

BRIAN P. BLEDSOE

**Dept. of Civil & Environmental Engineering
Colorado State University
Fort Collins, CO 80524 USA**

**Phone: (970) 491-8410
Fax: (970) 491-8671
Email: Brian.Bledsoe@colostate.edu**

EDUCATION

Ph.D. Colorado State University, Fort Collins, CO, 1999
Civil Engineering – River Mechanics

M.S. North Carolina State University, Raleigh, NC, 1993
Interdisciplinary Program in Environmental Science, Civil Engineering, and Restoration Ecology

B.M.E. Georgia Institute of Technology, Atlanta, GA, 1987
Mechanical Engineering – Fluids Emphasis

REGISTRATION

Professional Civil Engineer: Colorado (#40411), North Carolina (#21050)

EXPERIENCE

Associate Professor (June 2007 – present), **Assistant Professor** (Jan. 2000 – June 2007), **Research Associate** (Mar. 1999 – Dec. 2001), and **Research Assistant** (Aug. 1997 – Feb. 1999) / Colorado State University, Department of Civil and Environmental Engineering / Fort Collins, CO

- Managing an externally funded research program in surface water quality, stream and watershed restoration, and multi-scale biophysical linkages in aquatic ecosystems:
 - Representative active projects include grants from the National Science Foundation, U.S. Environmental Protection Agency, Water Environment Research Foundation, and the U.S. Forest Service to examine water quality benefits of stream restoration practices, effects of urbanization on the physical character of aquatic habitat, channel erosion and nutrient loading, and analysis of physical, chemical and biological characteristics of streams.
 - Collaborating with CSU faculty in engineering, natural resources, and social sciences to build integrative research and educational programs in environmental science and engineering with an interdisciplinary emphasis on restoration of aquatic ecosystems.
 - Preparing research reports and publishing research results in scholarly journals.
 - PI/Co-PI on active research grants totaling approximately \$1.7 million.
- Graduate advisor of 5 Ph.D. and 3 M.S. students, member of more than 30 graduate committees.
- Coordinating and supervising the research activities of graduate and undergraduate students in water quality, hydraulic, hydrologic, geomorphic, riparian and sedimentation studies, watershed planning and assessment, statistical analyses, field surveys, and GIS analyses.
- Teaching CE 413-Environmental River Mechanics and CIVE 440-Nonpoint Source Pollution.
- Active in the nationwide recruitment of top students for the CEE program at CSU.

Nonpoint Source Program Coordinator – Environmental Engineer II / North Carolina Department of Environment and Natural Resources, Division of Water Quality / Raleigh, NC / Jan. 1996 – Aug. 1997

- Supervised the Nonpoint Source Planning Group in the development and implementation of numerous water quality restoration and protection initiatives including Nutrient Sensitive Waters

management plans, basinwide management plans, nonpoint source (NPS) modeling using geographic information systems, and integrated management of point and diffuse pollution.

- Lead engineer in the development and implementation of best management practices and ecosystem rehabilitation measures designed to improve water quality in NPS impaired waters.
- Presented frequent written and oral reports on water quality issues and the scientific basis of program initiatives to the NC Legislature, Governor's staff, NCDENR administration, local governments, and to various agricultural, development, and environmental stakeholders.
- Negotiated with other agencies and interest groups to arrive at engineering and policy decisions which established and prioritized NPS control strategies to protect water quality throughout NC.
- Prepared federal NPS grant applications and administered contractual agreements exceeding \$2,000,000 under §319 of the Clean Water Act.

Environmental Specialist / North Carolina Department of Environment and Natural Resources, Division of Coastal Management / Raleigh, NC / Mar. 1994 – Jan. 1996

- Lead engineer for NCDENR in providing technical guidance to FHWA and NCDOT in impact avoidance, long term mitigation planning, and development of mitigation plans and specifications for transportation projects involving impacts to streams and wetlands.
- Developed technical foundation and state / federal agency support for a state-wide stream and wetland restoration program which led to enabling legislation and a \$9,000,000 appropriation from the NC General Assembly.
- Project leader responsible for a regional watershed analysis project involving development and implementation of a geographic information system (GIS) combined with hydrologic modeling for targeting watershed rehabilitation strategies to address water quality problems.
- Supervised GIS technicians and field crews in performing GIS analyses, Global Positioning System location surveys, mapping, site assessment, and prioritization of candidate sites for watershed rehabilitation measures.

Graduate Research and Teaching Assistant / North Carolina State University / Department of Forestry Raleigh, NC / Jan. 1991 – July 1993

- Supervised and conducted research on the hydrology, hydraulics, water quality, and ecology of streams and wetlands to determine design criteria for ecosystem restoration projects.
- Developed functional design, performed hydrologic and ecological modeling, and assisted in the construction management of a \$300,000 project to restore and create riverine wetland systems.
- Entirely responsible for teaching an undergraduate course on computer applications in natural resources management.

Environmental Engineering Research Technician / University of North Carolina - Chapel Hill Department of Environmental Sciences and Engineering / Jan. 1990 – Dec. 1990

- Supported air quality research program by performing photochemical pollution experiments, data analysis, maintenance and repair of instrumentation, and structural / electrical renovation of lab.
- Designed and built a computerized data acquisition system for use in air quality research.

Survey Crew Chief / Diamondback Land Surveys / Las Cruces, NM / Mar. 1989 – Sept. 1989

- Supervised survey crews and operated total stations, theodolites, levels, and other survey equipment in the performance of construction and boundary surveys.

Project Engineer / J.P. Bledsoe Company / Dalton, GA / Sept. 1987 – Mar. 1989

- Performed engineering design and construction layout for land development, highway, and bridge projects. Supervised survey crews and operated total stations, theodolites, and levels.

Engineering Intern / Dalton Utilities / Dalton, GA / June 1983 – Sept. 1983

- Performed diverse tasks at municipal water treatment plants including sample collection, assisting plant operators, and plant maintenance.

CURRENT RESEARCH PROJECTS

“Development of Tools for Hydromodification Assessment and Management,” PI, Southern California Coastal Water Research Project

“Stream Restoration, Ecological Engineering, and Nutrient Retention of Streams in Urban and Agricultural Settings,” PI, National Science Foundation CAREER Award

“Field Characterizations of the Hydraulics of Steep Channels,” PI, National Science Foundation

“GeoTools for Rapid Dynamic Channel Analysis and Biological Assessment,” PI, U.S. Department of the Interior, Bureau of Reclamation

“National Riparian Protocol Development,” PI, U.S. Department of Agriculture, Forest Service

“Predicting Relative Risk of Establishment and Persistence of Riparian and Aquatic Invasive Species in River Networks,” co-PI, U.S. Environmental Protection Agency

PAST RESEARCH PROJECTS

“Linking Watershed Characteristics with Flow Regime and Geomorphic Context to Diagnose Water Quality Impairment at Multiple Spatial and Temporal Scales,” Co-PI, U.S. Environmental Protection Agency

“Protocols for Studying Wet Weather Impact Urbanization,” Co-PI, Water Environment Research Foundation

“Assessing Snow-Making Impacts to Stream Channels,” Co-PI, U.S. Department of Agriculture, Forest Service

“Altered Channel Morphology as a Result of Urbanization and Other Land Uses in Watersheds,” PI, U.S. Environmental Protection Agency

“Hierarchical Physical Classification of Western Streams: Predicting Biological Condition in Terms of Key Environmental Processes Bridging Local to Ecoregional Scales,” PI, U.S. Environmental Protection Agency

“Geomorphic Assessment of Fisheries Enhancement Features on the Big Sandy River, Wyoming,” PI, U.S. Department of the Interior, Bureau of Reclamation

“Little Snake River Monitoring,” PI, Three Forks Ranch Corporation

“Eagle River Inventory and Assessment,” PI, Eagle River Watershed Council

“Effects of Wet Weather Discharges on the Physical Character of Aquatic Habitat,” Co-PI, Water Environment Research Foundation

“Biocomplexity – Modeling Urban Aquatic Ecology / Hydrologic / Geomorphologic Relationships On Urbanizing Streams in the West,” Co-PI, National Science Foundation

“Vision Paper: River Restoration,” Co-PI, Consortium of Universities for the Advancement of the Hydrologic Sciences, Inc.

