on Drought Monitoring: Assessing and Planning under Global Climate Change, Beijing, China, June 3-5, 2012. (Abstract and presentation)



21. Fu, X., **Tang, Z.**, 2012, Implementing the Principles of Net Zero Water Community Through Local Land Use Planning, 6th International Association for China Planning (IACP) Conference, Wuhan, China, June 17-19, 2012. (Abstract)
22. Zhao, N., **Tang, Z.**, 2012, Building Net-Zero Energy Community: Evaluating the Capacity of Local Comprehensive Plans for Energy Efficiency in Oregon State, 6th International Association for China Planning (IACP) Conference, Wuhan, China, June 17-19, 2012. (Abstract)
23. **\*Tang, Z.**, 2012, LiDAR Technology in Playa Wetland Management, Rainwater Basin, Rainwater Basin Joint Venture Sixteenth Annual Rainwater Basin Informational Seminar, February 8, 2012, Hastings, Nebraska. (Abstract and invited presentation; this presentation was highlighted as “**the most informative and relevant to conservation of Rainwater Basin wetlands**”)
24. Zhao, N., Li, Y., **Tang, Z.**, 2012, Assessing Wetland Restoration Methods in Rainwater Basin, Rainwater Basin Joint Venture Sixteenth Annual Rainwater Basin Informational Seminar, February 8, 2012, Hastings, Nebraska. (Abstract and poster)
25. **Tang, Z.**, Li, X., Zhao, N., Li, R., 2012, Developing a Restorable Wetland Index for Wetland Program Planning: A Multi-Criteria Spatial Analysis, The Association of American Geographers 2012 Annual Conference, February 24-28, 2012, New York City. (Abstract and presentation)
26. Kubicek, E., Bubach, M., **Tang, Z.**, 2012, Using Normative Messages to Encourage Pro-Environmental Behaviors, Water: Science, Practice and Policy 2012, Lincoln, NE (poster)

#### 2011:

27. **\*Tang, Z.**, Li, Xu, Harvey, E.D., 2011, Developing LiDAR-derived Wetland Maps and a Restorable Wetland Index For Playa Wetlands in Rainwater Basin, EPA Wetland Program Capacity Building and Sustainability Workshop, November 1-2, 2011, Kansas City, Missouri. (Abstract and invited presentation)
28. **\*Tang Z.**, 2011, Lessons learned from the disaster-resilient cities, Beijing Normal University, Beijing, China, June, 2011. (Invited presentation)
29. **\*Tang, Z.**, 2011, GIS and Built Environment Design, 2011 ACADIA Regional Conference, March 11, 2011, Lincoln, Nebraska. (Invited presentation)
30. **Tang, Z.**, 2011, Using LiDAR Data to Prioritize Playa Wetland Restoration Sites Under Climate Change Scenarios, Climate, Water and Ecosystems—Shaping the Great Plains Symposium, October 13, 2011, Lincoln, Nebraska. (Abstract)
31. Jiao, Y., Zhang, L., **Tang, Z.**, 2011, Explore the Public Participation in China’s Development Control: As a Force or as a Slogan? Association of Collegiate Schools of Planning (ACSP) Annual Conference, Salt Lake City, Utah. (Abstract and presentation)
32. **Tang, Z.**, Zhao, N., 2011, A Feasibility Assessment for Net-Zero Energy Efficiency Technologies in Residential Housing Development in North China, 5th International Association for China Planning (IACP) Conference, Beijing, China. (Abstract)
33. **Tang, Z.**, 2011, Balancing Environmental Value and Urban Development: Lessons from California, 5th International Association for China Planning (IACP) Conference, Beijing, China. (Abstract)
34. Zhao, L., Li, R., Li, X., **Tang, Z.**, 2011, Building 3-D Wetland-Agricultural Geodatabase in South Central Nebraska, Water for Food Conference, Lincoln, Nebraska. (Abstract and poster)

