



Brenda Schladweiler

president
principal scientist

Brenda has owned and operated **BKS ENVIRONMENTAL ASSOCIATES, INC.** for over 30 years. She specializes in soil and vegetation assessments, reclamation design and monitoring, wetland delineations, threatened and endangered (T&E) plant species and habitat surveys, and environmental compliance.

COMPANY

Since incorporation in Wyoming in 1981, **BKS ENVIRONMENTAL ASSOCIATES, INC.** (BKS) has earned a trusted and respected reputation as one of the leading companies offering environmental services for the extraction industries including coal, oil & gas, uranium, and other mining industries. BKS specializes in Soils, Vegetation, Wetland & Wildlife Surveys, as well as Reclamation Design and Monitoring. We provide environmental services, not only in Wyoming, but throughout the Western United States.

EXPERIENCE

1982 - Present

PRESIDENT/PRINCIPAL SCIENTIST – BKS Environmental Associates, Inc., Gillette, WY, Rock Springs, WY and Dickinson, ND

2013 - Present

UNIVERSITY OF WYOMING ADJUNCT PROFESSOR – Laramie, WY

2011 - Present

WYOMING RECLAMATION & RESTORATION CENTER LIAISON – Laramie, WY

1982

PROJECT COORDINATOR – Anaconda Minerals Company, Denver, CO

1980 - 1982

ASSOCIATE ENVIRONMENTAL COORDINATOR – ARCO Coal Company, Coal Creek Mine, Wright, WY

1980

RANGE SPECIALIST – Energy Fuels, Kerr Coal Company, Walden, CO

1979

ENVIRONMENTAL TECHNICIAN – Thunder Basin Coal Company, Black Thunder Mine, Wright, WY



EDUCATION

2003

Ph.D., SOIL SCIENCE – University of Wyoming, Laramie, WY

- + Dissertation: Soil & Plant Responses to Variable Topsoil Replacement Depths at a Coal Mine in Northeastern Wyoming. Research was conducted at the North Antelope/Rochelle Mine southeast of Wright, WY.

1995

M.S., SOIL SCIENCE – University of Wyoming, Laramie, WY

- + Thesis: Relationship between Soil Selenium Concentration and Selenium Uptake by Vegetation on Surface Coal Mine Lands in Wyoming.

1980

BACHELOR OF SCIENCE – Colorado State University, Fort Collins, CO
Range Management (Land Rehabilitation)

CERTIFICATES

2018

COMMERCIAL PESTICIDE APPLICATOR Wyoming Department of Agriculture

2018

HAZWOPER Hazardous Waste Site Worker Refresher

2018

REGISTERED PROFESSIONAL IN SOIL SCIENCE Minnesota

2017

ARCPAC Soil Science Society of America Certified Professional Soil Scientist

2017

MSHA Experienced Miner 8hr Annual Refresher

2013

NORTH DAKOTA PROFESSIONAL SOIL CLASSIFIER

2013

T & E PLANT SURVEYS State of Wyoming Abandoned Mine Program

2011

NRCS Technical Service Provider for Nutrient and Pest Management

2010

LEADERSHIP WYOMING

2010

NRCS Technical Service Provider for Grazing Plans

2010

SAFELAND USA TRAINING

CERTIFIED STATE MINE INSPECTOR TRAINING

CPRM Certified Carbon Verifier

OSHA General Industry 10hr Course

OSHA Hazardous Waste/Supervisor

WETLAND DELINEATOR Omaha & Sacramento Districts, U.S. Corps of Engineers

MEMBERSHIPS

AMERICAN SOCIETY OF MINING AND RECLAMATION-NATIONAL PRESIDENT (2015-2016)

ASSOCIATION OF WOMEN SOIL SCIENTISTS

COUNCIL OF SOIL SCIENCE EXAMINERS (SSSA) – 3 YEARS ONLY

GREAT PLAINS NATIVE PLANT SOCIETY

INTERNATIONAL EROSION CONTROL ASSOCIATION

MINING ASSOCIATES OF WYOMING

PETROLEUM ASSOCIATION OF WYOMING

SOCIETY FOR MINING, METALLURGY AND EXPLORATION

SOCIETY FOR RANGE MANAGEMENT

SOIL SCIENCE SOCIETY OF AMERICA

SOIL & WATER CONSERVATION SOCIETY



MEMBERSHIPS
(CONT.)

