

CURRICULUM VITA

William W. Doe III, Ph.D., P. E.

CONTACT INFORMATION

Work Address:

Center for Environmental Management of Military Lands Tele: (970) 491-5082/2748
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EDUCATION

Ph.D. ***Civil Engineering (Water Resources Planning and Management),
Colorado State University, Fort Collins, Colorado, 1992.***

Dissertation: Simulation of the spatial and temporal effects of Army
maneuvers on watershed response

M.S.C.E. ***Civil Engineering (Hydrology), University of New Hampshire,
Durham, New Hampshire, 1980.***

Project: Historical bank recession at selected sites along Corps of
Engineers reservoirs

B.S. ***U.S. Military Academy, West Point, New York, 1974.***

PROFESSIONAL EXPERIENCE

Academic Appointments

***Associate Professor (Joint Administrative Professional- Faculty Appointment),
Department of Forest, Range and Watershed Stewardship, Warner College of
Natural Resources, Colorado State University, August 2006 –***

***Associate Professor (Joint Administrative Professional- Faculty Appointment),
Department of Civil Engineering, College of Engineering, Colorado State
University, August 2006 –***

***Professor, Department of Geography, College of Arts & Sciences, Western Illinois
University, August 2005 – July 2006***

Associate Professor (Joint Administrative Professional- Faculty Appointment), Department of Forest Sciences, College of Natural Resources, Colorado State University, 1996 - 2005

Associate Professor (Joint Administrative Professional Faculty Appointment), Department of Civil Engineering, College of Engineering, Colorado State University, 1996 -2005

Academy Professor and Director of Geography Program, Department of Geography & Environmental Engineering, U.S. Military Academy, West Point, NY, 1992-96

Instructor and Assistant Professor, Department of Geography & Computer Science, U.S Military Academy, West Point, NY, 1983-86

Academic Administration

Interim Director (May 2007 – Dec 2007), and Associate Director (Professional and Graduate Studies) and Senior Research Scientist, Center for Environmental Management of Military Lands, Warner College of Natural Resources, Colorado State University, Fort Collins, CO, August 2006 –

- Directs an externally funded University environmental research center in support of environmental management and range operations activities at Department of Defense (DoD) installations throughout the U.S. The center includes 40 on-campus and 250 off-campus employees and generates \$18 Million annually in extramural contracts and grants
- Coordinates with Army agencies in support of operational range activities and environmental programs. Provides specialized expertise in the integration of Army operations and environmental programs, to include participation in Army-wide invited panels, workshops and conferences.
- Develops and writes grant/contract proposals and provides contract deliverables to Army agencies, to include professional training and distance learning courses, environmental assessment reports and specialized geographic studies.
- Conducts environmental/geographic research and authors professional articles on a wide range of technical and Army environmental subjects, to include natural resources management, sustainability, encroachment, military readiness and professional education.
- Develops academic courses and graduate research opportunities to support the Center and affiliated Colleges and Departments within the University.

Director, Institute for Environmental Studies, College of Arts & Sciences, Western Illinois University, Macomb, IL, August 2005 – July 2006

- Instituted and led an interdisciplinary Department-level unit, the Institute for Environmental Studies (IES), within the College of Arts & Sciences Research & Outreach Center (ROC).
- Initiated a collaborative, interdisciplinary research program for externally funded contracts and grants related to environmental issues. Acted as the College's single point of contact with external agencies for environmental programs and outreach related to sustainability.

- Integrated environmental curriculum, faculty and student research and outreach activities in support of environmental programs and initiatives at the University.
- Directed, advised and taught students in the interdisciplinary Environmental Studies Minor and other environmental curriculum initiatives.
- Organized campus workshops, seminars and events related to environmental sustainability.