“Fate and Transport of Metals and Sediment in Surface Water,” Co-PI, U.S. Environmental Protection Agency

“Evaluation of Enhanced Stream Bank Stabilization for Controlling Nutrient Loads in Watersheds,” Co-PI, U.S. Department of Agriculture

“Utilizing Bank Stabilization Structures for Controlling Nitrate and Phosphate Contamination of Ground Water and Surface Water Sources,” Co-PI, Colorado Agricultural Experiment Station

“Demonstration Erosion Control Monitoring,” Co-PI, U.S. Army Corps of Engineers, Waterways Experiment Station

REFERREED JOURNAL ARTICLES

* *Graduate advisees*

1. Poff, N.L., B.D. Richter, A.H. Arthington, S.E. Bunn, R.J. Naiman, E. Kendy, M. Acreman, C. Apse, B. P. Bledsoe, M.C. Freeman, J. Henriksen, R.B. Jacobson, J.G. Kennen, D.M. Merritt, J.H. O’Keeffe, J.D. Olden, K. Rogers, R.E. Tharme, and A. Warner. In Press. The Ecological Limits of Hydrologic Alteration (ELOHA): A New Framework for Developing Regional Environmental Flow Standards. *Freshwater Biology*.
2. David, G.C., B.P. Bledsoe, D.M. Merritt, and E.E. Wohl. 2008. Impacts of Ski Slope Development on Stream Channel Morphology in the White River National Forest, CO. *Geomorphology* 103:375-388, doi:10.1016/j.geomorph.2008.07.003.
3. Craig, L.S., M.A. Palmer, D.C. Richardson, S. Filoso, E.S. Bernhardt, B.P. Bledsoe, M.W. Doyle, P.M. Groffman, B. Hassett, S.S. Kaushal, P.M. Mayer, S.M. Smith, and P.R. Wilcock. 2008. Stream Restoration Strategies for Reducing River Nitrogen Loads. *Frontiers in Ecology & Environment* 6, doi:10.1890/070080.
4. Bledsoe, B.P., *M.C. Brown, and D.A. Raff. 2007. GeoTools: A Toolkit for Fluvial System Analysis. *Journal of the American Water Resources Association* 43(3):757-772, doi: 10.1111/j.1752-1688.2007.00060.x.
5. Poff, N.L., B.P. Bledsoe, and *C.O. Cuhaciyen. 2006. Hydrologic Alterations Due to Differential Land Use Across the Contiguous United States: Geomorphic and Ecological Consequences for Stream Ecosystems. *Geomorphology* 79:264-285.
6. *Flores, A.N., B.P. Bledsoe, *C.O. Cuhaciyen, E.E. Wohl. 2006. Channel-Reach Morphology Dependence on Energy, Scale, and Hydroclimatic Processes with Implications for Prediction Using Geospatial Data. *Water Resources Research* 42, W06412, doi:10.1029/2005WR004226.
7. *Sanborn, S.C. and B.P. Bledsoe. 2006. Predicting Streamflow Regime Metrics for Ungauged Streams in Colorado, Washington, and Oregon. *Journal of Hydrology* 325:241-261.
8. *Carney, S.K., B.P. Bledsoe, and D. Gessler. 2006. Representing the Bed Roughness of Coarse-Grained Streams in Computational Fluid Dynamics. *Earth Surface Processes and Landforms* 31:736-749.
9. Olden, J.D., N.L. Poff, and B.P. Bledsoe. 2006. Incorporating Ecological Knowledge Into Ecoinformatics: An Example of Modeling Hierarchically-Structured Aquatic Communities With Neural Networks. *Ecological Informatics* 1:33-42.
10. Poff, N.L., J.D. Olden, D.M. Pepin, and B.P. Bledsoe. 2006. Placing Global Streamflow Variability in Geographic and Geomorphic Contexts. *River Research and Applications* 22:149-166.

11. Wohl, E.E., P. L. Angermeier, B.P. Bledsoe, G.M. Kondolf, L. MacDonnell, D.M. Merritt, M.A. Palmer, N.L. Poff, and D. Tarboton. 2005. River Restoration. *Water Resources Research* 41, W10301, doi:10.1029/2005WR003985.
12. *Anderson, R.J., B.P. Bledsoe, and W.C. Hession. 2004. Stream and River Width Response to Vegetation, Bank Material, and Other Factors. *Journal of the American Water Resources Association* 40:1159-1172.
13. Van den Berg, J.H. and B.P. Bledsoe. 2003. Comment on Lewin and Brewer (2001): Predicting Channel Patterns, *Geomorphology* 40, 329-339. *Geomorphology* 53:333-337.
14. Bledsoe, B.P. 2002. Stream Erosion Potential Associated with Stormwater Management Strategies. *Journal of Water Resources Planning and Management* 128:451-455.
15. Bledsoe, B.P., C.C. Watson, and D.S. Biedenharn. 2002. Quantification of Incised Channel Evolution and Equilibrium. *Journal of the American Water Resources Association* 38:861-870.
16. Watson, C.C., D.S. Biedenharn, and B.P. Bledsoe. 2002. Use of Incised Channel Evolution Models in Understanding Rehabilitation Alternatives. *Journal of the American Water Resources Association* 38:151-160.
17. Bledsoe, B.P. and C.C. Watson. 2001. Effects of Urbanization on Channel Instability. *Journal of the American Water Resources Association* 37:255-270.
18. Bledsoe, B.P. and C.C. Watson. 2001. Logistic Analysis of Channel Pattern Thresholds: Meandering, Braiding and Incising. *Geomorphology* 38:281-300.
19. Roesner, L.A., B.P. Bledsoe, and R.W. Brashear. 2001. Are BMP Criteria Really Environmentally Friendly? *Journal of Water Resources Planning and Management* 127:150-154.
20. Bledsoe, B.P. and T.H. Shear. 2000. Vegetation Along Hydrologic and Edaphic Gradients in a North Carolina Coastal Plain Creek Bottom and Implications for Restoration. *Wetlands* 20:126-147.

