

Elizabeth A. Eschenbach

Environmental Resources Engineering, Humboldt State University, Arcata, CA 95521

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PROFESSIONAL PREPARATION:

Institution	Major/Area	Degree	Dates
University of California Santa Cruz	Mathematics and Psychology with Honors in Mathematics	BA	1985
Cornell University	Environmental Systems Engineering	MS	1991
Cornell University	Environmental Systems Engineering	Ph.D.	1994
University of Colorado Boulder	Object Oriented Water Resources Optimization Model Development	Post –Doc	2/94-1/95

APPOINTMENTS:

2005 – Present	Professor, Environmental Resources Engineering, Humboldt State University Arcata, CA
2003 – 2006	Department Chair Environmental Resources Engineering, Humboldt State University Arcata, CA
2000 – 2005	Associate Professor, Environmental Resources Engineering, Humboldt State University Arcata, CA
1995 - 2000	Assistant Professor, Environmental Resources Engineering, Humboldt State University Arcata, CA
1986 - 1987	Professional Research Assistant, Systems Ecology Research Group San Diego State University, San Diego, CA

PUBLICATIONS - RELATED TO PROPOSED PROJECT:

Eschenbach, E.A., J. Johnson, J. Montgomery, C. Brus, P. A. Carlson, D. Giammar, B. Grauer, L. Hotaling, G. Oguntimein, S. Safferman, E. Seiler and T. Wentling (2006) *WATERS Network's Potential to Transform Environmental Engineering Education* (to appear) Proceedings of the ASEE 2007 Annual Conference and Exposition. June 24-27, Honolulu Hawaii, 2007.

Eschenbach, E.A., J. Johnson, C. Brus, P. A. Carlson, D. Giammar, B. Grauer, L. Hotaling, G. Oguntimein, S. Safferman, E. Seiler and T. Wentling (2006) *Work In Progress: Eliciting Input For Transforming Cset Education Via The Nsf Collaborative Large-Scale Engineering Analysis Network For Environmental Research (CLEANER)* Proceedings of the 2005 Frontiers in Education Conference. *ONLINE* <http://fie.engrng.pitt.edu/fie2006/papers/1290.pdf>

Cashman E.M., **E. A. Eschenbach** and D. Baker *Adding Energy And Power To Environmental Engineering Curriculum With Just-In-Time Teaching* Proceedings of the 2005 Frontiers in Education Conference. *ONLINE* <http://fie.engrng.pitt.edu/fie2005/papers/1362.pdf>. 2005

Eschenbach, E.A. E. M. Cashman *Incorporating Feminist Pedagogy Into The Engineering Learning Experience*, Proceedings of the 2005 Frontiers in Education Conference. *ONLINE* <http://fie.engrng.pitt.edu/fie2005/papers/1496.pdf> .2005.

Espinoza D. M, J. W. White, **E.A Eschenbach**,. and E. M. Cashman,. *Student Attitudes Surveyed In An Introductory Environmental Resources Engineering Course*, Proceedings of the 2004 Frontiers in Education Conference. *ONLINE* <http://fie.engrng.pitt.edu/fie2004/papers/1520.pdf>. 2004.

OTHER PUBLICATIONS:

Shuman, L.J. C. J. Atman, **E. A. Eschenbach**, D. Evans, R. M. Felder, P. K. Imbrie, J. McGourty, R. L. Miller, L. G. Richards, K. A. Smith, E. P. Soulsby, A. A. Waller and C. F. Yokomoto *Special Panel - The Future Of Engineering Education* Proceedings of the Frontiers in Education Conference. ONLINE <http://fie.engrng.pitt.edu/fie2002/papers/1190.pdf>, 2002.

Eschenbach, E. A., *Web Based Forms for Design Team Peer Evaluations*. Proceedings of the Annual Conference of the American Society for Engineering Education. ONLINE: <http://www.asee.org/conferences/search/00627.PDF> 1998.

M. A. Madej, **E. A. Eschenbach** *Developing Restoration Strategies for Streams in Steep, Forested Terrain*, Invited submission for special issue of *Earth Surface Processes and Landforms*, submitted November 30, 2004.

Eschenbach, E. A., T. Magee, E. Zagona, M. Goranflo and R. Shane. Multiobjective Daily Operations Of Reservoir Systems Via Goal Programming. *American Society of Civil Engineers Journal of Water Resources Planning and Management*. Vol. 127, Issue 2, pages 108-120, 2001.

Eschenbach, E. A., C. A. Shoemaker, and H. M. Caffey. Parallel Algorithms for Stochastic Dynamic Programming with Continuous State and Control Variables. *Operations Research Society of America's Journal on Computing*, Vol. 7, No. 4, p. 386, 1995.

SYNERGISTIC ACTIVITIES:

- Serves as department chair of the largest undergraduate ABET accredited program in Environmental Engineering. According to the American Society for Engineering Education (ASEE), approximately 23% of the undergraduates studying environmental engineering in the US are at Humboldt State University.
- Multiple Recipient of the Helen Plants Award for Innovative Session for the Frontiers in Education Conference. 1997 – Cooperative Learning, 2004 Feminist Frontiers – What Does Feminist Pedagogy Offer to Engineering Education?
- Program Chair for two conferences 1) Educational Research and Methods Division for the American Society for Engineering Education 1999 Annual Conference. Reviewed over 55 abstracts and organized the peer review of 35 papers for 10 sessions. The conference was attended by approximately 3000 engineering educators and 2) Educational Research and Methods Program Chair for 2007 Frontiers in Education Conference to be held in San Diego. Over 750 abstracts have been submitted to this conference.
- Chair of organization committee for 8 different Expanding Your Horizon (EYH) Conferences held at either Humboldt State University or Cornell University. EYH conferences invite 200 - 500 middle school girls to come to a college campus for a day and participate in hands-on science, math and engineering workshops.
- Faculty Development Workshop Coordinator. Presented numerous faculty development workshops around the country on these topics: Teaching in a Diverse Community: Multicultural Awareness, Outcomes Assessment, Cooperative Learning and Teaching with Teams representing the Educational Research and Methods Division of ASEE. Served as Humboldt State University Service Learning Faculty Coordinator

COLLABORATORS AND OTHER AFFILIATIONS:

Collaborators in preceding 48 months: Guy-Alain Amoussou, Chris Brus, Jaquelyn Bolman, Eileen Cashman, Patricia A. Carlson, Daniel Giammar, Bette Grauer, Liesl Hotaling, James Johnson, Tyler Evans, Mary Ann Madej, Steven Safferman, Gbikeloluwa Oguntimein, Emma Seiler, Howard Stauffer, Tim Wentling, and Mary Virnoche.

Graduate advisor– Christine A. Shoemaker (Civil and Environmental Engineering, Cornell University).

Post Doctoral Sponsors– Jacquelyn Sullivan and Edith Zagona (Center for Advanced Decision Support in Water and Environmental Systems, University of Colorado, Boulder)

Thesis advisor– Three graduate students advised in past five years: Steven Klein, John Madigan and Justin Heavilin. Total students advised: Three. Total number of postdoctoral scholars sponsored: 0