WESTERN SOCIETY OF SOIL SCIENCE
WYOMING NATIVE PLANT SOCIETY
WYOMING WEED MANAGEMENT ASSOCIATION

PUBLICATIONS

- 2018 **40 YEARS OF SURFACE MINING CONTROL AND RECLAMATION ACT (SMCRA): WHAT HAVE WE LEARNED IN THE STATE OF WYOMING.** Schladweiler, B.K. International Journal of Coal Science & Technology. Submitted January 2018, in review.
- 2011 **DETERMINING RECLAMATION POTENTIAL FOR STEEP OIL AND GAS SITES IN THE POWDER RIVER BASIN, WYOMING.** Schladweiler, B.K. and D.M. Gardner. 2011. National Meeting of the American Society of Mining and Reclamation, Bismarck, ND. Reclamation: Sciences Leading to Success June 11-16, 2011.
- 2010 **COMPARISON OF THREE VEGETATION SAMPLING METHODS ON OIL AND GAS SITES IN SOUTHWESTERN WYOMING.** Schladweiler, B. and C. Adams. 2010. Presented at the 2010 National Meeting of the American Society of Mining and Reclamation, Pittsburgh, PA, Bridging Reclamation, Science, and the Community. June 8, 2010.
- 2009 **COMPARISON OF COAL MINE RECLAMATION UNDER THE SURFACE MINING CONTROL AND RECLAMATION ACT OF 1977 AND OIL AND GAS SITES IN WYOMING.** Schladweiler, B.K. 2009. American Society of Mining and Reclamation. Billings, Montana.
- 2007 **ONGOING EVALUATION OF EFFECTS FROM VARIABLE TOPSOIL DEPTHS AT A COAL MINE IN NORTHEASTERN WYOMING AMERICAN SOCIETY OF MINING AND RECLAMATION.** Schladweiler, B.K. 2007. Gillette, Wyoming
- 2005 **TOPSOIL DEPTH EFFECTS ON RECLAIMED COAL MINE AND NATIVE AREA VEGETATION IN NORTHEASTERN WYOMING.** Schladweiler, B.K., G.F. Vance, D.E. Legg, L.C. Munn, and R. Haroian. 2005. Rangeland Ecology & Management *Bik* 58:167 – 176.
- 2005 **ONGOING EVALUATION OF EFFECTS FROM VARIABLE TOPSOIL DEPTHS AT A COAL MINE IN NORTHEASTERN WYOMING.** Schladweiler, B.K., G.F. Vance, D.E. Legg, and S. Belden, 2005. 2005. National Meeting of the American Society of Mining and Reclamation.
- 2004 **INFLUENCE OF VARIABLE TOPSOIL REPLACEMENT DEPTHS ON SOIL CHEMICAL PARAMETERS WITHIN A COAL MINE IN NORTHEASTERN WYOMING.** Schladweiler, B.K., G.F. Vance, D.E. Legg, L.C. Munn, and R. Haroian. 2004. Arid Land Research and Management. Vol. 18:347 – 358.