REFERREED JOURNAL ARTICLES IN PREPARATION

* Graduate advisees

1. *Meyer, J. and B.P. Bledsoe. In prep. Restoration Structure Inventory and Survey Results from the Little Snake River and Tributaries, Northern Colorado. *Environmental Management*.
2. Albano, C.M., N.L. Poff, *B.E. Hurst, and B.P. Bledsoe. In prep. The Independent and Interactive Effects of Reduced Flow and Fine Sediment Deposition on Macroinvertebrate Community Structure and Function.
3. Bledsoe, B.P., *Carney, S.K., and *R.J. Anderson. In prep. Scale-dependent Effects of Bank Vegetation on Channel Processes: Field Data and CFD Modeling.
4. *Cuhaciyan, C.C., B.P. Bledsoe, and N.L. Poff. In prep. Hydrogeomorphic Classifications of Mountain Streams for Biomonitoring I: An *A Priori* Approach.
5. *Cuhaciyan, C.C., B.P. Bledsoe, and N.L. Poff. In prep. Hydrogeomorphic Classifications of Mountain Streams for Biomonitoring II: An *A Posteriori* Approach.
6. *Holburn, E.R., B.P. Bledsoe, N.L. Poff, and *C.C. Cuhaciyan. In prep. Modeling Benthic Indices Across Nested Ecoregions of the Pacific Northwest: A Hierarchical Approach.

7. *Hurst, B.E., B.P. Bledsoe, N.L. Poff, and C.M. Albano. In prep. Conditional Probability Approach for Assessing Fine Sediment Impacts on Aquatic Insects with Consideration of Hydrogeomorphic Context.
8. *Snyder, B.S., B.P. Bledsoe, L.H. MacDonald, and R.A. Mussetter. In prep. Predicting Flow Resistance in Mountain Streams.

BOOK CHAPTERS

1. Booth, D.B. and B.P. Bledsoe. 2009. Streams and Urbanization. In *The Water Environment of Cities*. L.A. Baker (Ed.), Springer-Verlag.
2. Bledsoe, B.P. 2007. Framework for Risk-based Assessment of Stream Response to Urbanization. In: V. Novotny and P. Brown (Eds.), In *Cities of the Future: Towards Integrated Sustainable Water and Landscape Management*, IWA Publishing, London, UK, pp. 141-156.
3. Bledsoe, B.P. 2002. Stream Responses to Hydrologic Changes. pp. 127-144 In *Linking Stormwater BMP Designs and Performance to Receiving Water Impacts Mitigation*, B.R. Urbonas (Ed.), American Society of Civil Engineers, 572 pp.

PROCEEDINGS PAPERS

1. Wright, S.J., O. Parra, and B.P. Bledsoe. 2008. Give and Take: The Toll on Ecosystems. Invited white paper for Sigma Xi's *Critical Issues in Science Series 2008 "Year of Water,"* posted and available at <http://www.sigmaxi.org/programs/issues/whitepapers.shtml>; reprints disseminated at the Sigma Xi Annual Meeting & Student Research Conference, November 20-23, Washington, DC.
2. Baker, D.W., J. Mueller-Price, and B.P. Bledsoe. 2008. Deciphering Highly Variable Tracer Data from Geomorphically Complex Urban and Agricultural Streams. *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract H33F-1063.
3. David, G.C., E.E. Wohl, S.E. Yochum, and B.P. Bledsoe. 2008. Characterizing Flow Resistance in Step-pool, Plane-bed and Cascade reaches, Fraser Experimental Forest, Colorado, USA. *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract H53B-1027.
4. Yochum, S.E., B.P. Bledsoe, G.C. David, and E.E. Wohl. 2008. Characterization of Reach Velocity and Detailed Geometry in Well-vegetated, High-gradient Streams. *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract H53B-1028.
5. Baker, D.W., J. Mueller-Price, and B.P. Bledsoe. 2008. Comparison of Stream Nitrate Uptake and Geomorphic Complexity in Agricultural and Urban Settings. Poster, *Bulletin of the North American Benthological Society (NABS 2008)*, 56th Annual Meeting, May 25-28, Salt Lake City, UT.
6. Mueller-Price, J., D.W. Baker, and B.P. Bledsoe. 2008. Influences of Sudden Changes in Physical Stream Characteristics on Nitrate Uptake in an Urban Stream. Poster, *Bulletin of the North American Benthological Society (NABS 2008)*, 56th Annual Meeting, May 25-28, Salt Lake City, UT.
7. Pyne, M.I., N.L. Poff, B.P. Bledsoe, and A.T. Herlihy. 2008. Estimation of Taxa Abundances Using a Bayesian Belief Network. Poster, *Bulletin of the North American Benthological Society (NABS 2008)*, 56th Annual Meeting, May 25-28, Salt Lake City, UT.

8. Hawley, R.J., Bledsoe, B.P. and E. Stein. 2008. A Channel Evolution Model in Response to Urbanization in Southern California. *In Proceedings of the 28th Annual American Geophysical Union Hydrology Days*, J.A. Ramirez (Editor), Abstract, Colorado State University, Fort Collins, CO, March 19-21.
9. Dust, D.W., R.J. Hawley, and B.P. Bledsoe. 2007. Observed Changes in Stream Morphology Due to Hydromodification in Southern California. *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract H43D-1616.
10. Bledsoe, B.P., D.W. Dust, and R.J. Hawley. 2007. Regional Variability of Stream Responses to Urbanization: Implications for Risk-based Assessments. *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract H52D-03 INVITED.
11. Baker, D.W., J. Mueller Price, and B.P. Bledsoe. 2007. A Multi-reach Comparison of Geomorphic Complexity and Hyporheic Exchange in Agricultural and Urban Streams. *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract H41A-0125.
12. Mueller Price, J., D.W. Baker, and B.P. Bledsoe. 2007. Effects of a Flash Flood on Physical Stream Characteristics and Nitrate Uptake in an Urban Stream. *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract H51B-0454.
13. Hawley, R.J., D.W. Dust, and B.P. Bledsoe. 2007. Channel Responses and Hydromodification in Southern California. *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract H43D-1615.
14. Baker, D.W., B.P. Bledsoe, C.M. Albano, and N.L. Poff. 2007. Ecohydraulic Effects of Flow Extraction in Rocky Mountain Streams. Poster, *Bulletin of the North American Benthological Society*, 55th Annual Meeting, June 3-8, Columbia, SC.
15. Apse, C., A.H. Arthington, B.P. Bledsoe, S.E. Bunn, D. Merritt, R.J. Naiman, N.L. Poff, B. Richter, K.H. Rogers, R. Tharme, and A.T. Warner. 2007. Ecological Limits of Hydrologic Alteration: An Approach for Setting Regional Environmental Flow Standards. Special Session, *Bulletin of the North American Benthological Society*, 55th Annual Meeting, June 3-8, Columbia, SC.
16. Mueller Price, J., D.W. Baker, and B.P. Bledsoe. 2007. Variability in Nitrate Uptake and Geomorphic Complexity in Two Segments of an Urban Stream. Poster, *Bulletin of the North American Benthological Society*, 55th Annual Meeting, June 3-8, Columbia, SC.
17. Pyne, M.I., N.L. Poff, B.P. Bledsoe, and A.T. Herlihy. 2007. Traits Versus Taxonomy: Community Composition along Environmental Gradients in Streams. Poster, *Bulletin of the North American Benthological Society*, 55th Annual Meeting, June 3-8, Columbia, SC.
18. Mueller Price, J., D.W. Baker, and B.P. Bledsoe. 2007. Reconsidering Nitrate Uptake Experiments in Streams. *In Proceedings of the 24th Annual American Geophysical Union Hydrology Days*, J.A. Ramirez (Editor), Colorado State University, Fort Collins, CO, March 19-21.
19. Baker, D.W., J. Mueller Price, and B.P. Bledsoe. 2007. The Influence of Stream Geomorphic Complexity on Hyporheic Flow Processes. *In Proceedings of the 24th Annual American Geophysical Union Hydrology Days*, J.A. Ramirez (Editor), Colorado State University, Fort Collins, CO, March 19-21.
20. Poff, N.L., B.P. Bledsoe, and C.O. Cuhaciyan. 2006. Hydrologic Variation with Land Use Across the Contiguous United States: Geomorphic and Ecological Consequences for Stream Ecosystems. *Proceedings of the 37th International Binghamton Geomorphology Symposium*, (L.A. James and W.A. Marcus, Eds.), Columbia, SC.