35. Li, R., Zhao, L., Li, X., **Tang, Z.**, 2011, Integrating LiDAR Technology into Agricultural Wetland Conservation: A Case Study in the Upper Sand Creek Watershed,” Water for Food Conference, Lincoln, Nebraska (Abstract and poster)
36. **Tang, Z.**, Li, X., Li, R., Zhao, N., Zhao, L., 2011, Applying LiDAR Technology in Agricultural Wetland Conservation Planning in South-central Nebraska, Nebraska Planning Conference, Nebraska Planning and Zoning Association, Grand Island, Nebraska. (Abstract and poster)
37. **Tang, Z.**, Li, X., Li, R., Zhao, N., Zhao, L., Wilson, R., Harvey, E., 2011, Develop LiDAR-derived Wetland Maps and Restorable Wetland Index, Rainwater Basin Joint Venture/Playa Lake Joint Venture Research Symposium, Grand Island, Nebraska. (Abstract and poster)
38. **Tang, Z.**, Li, X., Li, R., 2011, Use of LiDAR-Derived Map in Wetland Conservation, The Association of American Geographers 2011 Annual Conference, April 12-16, 2011, Seattle, Washington. (Abstract and presentation)

**2010:**

39. \***Tang, Z.**, 2010, Learning from U.S. Disaster Research, Chinese Academy of Social Sciences, Beijing, China. (Invited presentation)
40. \***Tang, Z.**, 2010, Disaster-Resilient Cities in U.S., Beijing Social Management Occupation College, Beijing, China. (Invited presentation)
41. \***Tang, Z.**, 2010, Moving from Innovative Ideas to Peer-Reviewed Products, School of Management and Economics, Beijing Institute of Technology, Beijing, China. (Invited presentation)
42. **Tang, Z.**, 2010, Building Low-Carbon Cities: Examining Locally-Driven Climate Change Actions, Association of Collegiate Schools of Planning (ACSP) 51st Annual Conference, Minneapolis, Minnesota. (Abstract and presentation)
43. **Tang, Z.**, 2010, Examining Water Quality Impacts from Bioethanol Production Facilities in Nebraska, Water for Food 2010 Conference: Growing More With Less, University of Nebraska–Lincoln. (Abstract)
44. **Tang, Z.**, Wei, T., 2010, Building Low Carbon Cities: Linking Climate Change Actions with Local Land Use Planning, Urban Affairs Association 40th Annual Meeting, Honolulu, Hawaii, March 10-13, 2010. (Abstract and presentation)
45. Li, Z., **Tang, Z.**, Xu, F., Wang, Y., Zeng, G., 2010, Using Multi-Criteria Spatial Analysis Tool to Assess Flood Risk, Association of American Geographers 2010 Annual Conference, April 14-18, 2010, Washington, DC. (Abstract)
46. **Tang, Z.**, Xu, F.H., Wei, T., 2009, Assessing the Vulnerability of Climate Change on Hazard-related Public Health, Disaster Risk Reduction for Natural Hazards: Putting Research into Practice, November 4-6, 2009, University College London. (Abstract)
47. **Tang, Z.**, 2009, Geographic Clusters of Local Climate Change Mitigation Efforts In California, 34th Annual Natural Hazards Research and Application Workshop, July 15-18, 2009, Broomfield, Colorado. (Abstract and poster)
48. Xu, F., **Tang, Z.**, 2009, Environmental Capacity Assessment and Ecological Restoration in Post-Earthquake Recovery, 34th Annual Natural Hazards Research and Application Workshop, July 15-18, 2009, Broomfield, Colorado. (Abstract)

49. **Tang, Z.**, Brody, S.D., Quinn, C., Chang, L., Examining Local Action Plans for Climate Change, Association of Collegiate Schools of Planning (ACSP) 50th Anniversary Conference, October 1-4, 2009, Crystal City, Virginia. (Abstract and presentation)
50. Chang, L., **Tang, Z.**, Popescu, S. C., 2009, Ten Years After the Northridge Earthquake: Study of Land Use Change in Los Angeles, California,” International Postgraduate Conference on Infrastructure and Environment, Hong Kong Polytechnic University. (Full paper)
51. **Tang, Z.**, Chang, L., Hussey, C., 2009, Incorporating Climate Change Mitigation and Adaptation in Local Land Use Planning, Association of American Geographers 2009 Annual Conference, March 22-27, 2009, Las Vegas, Nevada. (Abstract and presentation)
52. **Tang, Z.**, Hussey, C., 2009, Mitigating Greenhouse Gas Emissions Through Local Land Use Planning, UN Conference on Climate Change (COP15): Climate Change: Global Risks, Challenges & Decisions, March 10-12, 2009, Copenhagen, Denmark. (Abstract published in the conference proceedings)

