

William G. Kepner, Research Ecologist, in EPA's National Exposure Research Laboratory

Systems Exposure Division

[Mailing Address](#)

kepner.william@epa.gov

Area of Expertise: William Kepner is a recognized leader in environmental assessment and future scenarios analysis; he is responsible for landscape analysis and change detection research, habitat modeling, and development of spatial databases and hydrologic assessment tool systems. Specifically, William directs multi-scale/multi-temporal research that applies from community-based watersheds to regional and international scale projects. His research interests include the examination of human transformation of the earth's land surface and the resulting consequences on ecological processes and ecosystem services (such as biodiversity and water supply and quality) with a focus on linking scientific information to management and policy decisions.

Select Publications:

Kepner, W. [A National Approach to Quantify and Map Biodiversity Conservation Metrics within an Ecosystem Services Framework](#). International Visitor Leadership Program (IVLP), Las Vegas, NV, June 15, 2016.

Guertin, D., D. Goodrich, I. Burns, Y. Korgaonkar, J. Barlow, B. Sheppard, C. Unkrich, AND W. Kepner. [Automated Geospatial Watershed Assessment Tool \(AGWA\) Poster Presentation](#). AWRA Summer Specialty Conference, Sacramento, CA, July 11 - 13, 2016.

Kepner, W. [EPA and a Brief History of Environmental Law in the United States](#). International Visitor Leadership Program (IVLP), Las Vegas, NV, June 15, 2016.

View more research publications by [William Kepner](#).

Education:

- MPA, in Public Administration/Natural Resource Mgt., 2000, University of Nevada Las Vegas
- M.S. in Zoology, 1982, Arizona State University
- B.S. in Biology, 1975, University of Arizona
- A.A. in Biology, 1973, Phoenix College

Professional Experience:

- Research Ecologist, USEPA, ORD, NERL, Las Vegas NV, 1990 – Present
- U. S. State Department Embassy Science Fellow. 2013-2014 at U.S. Embassy in Port Louis, Mauritius

- Co-Director for the USGS Southwest Regional Gap Analysis Project for Nevada, 2000 – 2006
- Co-Director of NATO Advanced Research Workshop on Desertification in the Mediterranean Region, 2003 – 2006;
- Co-Director of the NATO/Committee on the Challenges of Modern Society International Pilot Study on the Use of Landscape Sciences for Environmental Assessment, 2001 – 2006;
- Technical Director-Arid Ecosystems, Environmental Monitoring and Assessment Program (EMAP), USEPA, ORD; 1990-1994.
- Environmental Contaminant Specialist, USFWS, Phoenix, AZ, 1984 – 1990
- Wildlife Biologist, USBLM, Phoenix, AZ, 1978 – 1984
- Hydrologist, USFS, Apache-Sitgreaves National Forests, Springerville, AZ, 1977

Honors and Awards:

- 2015 EPA Scientific Technological Achievement Award (Honorable Mention) - For assessment of regional woodland encroachment on sustainable hydrology in the American West.
- 2015 EPA Bronze Medal - For Automated Geospatial Watershed Analysis (AGWA) watershed analysis for futures forecasting in two regulatory settings (i.e. Region 8 and 9).
- 2015 EPA Bronze Medal -For development of EnviroAtlas, a multi-scale interactive web-based tool focused on ecosystem services.
- 2014 U.S. Dept. of State Meritorious Honor Award for serving as first Embassy Science Fellow for the American Embassy, Port Louis, Mauritius.
- 2014 EPA Scientific Technological Achievement Award (Honorable Mention) - For evaluating hydrological response to forecasted future land-use change.
- 2010 EPA NERL Special Achievement Award – Goal 5: Anticipate Future Environmental Issues
- 2008 USDA/ARS Technology Transfer Award – For superior effort in developing a watershed analysis tool.
- 2007 EPA Exceptional ORD Technical Assistance to the Regions or Program Offices Award - For exceptional technical assistance to Region 9 in support of NEPA and 404 program decisions in the American Southwest.
- 2006 EPA Scientific Technological Achievement Award (Level III) - For developing a methodology to evaluate landscape change and determine environmental vulnerability.
- 2005 EPA Bronze Medal - For significant scientific leadership in an international arena
- 2005 EPA Bronze Medal - For superior performance in developing, applying and providing innovative watershed analysis tools to the regulatory and scientific communities
- 2005 EPA Science Communication Award - For developing an innovative communication system to distribute geospatial data for the State of Nevada
- 2002 EPA Silver Medal - Environmental Monitoring and Assessment Program
- 2001 EPA Bronze Medal - Aquatic monitoring in collaborative projects involving States and Tribal Nations
- 2001 U.S. Department of Agriculture Science Team Award - San Pedro River (U.S./Mexico)