Associate Director (Professional and Graduate Studies) and Senior Research Scientist, Center for Environmental Management of Military Lands, College of Natural Resources, Colorado State University, Fort Collins, CO, 1996 – 2005

- Co-directed an externally funded University research center in support of environmental management and range operations activities at Department of Defense (DoD) installations.
- Managed over twenty active federal contracts/grants, totaling \$10 million, and supported thirty-five University contractor personnel in support of U.S. Army range sustainability and environmental programs.
- Coordinated with Army agencies in support of operational range activities and environmental programs. Provided specialized expertise in the integration of Army operations and environmental programs, to include participation in Army-wide invited panels, workshops and conferences.
- Developed, wrote and provided contract deliverables to Army agencies, to include professional training and distance learning courses, environmental assessment reports and specialized studies.
- Conducted environmental research and authored professional articles on a wide range of technical and Army relevant subjects, to include natural resources management, sustainability, encroachment, readiness and professional education.
- Developed graduate student research opportunities and served on graduate student committees to support the Center and affiliated Colleges and Departments.

Program Director of Geography and Environmental Studies, Department of Geography & Environmental Engineering, U.S. Military Academy (USMA), West Point, NY, 1992-96

- Directed undergraduate curriculum and majors program for USMA cadets in Geography (Physical and Human) and Environmental Studies majors.
- Directed and evaluated twelve integrated military and civilian faculty in providing undergraduate education and research opportunities for cadets.
- Performed educational outreach and applied research with Army field agencies in support of environmental and operational programs.
- Mentored cadets and junior Army officers towards careers of service in the U.S. Army.

Federal Government Service

Active Duty, U.S. Army Officer, U.S. Army Corps of Engineers (Lieutenant Colonel, Retired, 1974 – 1996

- Served in a variety of leadership, command and Research & Development

positions as a commissioned active duty Army officer (Second Lieutenant through Lieutenant Colonel) in the U.S. Army Corps of Engineers, with service in the continental United States and Germany. Positions included:

- - 1) *Company Commander, Combat Engineer Company* – led a 120-soldier unit with combat and heavy engineer equipment performing tactical and construction missions in support of U.S. forces in Europe.
 - 2) *Area Engineer, Philadelphia District, Army Corps of Engineers (Civil Works)* – directed flood control projects, reservoir operations, emergency management response and public affairs in the Upper Lehigh River Basin, PA.
 - 3) *Joint Services Environmental and Engineering Research Coordinator*, U.S. Naval Facilities Engineering Support Center (NFESC). Port Hueneme, CA – integrated environmental Research & Development programs between Army, Air Force and Navy/Marine Corps
 - 4) *Faculty member*, U.S. Military Academy, West Point, NY. – taught courses in Terrain Analysis, Water Resources Management and capstone course for majors

PROFESSIONAL CERTIFICATION

Registered Professional Engineer (P.E.), (Virginia), 1982-present

HONORARY AND PROFESSIONAL AFFILIATIONS

Phi Kappa Phi

Association of American Geographers (including Military Geography Specialty Group)

Society of American Military Engineers

Association of Graduates, U.S. Military Academy

Alumni Association, University of New Hampshire

Alumni Association, Colorado State University

PUBLICATIONS

Books and Book Chapters:

Timpson, W., et al. (2006). *147 Tips for Teaching Sustainability*, Atwood Publishing, Madison, WI, contributor.

R.S. Harmon and W.W.Doe III, eds. (2001). *Landscape Erosion and Evolution Modeling*, Kluwer Academic/Plenum Publishers, New York, 540 pp.

W. W. Doe, et al. (2000). "U.S. Army Training & Testing Lands: An Ecological Framework for Assessment," Chapter 16, in *The Scope of Military Geography: Across the Spectrum from Peacetime to War*, E.J. Palka and F.A. Galgano (eds.), McGraw-Hill Primis Custom Publishing, New York, pp. 373-392.

R. B. Shaw, W.W. Doe, et al. (2000). "Training a Global Force: Sustaining Army Land for 21st Century Readiness," Chapter 15, in *The Scope of Military Geography: Across the Spectrum from Peacetime to War*, E.J. Palka and F.A. Galgano (eds.), McGraw-Hill Primis Custom Publishing, New York, pp. 359-372.

Journal Articles:

Houston, S.T. and Doe, W.W. III (2005). "Characterization of Munitions Disturbance and Contaminant Loading," Federal Facilities Environmental Journal, Winter 2005, pp.15-25.

Herl, B.K. and Doe, W.W. III. (2005). "Use of Military Training Doctrine to Predict Patterns of Maneuver Disturbance on the Landscape. I. Theory and Methodology," Special Volume: Assessing the Impacts of Vehicular Traffic on Natural Areas, Journal of Terramechanics, Volume 42, Issues 3-4, July-October 2005, pp. 353-371.