**PUBLICATIONS
(CONT.)**

- 2002 **INFLUENCE OF VARIABLE TOPSOIL REPLACEMENT DEPTHS ON SOIL AND PLANT CHARACTERISTICS AT A COAL MINE IN NORTHEASTERN WYOMING.** Schladweiler, B.K., G.F. Vance, and R. Haroian. 2002. American Society of Mining and Reclamation. Lexington, Kentucky. Pg. 1157.
- 1997 **SELENIUM IN THE ENVIRONMENT: SOIL/GEOLOGY, VEGETATION, AND ANIMAL SCIENCE RESEARCH.** Vance, G.F., C.P. Skinner, B.K. Schladweiler, and J. A. Young. 1997. U.S. Army, Fort Carson DECAM Research Report, Colorado Springs, CO. 45pp.
- 1997 **HYDRIC SOILS AND THEIR RELATIONSHIP TO PLANT BIODIVERSITY WITHIN RECLAIMED STREAM CHANNELS IN SEMI-ARID ENVIRONMENTS.** Schladweiler, B.K., G.F. Vance, D.E. Legg, and S. Rexroat. 1997. *Agronomy Abstracts*, 89:315.
- 1996 **VEGETATION DIVERSITY WITHIN NATIVE AND RECLAIMED COAL MINE SITES: ENVIRONMENTAL FACTORS AND SEASONAL VARIABILITY.** Schladweiler, B.K., and G.F. Vance. 1996. *American Society of Surface Mining and Reclamation Proceedings*, Knoxville, Tennessee Vol. 13:472 – 483.
- 1995 **REGRESSION ANALYSIS TO PREDICT SELENIUM LEVELS AT TWO SURFACE COAL MINES IN THE POWDER RIVER BASIN, WYOMING.** Schladweiler, B.K., G.F. Vance, D.E. Legg, and C. Bilen. 1995. *Decades Later: A Time for Reassessment*. American Society of Surface Mining and Reclamation, Princeton, WV. Bol. I: 246 – 257.
- 1995 **RELATIONSHIP BETWEEN SOIL SELENIUM CONCENTRATIONS AND SELENIUM UPTAKE BY VEGETATION ON SURFACE COAL MINE LANDS IN WYOMING.** Schladweiler, B.K., G.F. Vance, R.N. Pasch, P.K. Carroll, M.S. Page, D.L. Bonett and S.E. Williams. 1995. *American Society of Surface Mining and Reclamation Abstracts*, p.861.
- 1994 **RELATIONSHIP BETWEEN SOIL SELENIUM CONCENTRATIONS AND SELENIUM UPTAKE BY VEGETATION ON SURFACE COAL MINE LANDS IN WYOMING.** Vance, G.F., R.N. Pasch, P.K. Carroll, M.S. Page, and B.K. Schladweiler. 1991-1994. *Proceedings of the First, Second, Third, Fourth, Fifth, and Sixth Abandoned Coal Mine Lands Research Meeting*. Sheridan, Gillette, Kemmerer, and Laramie, Wyoming, 24 pp.
- 1993 **RELATIONSHIP BETWEEN SOIL SELENIUM CONCENTRATIONS, & SELENIUM UPTAKE BY VEGETATION ON SURFACE COAL MINE LANDS IN WYOMING.** Schladweiler, B.K., G.F. Vance, R.N. Pasch, P.K. Carroll, M.S. Page, D.L. Bonett, S. E. Williams. 1993. *Billings Reclamation Symposium*. Office of Surface Mining. Vol. I: 119 – 130.



PUBLICATIONS (CONT.)

- 1993 **COMPARISON OF SELENIUM UPTAKE BY VEGETATION ON SURFACE COAL MINE LANDS IN WYOMING AND SEASONAL VARIABILITY OF UPTAKE.** Schladweiler, B.K., G.F. Vance, R.N. Pasch, P.K. Carroll, M.S. Page, D.L. Bonett, & S.E. Williams. 1993. American Society of Surface Mining and Reclamation. Vol. II: 828 – 838.
- 1993 **COMPARISON OF SELENIUM UPTAKE BY VEGETATION ON SURFACE COAL MINE LAND IN WYOMING AND SEASONAL VARIABILITY OF UPTAKE.** Schladweiler, B.K., G.F. Vance, P.K. Carroll, M.S. Page, AP. Wanek, D.L. Bonett, R.N. Pasch, and S.E. Williams. 1993. American Society of Surface Mining Reclamation Abstracts. P. 36.
- 1992 **EVALUATION OF VARIOUS SELENIUM EXTRACTION METHODS FOR CORRELATING SOIL/BACKFILL LEVELS TO PLANT CONCENTRATIONS.** Vance, G.F., R.N. Pasch, D.L. Bonett, B.K. Schladweiler, P.K. Carroll and M.S. Page. 1992. Agronomy Abstracts, p.246.
- 1992 **RELATIONSHIP BETWEEN SOIL SELENIUM CONCENTRATIONS AND SELENIUM UPTAKE BY VEGETATION ON SURFACE COAL MINE LANDS IN WYOMING.** Pasch, R.N., G.F. Vance, S.E. Williams, M.S. Page, P.K. Carroll, and B.K. Schladweiler. 1992. Abandoned Coal Mine Lands Research Meeting, Gillette, Wyoming.