21. Mueller, J.S., D.W. Baker, and B.P. Bledsoe, 2006. Influences of Geomorphic Complexity and Rehabilitation on Nutrient Uptake in an Urban Stream. *Eos Trans. AGU* 87(52), Fall Meet. Suppl., Abstract B23A-1059, Vol. 87.
22. Baker, D.W., B.P. Bledsoe, C.M. Albano, and N. L. Poff, 2006. Effects of Diversion Dams on the Physical and Ecological Characteristics of Rocky Mountain Streams. *Eos Trans. AGU* 87(52), Fall Meet. Suppl., Abstract H51G-0567, Vol. 87.
23. Bledsoe, B.P. and B.S. Snyder, 2006. Predicting Flow Resistance in Mountain Streams. In *Proceedings of the 23rd Annual American Geophysical Union Hydrology Days*, J.A. Ramirez (Editor), Colorado State University, Fort Collins, CO, March 20-22, 2006.
24. David, G., B.P. Bledsoe, D.M. Merritt, and E. Wohl, 2006. Effects of Snow-making, Grading, and Timber Harvest on Stream Channel Morphology in the White River National Forest, Colorado. In *Proceedings of the 23rd Annual American Geophysical Union Hydrology Days*, J.A. Ramirez (Editor), Colorado State University, Fort Collins, CO, March 20-22, 2006.
25. Baker, D.W. and B.P. Bledsoe, 2006. Effects of Diversion Dams on Physical Characteristics. In *Proceedings of the 23rd Annual American Geophysical Union Hydrology Days*, J.A. Ramirez (Editor), Colorado State University, Fort Collins, CO, March 20-22, 2006.
26. Brown, M.C., B.P. Bledsoe, and D.A. Raff, 2006. The GeoTools Shareware Package for Fluvial Systems Analysis. In *Proceedings of the 2006 World Environmental and Water Resources Congress*, (R. Graham, Editor), Omaha, NE, May 21-25, 2006, Environmental and Water Resource Institute (EWRI), American Society of Civil Engineers ISBN 0-7844-0856-4.
27. Cuhaciyan, C.O., Bledsoe, B.P, and N.L. Poff, 2006. Hydrogeomorphic Classification of Stream Insect Assemblages of the Pacific Northwest Mountains: A GIS-Based Approach. *Bulletin of the North American Benthological Society*, 54th Annual Meeting, Anchorage, AK.
28. Albano, C.M., N.L. Poff, D.W. Baker, and B.P. Bledsoe, 2006. Macroinvertebrate community response to streamflow diversion magnitude in Rocky Mountain streams. Presented at the *Bulletin of the North American Benthological Society*, 54th Annual Meeting, Anchorage, AK.
29. David, G.C., B.P. Bledsoe, D.M. Merritt, and E. Wohl. 2005. Effects of Snow-making, Grading, and Timber Harvest on Stream Channel Morphology in the White River National Forest, Colorado. *Eos Trans. AGU* 86(52), Fall Meet. Suppl., Abstract H53D-0502.
30. Rohrer, C.A., L.A. Roesner, and B.P. Bledsoe, 2004. The Effect of Stormwater Controls on Sediment Transport in Urban Streams. In *Critical Transitions in Water and Environmental Resources Management*. World Water and Environmental Resources Conference – 2004, Salt Lake City, Utah, G. Sehlke, D.F. Hayes and D.K. Stevens (Eds.). American Society of Civil Engineers, Salt Lake City, Utah, pp. 1-13.
31. Rohrer, C.A., L.A. Roesner, and B.P. Bledsoe, 2004. The Effect of Stormwater Controls on Sediment Transport in Urban Streams. In *Proceedings of the 23rd Annual American Geophysical Union Hydrology Days*, J.A. Ramirez (Editor), Colorado State University, Fort Collins, CO, April, 2004.
32. Bledsoe, B.P., C.C. Watson, and D.S. Biedenharn. 2001. Assessment of Phosphorus Concentrations in Bank Sediments of Long Creek, MS. *ASCE Wetlands Engineering and River Restoration Conference*, Reno, NV, August 27-31, 2001.
33. Bledsoe, B.P., R.A. Anderson, B. McCaig, A.N. Flores, and C.C. Watson. 2001. Modeling Package for Assessing the Potential Effects of Land Use Change on Stream Form and Integrity. *ASCE Wetlands Engineering and River Restoration Conference*, Reno, NV, August 27-31, 2001.

34. Raff, D.A. and B.P. Bledsoe. 2001. Optimal Energy Expenditure, Discharge Skewness, and Geomorphic Effectiveness in Relation to the Area-Slope Relationship. *In Proceedings of the 21st Annual American Geophysical Union Hydrology Days*, J.A. Ramirez (Editor), Colorado State University, Fort Collins, CO, April, 2002.
35. Watson, C.C., B.P. Bledsoe, and D.S. Biedenharn. 2001. Specific Stream Power and a Risk-Based Design Approach. *ASCE Wetlands Engineering and River Restoration Conference*, Reno, NV, August 27-31, 2001.
36. Anderson, R.J. and B.P. Bledsoe. 2001. A Combined Analytical and Empirical Approach for Design of Stable Width in Channels with Vegetative Influences. *ASCE Wetlands Engineering and River Restoration Conference*, Reno, NV, August 27-31, 2001.
37. Bledsoe, B. P. and C.C. Watson. 2000. Regional Risk Analysis of Channel Instability Due to Land Use Change. *In Watershed Management 2000: Science and Engineering Technology for the New Millennium* (M. Flug and D. Frevert eds.), American Society of Civil Engineers.
38. Bledsoe, B. P. and C.C. Watson. 2000. Observed Thresholds of Stream Ecosystem Degradation in Urbanizing Areas: A Process-Based Geomorphic Explanation. *In Watershed Management 2000: Science and Engineering Technology for the New Millennium* (M. Flug and D. Frevert eds.). American Society of Civil Engineers.
39. Watson, C.C., B.P. Bledsoe, and D.S. Biedenharn. 2000. System-Level Analysis of Watershed Instability in the Yalobusha Basin, Mississippi. *In Watershed Management 2000: Science and Engineering Technology for the New Millennium* (M. Flug and D. Frevert eds.). American Society of Civil Engineers.
40. Firenzi, A.L., C.C. Watson, and B.P. Bledsoe. 2000. Stable Channel Design for Mobile Gravel Bed Rivers. *In Proceeding of the ASCE Water Resources Engineering Conference*, Minneapolis, MN, July 2000.
41. Haupt, D.M., C.J. Bruce, and B.P. Bledsoe. 1998. A Geographic Information System for Targeting Wetland Restoration. *In Wetlands Engineering and River Restoration Conference: Protecting, Restoring, and Managing the World's Water Resources*. American Society of Civil Engineers, Denver, CO, March 1998.
42. Lucas, A., E. McGee, B.P. Bledsoe, and L. Xu. 1996. Development of the Use Restoration Waters Program. *In Watershed 96 - Moving Ahead Together*, Technical Conference and Exposition. June 8-12, 1996. Baltimore, Maryland.
43. Bledsoe, B. P., J. E. Wuenschel, and L. A. Sutter. 1995. Identifying and Prioritizing Potential Wetland Restoration Sites in the Coastal Plain of North Carolina, *In Proceedings of the National Interagency Workshop on Wetlands: Technology Advances for Wetlands Science*. Technical Report, Wetlands Research and Technology Center, USACE Waterways Experiment Station, Vicksburg, MS.
44. Bledsoe, B. P. and T.H. Shear. 1995. Relationships Between Hydrologic Factors and Plant Community Types with Implications for Swamp Restoration, *In Proceedings of the National Interagency Workshop on Wetlands: Technology Advances for Wetlands Science*. Technical Report, Wetlands Research and Technology Center, USACE Waterways Experiment Station, Vicksburg, MS.
45. Shear, T.H., and B. P. Bledsoe. 1993. Relationships between plant communities, microtopography, and hydrology and implications for swamp restoration and creation. *In Proceedings of the Conference on Engineering for Wetlands Restoration*, U.S. Army Corps of Engineers, St. Louis, MO.