Houston, S.T., W.W. Doe III and R.B.Shaw (2001). "Environmental Risk of Army Ranges and Impact Areas: An Ecological Framework for Assessment," Federal Facilities Environmental Journal, Spring 2001, pp. 93-111.

Shaw, R. B., W. W. Doe III, E.J. Palka, and T.E. Macia (2000). "Sustaining Army Land for Readiness in the 21st Century," Military Review, September-October 2000, No. 5, U.S. Army Command & General Staff College, Fort Leavenworth, KS, pp. 68-77.

Doe, W.W., R.B. Shaw, R.G. Bailey, D. J. Jones and T. Macia (1999). "Locations and Environments of U.S. Army Training & Testing Lands: An Ecoregional Framework for Assessment," Federal Facilities Environmental Journal, Autumn 1999, pp. 9-26.

Doe, William W., B. Sagharian and P. Julien (1996). "Land Use Impact on Watershed Response: The Integration of Two-Dimensional Hydrologic Modelling and Geographical Information Systems," Journal of Hydrological Processes, Volume 10, pp. 1503-1511.

Gatto, L. and W.W. Doe (1984). "Bank Conditions and Erosion Along Selected Reservoirs," Environmental Geology and Water Sciences, Volume 9, No.3, pp. 143-154.

Technical Reports and Conference Proceedings:

Doe, W. W., Bailey, R.G., Harmon, R.S., King, W.Chris and Palka, E. (2006). "Natural Environments for Testing and Training: Developing Geographic Analogs for an Expeditionary Army," 25th Army Science Conference, Proceedings, Orlando, FL, November 2006. *In press*. <http://www.asc2006.com/orals/OO-04.pdf>

Doe, W.W. III and Phillips, J.R. (2004). "Educating the Army's Sustainable Range Managers: A Professional Development Concept," Proceedings, Conference on Sustainable Range Management, Battelle, Inc., New Orleans, LA, January 2004.

King, W. Chris, et al. (2004). Scientific Characterization of Desert Environments for Military Testing, Training and Operations, Environmental Sciences Branch, U.S. Army Research Office, Research Triangle Park, NC, 108 pp. (Scientific Peer Panel Contributor)

Doe, W. W. III (2000). Watershed Monitoring and Analysis of the Upper Frankenoe,

Grafenwoehr Training Area, Germany, Final contract report, 7th Army Training Center, Germany, Center for Environmental Management of Military Lands, Colorado State University, CO.

Doe, W.W., et al. (1999). U.S. Army Integrated Training Area Management (ITAM) Learning Modules, prepared in CD-ROM format and in Web-based format, U.S. Army Environmental Center, Aberdeen Proving Ground, MD. <http://www.army-itam.com/itamlm/index.htm>

Doe, William W., D. Jones and S. Warren (1999). Soil Erosion Model Guide for Military Lands: Analysis of Erosion Models for Natural and Cultural Resources Applications, Contract Report/Technical Report CADD-99-XX, Tri-Service CADD/GIS Technology Center, U.S. Army Waterways Experiment Station, Vicksburg, MS, 146 pp.

King, W. Chris, et al. (1998). A Technical Analysis to Identify Ideal Geographic Locations for Tropical Testing of Army Materiel and Systems, Environmental Sciences Branch, U.S. Army Research Office, Research Triangle Park, NC, 36 pp. (Scientific Peer Panel Contributor)

Harrison, J.S. and Doe, W. W. (1997). Erosion Modeling in Pinon Canyon Maneuver Site Using the Universal Soil Loss Equation and the GIS System-GRASS, CEMML TPS 97-21, Center for Ecological Management of Military Lands, Colorado State University, Fort Collins, CO, 47 p.

Doe, William W. (1997). Terrain and Eco-Region Analysis of Select U.S. Army Installations, CEMML TPS 97-17, Center for Ecological Management of Military Lands, Colorado State University, Fort Collins, CO, 19 pp.