PRESENTATIONS

- 2017 **40 YEARS OF AMCRA: WHAT HAVE WE LEARNED IN THE STATE OF WYOMING.** B.K. Schladweiler. 2017 Second International Symposium on Land Reclamation and Ecology Restoration, Xi'an, China. Hosted by China Coal Society and China University of Mining and Technology(Beijing), October 20-23, 2017.
- 2016 **INVESTIGATION INTO ESD DATA AS POTENTIAL VEGETATION REFERENCE AREAS IN OIL AND GAS DEVELOPMENT.** B.K. Schladweiler, A.D. Sisel, and D.M. Gardner. 2016. 2016 Rawlins Industry Meeting, Rawlins, WY. October 12, 2016.
- 2015 **COMPARISON OF POINT LINE INTERCEPT AND SAMPLEPOINT DATA COLLECTION METHODS FOR TOTAL VEGETATION COVER, TOTAL GROUND COVER, AND TIME REQUIREMENTS ON RECLAIMED SITES IN WYOMING.** Wood, C., C. Adams, and B. Schladweiler. 2015. National Meeting of the American Society of Mining and Reclamation, Lexington, KY, June 7-11, 2015.
- 2014 **RECLAMATION IN SOUTHEASTERN WYOMING: BEAUTY IS IN THE EYE OF THE BEHOLDER.** Schladweiler, B. 2014. National Meeting of the American Society of Mining and Reclamation, Oklahoma City, OK, Exploring New Frontiers in Reclamation, June 14-21, 2014.



PRESENTATIONS
(CONT.)

- 2013 **LONG-TERM COMPARISON OF VEGETATION REFERENCE AREA ON RECLAIMED COAL MINES IN NORTHEASTERN WYOMING.** Schladweiler, B., C. Adams, and M. Kasten. 2013. National Meeting of the American Society of Mining and Reclamation, Laramie, WY. Reclamation: Sciences Leading to Success June 1-6, 2013.
- 2013 **SOIL AMENDMENT APPLICATIONS DURING DROUGHT PERIODS ON OIL AND GAS SITES IN WYOMING.** Cox, L., M. Kasten, and B. Schladweiler. 2013. National Meeting of the American Society of Mining and Reclamation, Laramie, WY. Reclamation: Sciences Leading to Success June 1-6, 2013.
- 2013 **COMPARISON OF BASAL AND AERIAL COVER FOR TOTAL VEGETATION COVER AND TOTAL GROUND COVER ON OIL AND GAS SITES IN WYOMING.** Adams, C. and B.K. Schladweiler. 2013. National Meeting of the American Society of Mining and Reclamation, Laramie, WY. Reclamation: Sciences Leading to Success June 1-6, 2013.
- 2013 **SOIL MANAGEMENT- LINEAR DISTURBANCES.** Brenda K. Schladweiler. 2013. Pipeline Reclamation Workshop, Sidney, MT.
- 2013 **IT BEGINS WITH THE SOIL.** Brenda K. Schladweiler. 2013. Wyoming Weed Management Association, Casper, WY.
- 2012 **TOPSOIL MANAGEMENT ISSUES RELATED TO ENERGY DEVELOPMENT.** Brenda K. Schladweiler. 2012. Colorado Oil and Gas Association, Denver, CO.
- 2012 **SOIL AMENDMENT APPLICATIONS DURING DROUGHT PERIODS.** Brenda K. Schladweiler. 2012. Petroleum Association of Wyoming, Casper, WY.
- 2012 **RECLAMATION IMPLICATION OF OVERLAPPING INDUSTRIES IN SOUTHERN CAMPBELL COUNTY, WY.** Brenda K. Schladweiler and Lisa Cox. 2012. American Society of Mining and Reclamation, Tupelo, MS.
- 2011 **DETERMINING RECLAMATION POTENTIAL FOR STEEP OIL AND GAS SITES IN THE POWDER RIVER BASIN, WYOMING.** Brenda K. Schladweiler and Dawn. M. Gardner. 2011. American Society of Mining and Reclamation, Bismarck, ND.
- 2010 **COMPARISON OF THREE VEGETATION SAMPLING METHODS ON OIL AND GAS SITES IN SOUTHWESTERN WYOMING.** Schladweiler, B. and C. Adams. 2010. American Society of Mining and Reclamation, Pittsburgh, PA.
- 2009 **COMPARISON OF THREE VEGETATION SAMPLING METHODS.** Adams C. and B.K. Schladweiler. 2009. PAW Second Annual Reclamation Conference, Casper, WY.
- 2009 **COMPARISON OF COAL MINE RECLAMATION UNDER THE SURFACE MINING CONTROL AND RECLAMATION ACT OF 1977 AND OIL AND GAS SITES IN WYOMING.** Schladweiler, B.K. 2009. American Society of Mining Reclamation. Billings, MT.