**2008:**

53. **Tang, Z.**, 2008, Digital Photogrammetric Method in Reactivation of Historical Landslides, International Geoscience and Remote Sensing Symposium, July 6-11, 2008, Boston, Massachusetts. (Abstract)
54. **Tang, Z.**, 2008, Stakeholder Assessment for Resource-Based Industries in Environmental Conflicts, 2008 Ecocity World Summit (7th International Ecocity Conference), San Francisco, California. (Abstract)

**2007:**

55. **Tang, Z.**, Brody, S. D., 2007, Do local Jurisdictions in California Incorporate Strategic Environmental Impacts in Land Use Plans? Association of Collegiate Schools of Planning (ACSP) 48th Annual Conference, October 18-21, 2007, University of Wisconsin–Milwaukee. (Abstract and presentation)
56. **Tang, Z.**, 2007, Integrating Environment, Energy, and Ethics in Local Land Use Planning Decisions, 2007 Environment Energy Ethics Conference, September 21-23, 2007, University of Delaware. (Abstract)
57. **Tang, Z.**, 2007, Strategic Environmental Assessment for the Future Development of Texas Urban Triangle, International Conference on Environmental Science and Technology 2007, August 6-9, 2007, Houston, Texas. (Full paper)
58. **Tang, Z.**, 2007, Measuring the Next Twenty-five Years’ Impacts in Texas Urban Triangle, 2007 Annual Hazards and Disasters Conference, University of Colorado, Boulder, Colorado. (Abstract)
59. **Tang, Z.**, 2007, Do We Have a Strategic Vision for Environmental Planning? Student Research Week at Texas A&M University, March, 28-29, 2007, Texas A&M University. (Abstract)
60. Bright, E., **Tang, Z.**, 2007, A Tale of Two Methods: the Divergent Paths of Land Suitability Analysis and Impact Assessment as Conservation Tools, Conser-Vision: The Next 50 years, July 4-7, 2007, University of Waikato, Hamilton, New Zealand. (Full paper)
61. Bright, E., **Tang, Z.**, 2007, Using Transportation Infrastructure to Guide Growth in Emerging Megacities, Transport New Zealand Conference: Transport—The Next 50 Years. (Full paper)

62. Bright, E., **Tang, Z.**, 2007, Can We Make Texas Megacities Sustainable? International Conference on Sustainable Urbanism, Texas A&M University, College Station, Texas. (Abstract and presentation)

**2006:**

63. **Tang, Z.**, 2006, Measuring Tsunami Planning Capacity on the US Pacific Coast, 2006 Annual Hazards and Disasters Conference, University of Colorado, Boulder, Colorado. (Abstract and poster)
64. **Tang, Z.**, 2006, Integrating Environmental Impact Assessment and Local Planning in California, Association of Collegiate Schools of Planning (ACSP) 17th Annual Conference, November 9-12, 2006, Ft. Worth, Texas. (Abstract and presentation)
65. Bright, E., Van Zandt, S., **Tang, Z.**, 2006, Inequities and Inequalities in Property Tax Appraisals Versus Market Values in the City of Arlington, Texas, Association of Collegiate Schools of Planning (ACSP) 17th Annual Conference, November 9-12, 2006, Ft. Worth, Texas. (Abstract and presentation)
66. **Tang, Z.**, 2006, Measuring Strategic Environmental Assessment Capacities of Local Land Use Comprehensive Planning in California, Ecological Integration Student Research Symposium combined with the Student Research Week at Texas A&M University, March, 27-April 1, 2006, Texas A&M University. (Abstract and presentation)
67. **Tang, Z.**, 2006, Measuring the Capabilities of Local Jurisdictions for Environmental and Hazard Planning: Empirical Studies in the Pacific and Gulf Coast, National Park Service Geologic Resources Division.
68. **Tang, Z.**, 2006, Integrating Environmental Impact Assessment and Local Land Use Comprehensive Planning: Implementing the Principles of Strategic Environmental Assessment in California, Texas A&M University at Galveston.
69. **Tang, Z.**, 2006, Incorporating Environmental Impacts in Local Land Use Comprehensive Planning: Measuring California Local Jurisdictions' Capacities for Strategic Environmental Assessment, The New Planner's Urban & Regional Sciences Doctoral Students Forum, College Station, Texas.