SELECTED REPORTS

1. Bledsoe, B., R. Hawley, and E.D. Stein. 2008. Stream channel classification and mapping systems: Implications for assessing susceptibility to hydromodification effects in southern California. Southern California Coastal Water Research Project (SCCWRP), Technical Report 562. Costa Mesa, CA. April 30, 38 pp.
2. Bledsoe, B.P. 2008. CAREER: Stream Restoration, Ecological Engineering, and Nutrient Retention of Streams in Urban and Agricultural Settings. National Science Foundation Annual Report (Award ID: 0548258), Annual Report for Period: February 2008 - January 2009, Submitted on December 23.
3. Poff, N.L., B.P. Bledsoe, and D. Dean. 2008. Linking Watershed Characteristics with Flow Regime and Geomorphic Context to Diagnose Water Quality Impairment at Multiple Spatiotemporal Scales. Report to the U.S. Environmental Protection Agency, EPA Grant Number R831367.
4. Bledsoe, B.P. 2008. Grantee Final Report, U.S. Scholar Fulbright Program. Report to the Council for International Exchange of Scholars, Grant dates February - June.
5. Bledsoe, B.P., R. Hawley and E. Stein. 2008. Channel Classification and Mapping Systems with Implications for Assessing Susceptibility to Hydromodification in Southern California. Report to the Southern California Coastal Water Research Project, Costa Mesa, CA, February, 38 p.
6. Raff, D.A, Bledsoe, B.P., A.N. Flores, and M.C. Brown. 2007. GeoTool User's Manual. Version 4 Report for posting on the Internet, July, 93 pp. + app.
7. Bledsoe, B. P., and J. Meyer. 2006. Monitoring of the Little Snake River and Tributaries, Year 5 – Final Report. Report to Three Forks Ranch Corporation and Porzak, Browning, and Bushong LLP, Boulder, CO, November, 38 pp. + app.
8. Bledsoe, B., J. Meyer, E. Holburn, C. Cuhaciyar, S. Earsom, and B. Snyder. 2005. Eagle River Inventory and Assessment. Final Report to the Eagle River Watershed Council, Colorado Dept. of Public Health and Environment, and Great Outdoors Colorado, 550 pp. + app.
9. Bledsoe, B. P., and J. Meyer. 2004. Monitoring of the Little Snake River and Tributaries, Year 4. Report to Three Forks Ranch Corporation and Porzak, Browning, and Bushong LLP, Boulder, CO, November, 32 pp. + app.
10. Bledsoe, B.P., D.A. Raff, and A.N. Flores. 2004. GeoTool User's Manual. Final Report Submitted to U.S. Army Corps of Engineers, Engineering Research and Development Center Vicksburg, MS, 88 pp. + app.
11. Bledsoe, B. P., and S.K. Carney. 2003. Monitoring of the Little Snake River and Tributaries, Year 3. Report to Three Forks Ranch Corporation and Porzak, Browning, and Bushong LLP, Boulder, CO, November, 30 pp. + app.
12. Bledsoe, B.P., and R.J. Anderson. 2002. Geomorphic Assessment of the Big Sandy River Downstream of Farson, Wyoming. Final Report to the U.S. Department of Interior, Bureau of Reclamation, 50 pp. + app.
13. Roesner, L.A., and B.P. Bledsoe. 2002. Physical Effects of Wet Weather Flows on Aquatic Habitats – Present Knowledge and Research Needs. Final Report to Water Environment Research Foundation, WERF Project Number 00-WSM-4, 250 pp.

14. Bledsoe, B. P., R.J. Anderson, S.K. Carney, C.C. Watson. 2002. Monitoring of the Little Snake River and Tributaries, Year 2. Report to Three Forks Ranch Corporation and Porzak, Browning, and Bushong LLP, Boulder, CO, August, 21 p. + app.
15. Bledsoe, B.P., R.J. Anderson, and C.C. Watson. 2001. Monitoring of the Little Snake River and Tributaries. Report Submitted to Three Forks Ranch Corporation, August 2001.
16. Bledsoe, B.P., K.A. O'Connor, C.C. Watson, and K.H. Carlson. 2000. Phosphorus Content of Streambed, Bank, and Upland Sediments: Long Creek and Johnson Creek Watersheds, Mississippi. Report Submitted to the U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, MS, November 2000.
17. Battikhi, A., B.P. Bledsoe, C.C. Watson. 2000. Benefits of Stream Stabilization in the Yazoo River Basin, Mississippi. Report Submitted to the U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, MS, November 2000.
18. Watson, C.C, B.P. Bledsoe, and C.I. Thornton. 2000. Demonstration Erosion Control Monitoring Sites 1999 Evaluation. Submitted to the U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, MS, 156 pp., October 2000.
19. Watson, C.C and B.P. Bledsoe. 1999. Demonstration Erosion Control Monitoring Sites 1998 Evaluation. Submitted to the U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, MS, 157 pp., June 1999.
20. Watson, C.C., B.P. Bledsoe, and P.B. Kozinski. 1998. Yalobusha Basin Geomorphic Assessment. Submitted to the U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, MS, 64 pp., October 1998.
21. Watson, C.C., C.I. Thornton, P.B. Kozinski, B.P. Bledsoe, et al. 1998. Demonstration Erosion Control Monitoring Sites 1997 Evaluation. Submitted to the U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, MS, 129 pp., July 1998.
22. Bledsoe, B. P., D. M. Haupt, L. A. Sutter, and J. E. Wuenschel. 1997. A Geographic Information System for Targeting Wetland Restoration. NC Dept. of Environment, Health, and Natural Resources, Division of Coastal Management, 93 pp.
23. Co-author. 1997. Neuse River Nutrient Sensitive Waters Management Strategy: Concept Paper, Fiscal Analysis, Accountability Structure, and Report of Proceedings. NC Dept. of Environment, Health, and Natural Resources, Division of Water Quality, 718 pp.
24. Co-author. 1997. Neuse River Basinwide Management Plan. NC Dept. of Environment, Health, and Natural Resources, Division of Water Quality.