**PRESENTATIONS
(CONT.)**

- 2009 **ABANDONED MINE LAND URANIUM RECLAMATION AND RESEARCH IN WYOMING.** Schladweiler, B.K. 2009. U2009 Global Uranium Symposium. Denver, CO.
- 2008 **RECLAMATION IN NORTHEASTERN WYOMING.** Schladweiler, B.K. 2008. Society for Range Management/Society for Soil Water Conservation Society combined state meeting. Cheyenne, WY.
- 2008 **TOPSOIL MANAGEMENT ISSUES RELATED TO OIL AND GAS DEVELOPMENT.** Schladweiler, B.K. 2008. PAW Reclamation Conference. Casper, WY.
- 2007 **ONGOING EVALUATION OF EFFECTS FROM VARIABLE TOPSOIL DEPTHS AT A COAL MINE IN NORTHEASTERN WYOMING.** Schladweiler, B.K. 2007. American Society of Reclamation. Gillette, WY.
- 2007 **VEGETATION AND SOILS RECOVERY FOR POST-CBNG CO-PRODUCED WATER DISCHARGE.** Schladweiler, B.K. 2007. Wyoming BLM, Buffalo Field Office, Best Management Practices.
- 2006 **VEGETATION AND SOILS RECOVERY FOR POST-CBNG CO-PRODUCED WATER DISCHARGE.** Schladweiler, B.K. 2006. Coalbed Methane Education Fair.
- 2006 **RECLAMATION CLASS,** Schladweiler, B.K. 2006. Wyoming Workforce Development, Gillette Campus.
- 2006 **A SURVEY OF SUCCESSFUL MINELAND REVEGETATION TECHNIQUES.** Schladweiler, B.K. 2006. Billings Land Reclamation Symposium.
- 2005 **TOPSOIL MANAGEMENT WORKSHOP, PART 1.** Schladweiler, B.K. 2005. Coalbed Methane Education Fair.
- 2005 **A SURVEY OF SUCCESSFUL MINELAND REVEGETATION TECHNIQUES. SCHLADWEILER, B.K. 2005.** SRM/SWCS Combined Annual Meeting.
- 2004 **ENVIRONMENTAL ASSESSMENTS RELATED TO CBNG ACTIVITY.** Schladweiler, B.K. 2004. Wyoming Water Well Association.
- 2004 **OVERVIEW OF NATURAL RESOURCES IN THE POWDER RIVER BASIN.** Schladweiler, B.K. 2004. Wyoming L.E.A.D. Seminar.
- 2001 **EFFECT OF CBM WATER ON SOILS AND VEGETATION.** Schladweiler, B.K. 2001. Coalbed Methane Education Fair.