**2005:**

70. **Tang, Z.**, 2005, Do California Coastal Communities Prepare Well for Tsunamis? A Case Study of Crescent City and Santa Barbara County, 2005 Annual Hazards and Disasters Conference, University of Colorado, Boulder, Colorado. (Abstract and poster)
71. **Tang, Z.**, B. Daniel, L.A. Owen, 2005, Using Aerial Photos and Field Survey Methods to Monitor Fan Sedimentation and Landscape Evolution, Watershed Management 2005 Conference, Williamsburg, Virginia. (Full paper)
72. **Tang, Z.**, 2005, A Field Survey of the Landslides and Land Use Types in the Three-Gorges Region, China, The New Planner's Urban & Regional Sciences Doctoral Students Forum, College Station, Texas. (Presentation)
73. Brody, S. D., Grover, H., Bernhardt, S., **Tang, Z.**, Whitaker, B., Spencer, C., 2005, Multi-Criteria Evaluation of Oil and Gas Exploration in Texas State Coastal Waters Using Geographic Information Systems, 2005 Texas Bays and Estuaries Meeting, Port Aransas, Texas. (Presentation)

## **SCHOLARLY AND PROFESSIONAL SERVICE**

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### **National/International Service:**

#### *Scientific Research Proposal/Report Reviewer:*

- U.S. Department of State (2010)
- U.S. National Oceanic and Atmospheric Administration (NOAA) (2008)
- U.S. National Estuarine Research Reserve System (NERRS) (2010)
- U.S. Environmental Protection Agency (EPA) (2012; 2013; 2015)
- Wisconsin Sea Grant Institute (2013)
- Connecticut Sea Grant College Program (2013)
- CRDF Global (2015)

#### *International Journal Reviewer:*

- African Journal of Agricultural Research (2010; 2011; 2012);
- Catena (2014)
- Carbon Management (2011; 2013(2));
- Challenges (2012);
- Computers and Geosciences (2011);
- Ecological Indicators (2013; 2014(3));
- Educational Research Journal (2011);
- Environmental Impact Assessment Reviewer (2012);
- Environmental Management (2009; 2011; 2012 (2));
- Environmental Monitoring and Assessment (2009; 2010);
- Environment and Planning A (2011);
- Environment and Planning B (2013);
- Geomorphology (2014);
- Global Environmental Change (2013);
- In. Form Journal (2008);
- International Journal of Disaster Risk Science (2010; 2012(5));
- International Journal of Climatology (2011);
- International Journal of Environmental Pollution (2008);
- International Journal of Environmental Research and Public Health (2013);
- International Journal of Geographical Information Science (2013; 2014);
- International Journal of Sustainable Development & Planning (2012);
- International Journal of Sustainable Transportation (2013);
- Journal of Ecology and Natural Environment (2014);
- Journal of Environmental Assessment Policy and Management (2011; 2014);
- Journal of Environmental Planning and Management (2010; 2011; 2012(5); 2014);
- Journal of Environmental Management (2008);
- Journal of Geography and Regional Planning (2013);
- Journal of Integrated Coastal Zone Management (2013);
- Journal of Mountain Science (2013 (2));

- Journal of Planning Education and Research (2010);
- Journal of Planning Literature (2010; 2011);
- Journal of the American Water Resources Association (2013)
- Journal of Urban Affairs (2012);
- Local Environment (2008);
- Land Use Policy (2013);
- Landscape and Urban Planning (2011; 2012(2);2014);
- Natural Hazards (2011; 2012(2));
- Natural Hazards Review (2011; 2012(2); 2014);
- Population and Environment (2008; 2009);
- PLOS ONE (2013; 2015);
- Quaternary International (2014(2));
- Soil & Tillage Research (2013);
- Sustainability Journal (2010; 2015);
- The Social Science Journal (2012);
- Transportation Research Part D: Transport and Environment (2014);
- Urban Affairs Review (2012);
- Urban Planning and Design Research (2013);
- Urban Studies (2012);

*International Scientific Publisher Reviewer:*

- Invited Book Proposal (Introduction to Planning Techniques) Reviewer, Routledge Publisher (2013)
- Journal Editorial Board Member (2011-Present), Guest Editor of Special Issue (2012), International Journal of Disaster Risk Science, by Springer Publisher
- Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report: Working Group III (WG III) (2012)
- Invited Book Proposal Reviewer, Ashgate Publisher (2010)