SELECTED PRESENTATIONS

1. Taught courses, developed academic curricula, advised students, conducted research, and lectured at the Centro EULA de Chile, Universidad de Concepción in Chile in fulfillment of the Fulbright Scholar Grant, February - June 2008.
2. Presented invited presentation on Environmental Flows (Non-consumptive Needs Assessments), during the Colorado Basin Roundtables in Glenwood Springs, Colorado, on December 17, 2007.
3. Presented invited paper entitled Regional Variability of Stream Responses to Urbanization: Implications for Risk-based Assessments, at the AGU Fall Meeting, San Francisco, California, December 12-14, 2007.

4. David, G.C., B.P. Bledsoe, D.M. Merritt, and E. Wohl. 2007. Poster: Effects of Snow-making, Grading, and Timber Harvest on Stream Channel Morphology in the White River National Forest, Colorado. Boulder Climate Workshop, Boulder, CO.
5. Mueller Price, J., D.W. Baker, and B.P. Bledsoe. 2007. Reconsidering Nitrate Uptake Experiments in Streams. 24th Annual American Geophysical Union Hydrology Days, Colorado State University, Fort Collins, CO.
6. Baker, D.W., J. Mueller Price, and B.P. Bledsoe. 2007. The Influence of Stream Geomorphic Complexity on Hyporheic Flow Processes. 24th Annual American Geophysical Union Hydrology Days, Colorado State University, Fort Collins, CO.
7. Baker, D.W., B.P. Bledsoe, C.M. Albano, and N.L. Poff. 2007. Ecohydraulic Effects of Flow Extraction in Rocky Mountain Streams. Poster, North American Benthological Society, 55th Annual Meeting, June 3-8, Columbia, SC.
8. Apse, C., A.H. Arthington, B.P. Bledsoe, S.E. Bunn, D. Merritt, R.J. Naiman, N.L. Poff, B. Richter, K.H. Rogers, R. Tharme, and A.T. Warner. 2007. Ecological Limits of Hydrologic Alteration: An Approach for Setting Regional Environmental Flow Standards. Special Session, North American Benthological Society, 55th Annual Meeting, June 3-8, Columbia, SC.
9. Mueller Price, J., D.W. Baker, and B.P. Bledsoe. 2007. Variability in Nitrate Uptake and Geomorphic Complexity in Two Segments of an Urban Stream. Poster, North American Benthological Society, 55th Annual Meeting, June 3-8, Columbia, SC.
10. Pyne, M.I., N.L. Poff, B.P. Bledsoe, and A.T. Herlihy. 2007. Traits Versus Taxonomy: Community Composition along Environmental Gradients in Streams. Poster, North American Benthological Society, 55th Annual Meeting, June 3-8, Columbia, SC.
11. Bledsoe, B.P. 2006. Invited Keynote Speaker: Innovations in Urban Development. Invited Keynote Speaker at the Cochrane Low Impact Development Conference, sponsored by the Cochrane Environmental Action Committee (CEAC), Cochrane, Alberta, Canada, October 18-20.
12. Invited Panelist / Speaker at The Nature Conservancy's International Environmental Flows Workshop in Half Moon Bay, CA, August 6-9, 2006.
13. Invited Speaker at the NSF-funded Wingspread Workshop on Urban Water: Cities of the Future: Creating Blue Water in Green Cities, in Racine, WI, July 12-14, 2006.
14. Bledsoe, B.P. 2005. Risk-Based Channel Stability Analysis for Urbanizing Watersheds. Invited Presentation to the California Stormwater Quality Association 2005 Conference, Ontario, CA, October 3-5.
15. Bledsoe, B.P. and N.L. Poff. 2005. Hydrogeomorphic Classification and Functional Composition of Benthic Communities in the Pacific Northwest Mountains. Joint Assembly of the American Geophysical Union and North American Benthological Society, New Orleans, LA, May 23-27.
16. Cuhaciyian, C.O., B.P. Bledsoe, J.D. Olden, and N.L. Poff. 2005. Hydrogeomorphic Classification of Benthic Macroinvertebrate Assemblages in the Pacific Northwest Mountains. Joint Assembly of the American Geophysical Union and North American Benthological Society, New Orleans, LA, May 23-27.
17. Holburn, E.R., C.O. Cuhaciyian, B.P. Bledsoe, and N.L. Poff. 2005. Explanatory Power of Multi-scale Physical Descriptors in Modeling Benthic Indices Across Nested Ecoregions of the Pacific Northwest. Joint Assembly of the American Geophysical Union and North American Benthological Society, New Orleans, LA, May 23-27.

18. Hurst, B.E., B.P. Bledsoe, C.M. Albano, and N.L. Poff. 2005. Conditional Probability Approach for Assessing Fine Sediment Impacts on Aquatic Insects. Joint Assembly of the American Geophysical Union and North American Benthological Society, New Orleans, LA, May 23-27.
19. Albano, C.M., B. E. Hurst, N.L. Poff, and B.P. Bledsoe. 2005. The independent and interactive effects of reduced streamflow and fine sediment deposition on macroinvertebrate community structure and function. Joint Assembly of the American Geophysical Union and North American Benthological Society, New Orleans, LA, May 23-27.
20. Olson, K.D., B.P. Bledsoe, and C.O. Cuhaciyian. 2005. An Adaptive GIS Algorithm for Neighborhood Analysis of Hydrologic Networks, presented at the 18th annual GIS in the Rockies Conference, Denver, Colorado. Poster Award, 1st Place.
21. Meyer, J. and B.P. Bledsoe. 2005. A River Restoration Case Study: Three Forks of the Little Snake River, Colorado. 25th Annual American Geophysical Union Hydrology Days, Colorado State University, Fort Collins, CO.
22. Olson, K.D., C.O. Cuhaciyian, and B.P. Bledsoe. 2005. Mapping Stream Habitat Heterogeneity Using a Flexible Neighborhood Analysis Algorithm. 25th Annual American Geophysical Union Hydrology Days, Colorado State University, Fort Collins, CO.
23. Hurst, B.E. and B.P. Bledsoe. 2005. A Probabilistic Approach for Assessing Effects of Deposited Fine Sediment on Aquatic Insects. 25th Annual American Geophysical Union Hydrology Days, Colorado State University, Fort Collins, CO.
24. Cuhaciyian, C.O., J.D. Olden, B.P. Bledsoe, and N.L. Poff. 2005. Multi-Scale Environmental Filters of Benthic Invertebrate Communities in Mountainous Ecoregions of Oregon and Washington. 25th Annual American Geophysical Union Hydrology Days, Colorado State University, Fort Collins, CO.
25. Holburn, E.R., B.P. Bledsoe, C.O. Cuhaciyian, and N.L. Poff. 2005. Scale-dependent Relevance of Watershed, Valley, and Reach Descriptors to Benthic Indices Across Nested Ecoregions of the Pacific Northwest. 25th Annual American Geophysical Union Hydrology Days, Colorado State University, Fort Collins, CO.
26. Raff, D.A. and B.P. Bledsoe. 2004. Geomorphology Toolbox for Assessing the Potential Effects of Land-use Change and Management Practices on Stream Form and Integrity. American Geophysical Union Fall Meeting, San Francisco, CA.
27. Carney, S.K., B.P. Bledsoe, D. Gessler. 2004. Computational Fluid Dynamics Investigation of the Influence of Bank Vegetation on Open Channel Flow. AWRA Summer Specialty Conference, Riparian Ecosystems and Buffers: Multi-Scale Structure, Function, and Management, Olympic Valley, CA.
28. Poff, N.L., B.P. Bledsoe, J.D. Olden, and C.O. Cuhaciyian. 2004. Constructing a hierarchical filtering model to predict functional composition of benthic communities across multi-scaled environmental gradients. North American Benthological Society Annual Meeting, Vancouver, British Columbia.
29. Bledsoe, B.P., D.A. Raff. 2004. GeoTool: A Modeling Toolbox for Geomorphic Analysis. Proceedings of the 24th Annual American Geophysical Union Hydrology Days, J.A. Ramirez (Ed.), Colorado State University, Fort Collins, CO.
30. Carney, S.K., B.P. Bledsoe. 2004. Representing the Bed Roughness of Gravel Bed Rivers in Computational Fluid Dynamics. Proceedings of the 24th Annual American Geophysical Union Hydrology Days, J.A. Ramirez (Ed.), Colorado State University, Fort Collins, CO.