Doe, William W., P. Julien and F. Ogden (1997). "Maneuversheds and Watersheds: Modeling the Hydrologic Effects of Mechanized Training on Military Lands," Proceedings, 1997 AWRA Summer Symposium - Water Resources Education, Training and Practice: Opportunities for the Next Century, Keystone, CO, June 29 - July 3, 1997, pp. 767-776.

Doe, William W. and B. Sagharian (1993). "Spatial and Temporal Effects of Army Maneuvers on Watershed Response: The Integration of GRASS and a Two-Dimensional Hydrologic Model," National Park Service Technical Report NRTR-93/13, Geographic Information Systems: Proceedings of the Seventh Annual GRASS Users Conference, Lakewood, CO.

Doe, William W. and N. Herron (1988). Forward Naval Base Functions: Measuring Their Contributions to Warfighting Effectiveness, NCEL Technical Report 03B-88-01, Naval Cbivil Engineering Laboratory, Port Hueneme, CA.

Doe, William W. and B. Bailey (1985). Mapping of Terrain and Environmental Attributes, Blair Lakes, Alaska, Technical Note, U.S. Army Cold Regions Research and Engineering Laboratory, Hanover, NH.

Gatto, L. and W. W. Doe (1983). Historical Bank Recession at Selected Sites Along Corps of Engineers Reservoirs, Special Report 83-30, U.S. Army Cold Regions

Research and Engineering Laboratory, Hanover, NH.

Posters and Presentations

Doe, W.W. III, et al. (2007). Invited speaker. "Developing Spatial Analogs for an Expeditionary Army: A Military Geography of Natural Environments for Testing and Training, 7th International Conference on Military Geology and Geography, Quebec City, Canada, 18-21 June 2007.

Doe, W.W. III and Bailey, Robert G. (2007). "Military Operating Environments: Ecoregional Mapping and Analogs of U.S. Military Deployment Areas in the 21st Century," Association of American Geographers Annual Meeting, April 2007, San Francisco, CA. *Poster*

Doe, W.W. III and Bailey, Robert G. (2006). "Fort Carson's Ecoregional Footprint: Envisioning a sustainable military installation-community in the semidesert, Association of American Geographers Annual Meeting, March 2006, Chicago, IL.

Doe, William W. and Bailey, Robert G. (2005). "Army Landscapes in the American Arid and Semi-arid West: Ecosystem Patterns and Design for Sustainability," Association of American Geographers Annual Meeting, Military Geography Session, March 2005, Denver, CO.

Doe, William W. (1999). "Soil Erosion Modeling for Land Managers: Applications & Limitations," Eighth Annual U.S. Army Integrated Training Area Management (ITAM) Workshop, 23-26 August 1999, St. Cloud, MN.

Shaw, Robert B. and W.W. Doe (1999). "Where Does the U.S. Army Train to Fight ?", Association of American Geographers 1999 Annual Meeting, March 1999, Honolulu, HI.

Doe, William, R. Shaw and B. Bailey (1999). "Ecological Resiliency of Army Training & Testing Lands: A Classification and Evaluation Method," National Defense Industrial Association Environmental Symposium, 29 March – 1 April 1999, Denver, CO.

Doe, William W. and B. Miller (1998). "Soil Erosion on a Maneuvershed: Applying USLE/RUSLE at the Pinon Canyon Maneuver Site, CO," Proceedings, 7th Annual U.S. Army Integrated Training Area Management Workshop, 25-27 August 1998, Yakima, WA.

Doe, William W. (1998). "The U.S. Army's Integrated Training Area Management (ITAM) Program: Moving Good Science into Successful Practice," New Research Directions in Desert Surficial Processes and Landscape Dynamics on Military Lands, Army Research Office/Desert Research Institute Workshop, Mojave Desert, April 1998.

Doe, William W. (1998). "In Suspect Terrain: Evaluating the Ecoregion Significance of Critical Army Training and Testing Lands," in Abstracts, 1998 Association of American Geographers (AAG) Annual Meeting, Boston, MA, 25-28 March 1998.