*National/International Conference/Committee Recognition:*

- Invited Reviewer for 14th International Conference on Computers in Urban Planning and Urban Management, 2015
- Judge for the Graduate Student Poster Competition, 2013 Water for Food Conference, Lincoln, Nebraska, 2013
- Program Chair, 2nd International Conference on Information and Multimedia Technology (ICIMT 2010), Hong Kong, in December 28-30, 2010
- Invited Participant, 2010's AIMEs (Analysis, Integration and Modeling of the Earth System) Young Scholar's Network Summer Institute Fellowship at Cornell University
- Invited Official Observer, 2012 Invitational Drought Tournament (IDT), The Agri-Environment Services Branch (AESB) of Agriculture and Agri-Food Canada (AAFC-AAC), Saskatoon, Canada, March 1-2, 2012
- Conference Organizer, International Workshop on Drought Monitoring, Assessment and Planning under Global Climate Change, Beijing Normal University, Beijing, China, June 3-5, 2012

- Invited Panelist, 37th Annual Natural Hazards Research and Applications Workshop, Broomfield, Colorado, July 14-17, 2012
- Committee Member, National Integrated Drought Information System (NIDIS) Carolinas Drought Impact Reporting, 2013
- Committee Member, 2013, U.S. Department of Interior—North Central Climate Science Center Adaptation Working Group
- Member of the Regional Development Planning Specialty Group within the Association of American Geographers

### **State, Regional and Community Service:**

- **2014**, Nebraska Map Usability Review Committee
- **2013**, Green Infrastructure Education and Engagement in Omaha: Saddle Hills Neighborhood, TV Tower Neighborhood, Benson Neighborhood
- **2012**, Site Plan/Design/Layout for Nebraska Game and Parks Commission’s Maloney and Sutherland Reservoir Campgrounds
- **2011**, Nebraska State Recycling Association summit conference to develop a statewide strategic plan
- **2010**, Water supply prediction in the next 10 to 20 years, Nebraska Department of Natural Resources
- **2010**, Antelope Creek Watershed Management Plan, City of Lincoln, Nebraska
- **2009**, Nebraska water summit meeting to prioritize top 10 statewide water challenges
- **2009**, Building Sustainable Partnerships (BSP) networking, City of Lincoln and University of Nebraska–Lincoln
- **2009**, Planning and Development Task Group, Lincoln Green by Design, Joslyn Castle Institute for Sustainable Communities

### **Campus-Wide Service at University of Nebraska–Lincoln:**

- 2015, Quantitative Remote Sensing Faculty Search Committee
- **2011**, University of Nebraska Geospatial Faculty Research White Paper
- **2009-2012**, Advisory Committees for International Students and Scholars
- **2009**, Take a Parent to Lunch (TAPTL) Program

### **College-Wide Service in College of Architecture at University of Nebraska–Lincoln:**

- **2014-2015**, Landscape Architecture Faculty Search Committee
- **2014-2015**, New College Translation Committee
- **2013-2015**, Hyde Speaker Committee
- **2012-2013**, Curriculum, Research and Engagement Task Force/Committee
- **2012-2013**, Recruitment and Retention Task Force/Committee
- **2012**, Dean Search Committee for College of Architecture
- **2011**, Faculty Search Committee, Landscape Architecture Program
- **2010**, Faculty Search Committee, Landscape Architecture Program

- **2009**, Faculty Search Committee, Landscape Architecture Program
- **2008-2011**, Comprehensive Exam Committee, Community and Regional Planning Program
- **2008**, Faculty Search Committee, Community and Regional Program

## **AWARDS AND HONORS**

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- **2015**, Hawthorne Distinguished Faculty Award: Excellence in Research, College of Architecture, University of Nebraska-Lincoln
- **2014**, Excellence in Research Award, College of Architecture, University of Nebraska-Lincoln
- **2010**, Hyde Professorship (2010-2012), University of Nebraska–Lincoln
- **2008**, Hyde Professorship (2008-2010), University of Nebraska–Lincoln
- **2006**, Department Head Honor Roll Award, Department of Landscape Architecture and Urban Planning, Texas A&M University
- **2006**, First Place Award and Interdisciplinary Research Recognition Award for Student Research Week at Texas A&M University
- **2006**, R M “Bob” Logan Scholarship for Academic Excellence Award from Texas A&M University
- **2005**, Cary N. Smith (’34) Memorial Scholarship for Academic Excellence Award from Texas A&M University
- **2004**, Texas A&M University Regent’s Graduate Merit Fellowship
- **2003**, Texas A&M University Regent’s Graduate Merit Fellowship
- **2003**, First Class Award of Water Resources Science and Technology of Shanxi (No. 2003001) (as one of the core members)
- **2002**, Second Class Award of Mountainous Development of Hebei, granted by Office of Science and Technology of Hebei, 2002 (No. 96230305)