31. Meyer, J., C.O. Cuhaciyan, B.P. Bledsoe. 2004. A Geomorphic Assessment of the Eagle River at Camp Hale. Proceedings of the 24th Annual American Geophysical Union Hydrology Days, J.A. Ramirez (Ed.), Colorado State University, Fort Collins, CO.
32. Sanborn, S.C., B.P. Bledsoe. 2004. Predicting Flow Regime for Ungauged Streams in CO, WA, and OR. Proceedings of the 24th Annual American Geophysical Union Hydrology Days, J.A. Ramirez (Ed.), Colorado State University, Fort Collins, CO.
33. Cuhaciyan, C.O., S.C. Sanborn, B.P. Bledsoe. 2004. Mapping Aquatic Habitat Characteristics in Stream Networks. Proceedings of the 24th Annual American Geophysical Union Hydrology Days, J.A. Ramirez (Ed.), Colorado State University, Fort Collins, CO.
34. Poff, N.L., J.D. Olden, B.P. Bledsoe. 2004. Using ecoinformatics tools to model hierarchically-structured aquatic ecosystems with implications for conservation. Fourth Conference of the International Society for Ecological Informatics in Busan (Pusan), Korea, October 24–28.
35. Rohrer, C.A., L. A. Roesner, B.P. Bledsoe. 2004. The Effect of Stormwater Controls on Sediment Transport in Urban Streams. ASCE World Water Congress 2004-Critical Transitions in Water and Environmental Resources Management. G. Sehlke, D.F. Hayes, D.K. Stevens - Editors, June 27 - July 1, 2004, Salt Lake City, UT.
36. Bledsoe, B.P., Flores, A.N., Sanborn, S.C., and Cuhaciyan, C.O. 2003. Multi-scale Factors Influencing Stream Substrate Size Within and Among Watersheds. American Geophysical Union Fall Meeting, San Francisco, CA.
37. Cuhaciyan, C.O., Sanborn, S.C., and Bledsoe, B.P. 2003. Mapping Stream Hydrogeomorphic and Disturbance Regimes Throughout Drainage Networks. American Geophysical Union Fall Meeting, San Francisco, CA.
38. Bledsoe, B.P, Flores, A.N., Poff N.L., and Cuhaciyan, C.O. 2003. Prediction of Local Stream Habitat Attributes with Spatial Analysis of Watershed-Scale Data. Bulletin of the North American Benthological Society 20(1):382, 51st Annual Meeting, Athens, GA.
39. Poff, N.L., Bledsoe, B.P., Olden, J.D., and Flores, A.N. 2003. Functional organization of benthic macroinvertebrate communities along multi-scale environmental gradients. Bulletin of the North American Benthological Society 20(1):185, 51st Annual Meeting, Athens, GA.
40. Carney, S.K., Bledsoe, B.P., and Gessler, D. 2003. Shear stress distributions in streams with high bank roughness. Proceedings of the 23rd Annual American Geophysical Union Hydrology Days, J.A. Ramirez (Ed.), Colorado State University, Fort Collins, CO.
41. Flores, A.N. and Bledsoe, B.P. 2003. Depicting channel reaches at sub-link scales using digital elevation models. Proceedings of the 23rd Annual American Geophysical Union Hydrology Days, J.A. Ramirez (Ed.), Colorado State University, Fort Collins, CO.
42. Sanborn, S.C. and Bledsoe, B.P. 2003. Predicting Flow Regime for Ungauged Streams in the Western United States. Proceedings of the 23rd Annual American Geophysical Union Hydrology Days, J.A. Ramirez (Ed.), Colorado State University, Fort Collins, CO.
43. Cuhaciyan, C.O., Sanborn, S.C., and Bledsoe, B.P. 2003. Predicting Bed Material In Stream Networks. Proceedings of the 23rd Annual American Geophysical Union Hydrology Days, J.A. Ramirez (Ed.), Colorado State University, Fort Collins, CO.
44. Poff, N.L., J.D. Olden, D.M. Pepin, B.P. Bledsoe. 2003. Placing Global Streamflow Variability in Geographic and Geomorphic Contexts. NISORS: Ninth International Conference on River Research and Applications, July 6-11, New South Wales, Australia.