- Doe, William W., J. Linn and R. Savoy (1997). "An Integrated ITAM Scenario and Practical Exercise for Land Managers and Trainers: Fort Carson, CO," Proceedings, 6th Annual U.S. Army Integrated Training Area Management Workshop, 26-28 August 1997, San Antonio, TX.
- Doe, William W., P. Julien and F. Ogden (1997). "Maneuversheds and Watersheds: Modeling the Hydrologic Effects of Mechanized Training on Military Lands," Proceedings, 1997 AWRA Summer Symposium - Water Resources Education, Training and Practice: Opportunities for the Next Century, Keystone, CO, June 29 - July 3, 1997.
- Doe, William W. (1996). "Environmental Stewardship of Army Training Lands: A Geographical Imperative," Abstracts, 1996 Association of American Geographers (AAG) Annual Meeting, Charlotte, NC.
- Doe, William W. (1996). "Carrying Capacity Modeling for Army Lands: A Green Suiter's Perspective," Carrying Capacity Modeling Workshop, Department of Range Ecosystem Science, Colorado State University, Fort Collins, CO.
- Doe, William W. and G. Walker (1995). "Duty, Honor, Geography: A Curriculum Framework for National Leaders in the 21st Century," Abstracts, 1995 Association of American Geographers (AAG) Annual Meeting, Chicago, IL.
- Doe, William W. (1994). "Modeling the Effects of Army Maneuvers on Watershed Response: A Spatial Decision Support Framework," Abstracts, 1994 American Water Resources Association Summer Symposium on the Effects of Human-Induced Changes on Hydrologic Systems, Jackson Hole, WY.
- Doe, William W. (1993). "Effects of Army Maneuvers on Watershed Response: A Spatial Analysis Using GIS and Hydrologic Modeling," Abstracts, 1993 Association of American Geographers (AAG) Annual Meeting, Atlanta, GA.
- Doe, William W. (1985). "Aerial Photointerpretation and Analysis of Potential Ice Jam Sites on the Delaware River," Proceedings, U.S. Army Corps of Engineers Fifth Remote Sensing Symposium: Applications for Water Resources Management, Ann Arbor, MI.
- Gatto, L. and W.W. Doe (1984). "Historical Bank Recession at Selected Sites Along Corps of Engineers Reservoirs in Cold Regions," Abstracts, 1984 Association of American Geographers (AAG) Annual Meeting, Washington, D.C.

UNIVERSITY TEACHING EXPERIENCE (Undergraduate)

U.S. Military Academy, West Point, NY (1983-86; 1992-96)

- Terrain Analysis (Introduction to Physical Geography)
- Water Resources Planning and Management
- Land Use Planning and Management
- Environmental Studies Senior Capstone Seminar

Western Illinois University (2006)

- Introduction to Environmental Studies

Colorado State University (1996-2007)

- Guest Lecturer, Leadership in the Environment Seminar
- Guest Speaker, Remote Sensing/GIS Seminar
- Guest Speaker, Student Conservation Biology Club

SERVICE

Graduate Committee Service:

- Department of Civil and Environmental Engineering, College of Engineering (outside committee member), 1996-2005, 2006-2007:
 - 2 Ph.D., 3 M.S.
- Department of Forest Sciences (currently Forest, Range and Watershed Stewardship), Warner College of Natural Resources, 1996-2005, 2006-2007:
 - 1 Ph.D., 5 M.S.

Invited Panel Member, U.S. Army Environmental Policy Institute (AEPI), Foresight Roundtable, LMI, Inc., McClean, VA, 24-25 July 2007.

Invited Panel Member, Department of Defense (DoD) Sharing Future Space Conference, U.S. Army Corps of Engineers Research & Development Laboratory (USACERL), Beckmann Institute, University of Illinois-Champaign, April 11, 2006.

Co-organizer, Campus Environmental Sustainability Summit, Western Illinois University, April 2006.

U.S. Army Scientific Advisory Panel member, U.S. Army Tropics and Desert Environments Characterization Study, U.S. Military Academy, West Point, NY, 24-25 September 2005 and U.S. Army Yuma Proving Ground, January 30 – 3 February 2006.

Invited Workshop Participant, Environmental Studies Curriculum, College of Natural Resources, 2001.

Workshop Organizer and Chair, "Landscape Evolution and Soil Erosion Modeling: Applications for Environments of Military Interest," March 1999, Sylvan Dale Ranch, Loveland, CO.