45. Bledsoe, B.P. 2003. Stream Restoration and Water Quality. Colorado Nonpoint Source Forum, Glenwood Springs, CO.
46. Flores, A.N., and Bledsoe, B. P. 2002. Application of Hack's Law to Predict In-channel Features of Ecological Interest with Coarse Scale Watershed Variables. Proceedings of the 22nd Annual American Geophysical Union Hydrology Days, J.A. Ramirez (Ed.), Colorado State University, Fort Collins, CO, April 1-4, 2002.
47. Bledsoe, B.P. 2002. Energy-Based Indicators of Network Structure and Channel Stability: Status and Prospect. Proceedings of the 22nd Annual American Geophysical Union Hydrology Days, J.A. Ramirez (Ed.), Colorado State University, Fort Collins, CO, April 1-4, 2002.
48. Flores, A.N., and Bledsoe, B.P. 2002. Watershed-Scale Implications of Hack's Slope-Drainage Area Relationship and Application to the Prediction of In-Channel Features of Ecological Interest. Geological Society of America 2002 Denver Annual Meeting, October 27-30, 2002.
49. Bledsoe, B.P. et al. 2002. Hydrogeomorphic Classification of Western Streams for Ecological Assessment. American Geophysical Union Fall Meeting, San Francisco, CA, December 6-10.
50. Flores, A. N. and B.P. Bledsoe 2002. Investigating Spatial Variability in Channel Slope and Flow Energy Within and Among Watersheds. American Geophysical Union Fall Meeting, San Francisco, CA, December 6-10.
51. Bledsoe, B.P., N.L. Poff, and E.E. Wohl. 2002. Multi-scale classification of western streams. Presented at the 2002 EMAP Symposium: The Condition of Our Nation's Streams and Rivers from the Mountains to the Coast, Kansas City, Missouri, May 7-9.
52. Flores, A.N. and B.P. Bledsoe. 2002. Application of Hack's law to predict in-channel features of ecological interest with coarse scale watershed variables. Proceedings of the 22nd Annual American Geophysical Union Hydrology Days, J.A. Ramirez (Ed.), Colorado State University, Fort Collins, CO, April 1-4.
53. Bledsoe, B.P. 2001. Invited Presentation to USEPA Workshop on Reference Conditions for Western Streams and Rivers. February 13-15, 2001, Phoenix, AZ.
54. Bledsoe, B.P. 2001. Invited Presentation to United Engineering Foundation Conference on Linking Stormwater BMP Designs and Performance to Receiving Water Impacts Mitigation. Wetlands 2001 Wetlands Engineering and River Restoration, August 19-24, Snowmass, CO.
55. Bledsoe, B.P., C.C. Watson, and D. Biedenharn. 2001. Assessment of Phosphorus Concentrations in Bank Sediments of Long Creek, MS. ASCE Wetlands Engineering and River Restoration Conference 2001 Proceedings, D. F. Hayes - Editor, August 27-31, 2001, Reno, NV.
56. Bledsoe, B.P. 2000, 2001. Stream Corridor Restoration: Functions, Dynamic Equilibrium, and Human Impacts. Invited Workshop Presentation for the US Environmental Protection Agency – Region 8, Denver, CO.
57. Bledsoe, B.P. 1999. Linking Fluvial Geomorphology and the Clean Water Act. Invited Presentation to the Colorado Department of Public Health and Environment, Denver, CO.
58. Bledsoe, B.P. 1998. Linking Fluvial Geomorphology and the Clean Water Act. Invited Presentation to the Colorado Department of Public Health and Environment, Denver, CO.
59. Bledsoe, B.P., B. A. McGee, and A. M. Lucas. 1996. The Use Restoration Waters Program in North Carolina. Presentation to the American Water Resources Assoc. Conference on *Watershed Restoration Management: Physical, Chemical, and Biological Considerations*. Syracuse, NY.

60. Bledsoe, B.P. 1992. Relationships Between Hydrologic Regimes and Plant Community Types: Applications in Creating and Restoring Forested Wetlands. Presentation to the Society for Ecological Restoration Annual Conference, Waterloo, Ontario.

SERVICE AND PROFESSIONAL ACTIVITIES

- Co-founder and Faculty Advisor of Engineers Without Borders CSU Chapter
- Member of the American Society of Civil Engineers
- Member of the American Geophysical Union
- Member of the American Water Resources Association
- Member of the American Society for Engineering Education
- Member of the American Ecological Engineering Society
- Reviewer for *Water Resources Research*, *Journal of Hydraulic Engineering*, *Journal of Hydrologic Engineering*, *Journal of the American Water Resources Association*, *Freshwater Biology*, *Journal of the North American Benthological Society*, *Journal of Environmental Quality*, *Journal of Hydrology*, *Hydrological Sciences Journal*, *Geomorphology*, and John Wiley & Sons
- Invited Member of Scientific Advisory Board on Suspended and Bedded Sediments for the U.S. Environmental Protection Agency – Office of Water
- Invited Panelist for Peer-Review of the Environmental Monitoring and Assessment Program (EMAP) Research Strategy for the U.S. Environmental Protection Agency – Office of Research and Development
- Invited Panelist for Peer-Review of Development of National Aquatic Ecosystem Classifications and Reference Conditions - 2001 Science to Achieve Results (STAR) Program – U.S. Environmental Protection Agency
- Proposal Reviewer for National Science Foundation
- Volunteer Mentor for Students as Leaders in Engineering and the Women and Minorities in Engineering Program at Colorado State University
- Volunteer Project Mentor for Senior Design Groups in Civil Engineering
- Volunteer for the Colorado Alliance of Minority Participation
- Volunteer for the Native American Student Services Summer Youth Experience
- Volunteer Scientist for The Nature Conservancy and Eagle River Watershed Council
- Invited expert Panelist on the future of the Cache la Poudre River for the City of Fort Collins, CO (2007-2008).

AWARDS

- 2009, Outstanding Mid-Career Faculty Member, College of Engineering, Colorado State University.
- 2008, Fulbright Scholar in Chile, Department of State - Fulbright Commission. Fulbright Scholar grant at the Centro EULA de Chile, Universidad de Concepción in Chile: conducted river research, lectured on watershed management, and participated in an interdisciplinary seminar focused on hydropower and environmental flows that balance ecosystem and human needs.
- 2007, Outstanding Faculty Performance Award, Department of Civil and Environmental Engineering, Colorado State University, Fort Collins, CO
- 2007, International Service Award, College of Engineering, Colorado State University, Fort Collins, CO
- 2006, Selected as the Borland Chair of Hydraulics, Department of Civil and Environmental Engineering, Colorado State University, Fort Collins, CO

- 2006, NSF CAREER Award: Stream Restoration, Ecological Engineering, and Nutrient Retention of Streams in Urban and Agricultural Settings, National Science Foundation, Washington, DC.
- 2006, Exceptional Achievement in Service and Experiential Learning Award, Engineers without Borders, Colorado State University, Fort Collins, CO
- 2006, Awarded a \$1,700 Service-Learning Mini-Grant for the: El Salvador Water Project, Service Integration Project, Colorado State University, Fort Collins, CO
- 2005, Best Poster Award for: An Adaptive GIS Algorithm for Neighborhood Analysis of Hydrologic Networks, by K.D. Olson, B.P. Bledsoe, and C.O. Cuhaciyian, 18th Annual GIS in the Rockies Conference, Denver, CO
- 2003, Outstanding Faculty Performance Award, Colorado State University, Fort Collins, CO
- 2003, Certificate of Appreciation – Office of International Programs, Colorado State University, Fort Collins, CO
- 2001, Top 10 Downloaded Paper in *Geomorphology*

GRADUATE STUDENTS ADVISED

Russ Anderson (M.S. completed, GRA)
Dan Baker (Ph.D. completed, GRA)
Amer Battikhi (M.S. completed)
Michael Brown (M.S. completed, GRA)
Andrew Bryden (M.S. completed)
Shaun Carney (M.S. completed, GRA)
Erick Carlson (M.S. in progress GDPE, GRA)
Christopher Cuhaciyian (Ph.D. completed, GRA and Post-doc)
William deRossett (M.S. in progress)
David Dust (Ph.D. in progress, GRA)
Alejandro Flores (M.S. completed, GRA)
Brian Haines (M.S. in progress)
Robert Hawley (Ph.D. completed, GRA)
Elaina Holburn (M.S. completed, GRA)
Blair Hurst (M.S. completed, GRA)
Brian McCaig (M.S. completed)
John Meyer (M.S. completed, GRA)
Gabriel Miller (M.S. completed, GRA)
Jennifer Mueller Price (Ph.D. in progress, GRA)
Radley Ott (M.S. completed)
Kevin Pilgrim (M.S. completed)
David Pizzi (M.S. completed, GRA)
Steve Sanborn (M.S. completed, GRA)
Ben Snyder (M.S. completed)
Christy Wilson (M.S. completed)
Steve Yochum (Ph.D. in progress, GRA)