STEPHEN P. KUNZ

Senior Ecologist, Schmid & Company, Inc., Consulting Ecologists 1201 Cedar Grove Road, Media, PA 19063-1044 610-356-1416 www.schmidco.com spkunz@aol.com

EDUCATION

B.S. Human Ecology, Cook College - Rutgers University New Brunswick, New Jersey, 1977 (summa cum laude)

CERTIFICATIONS

Ecological Society of America: Senior Ecologist (2013, 2008, 2003, 1998)

Society of Wetland Scientists: *Professional Wetland Scientist* (2017, 2012, 2007, 1995) Army Corps of Engineers: *Wetland Delineator* (Provisional Certification, Baltimore District

- Certificate No. DCP93MDO51OO35B)

SUMMARY OF EXPERIENCE

Mr. Kunz has worked full-time as a private sector ecological consultant for more than three decades. His primary focus has been on water quality and wetland issues. Mr. Kunz routinely deals with state and federal water quality laws and regulations on projects throughout Pennsylvania, New Jersey, and eastern New York. He has extensive experience in the technical evaluation and regulatory review of development projects, primarily focusing on wetland delineation, assessment, and regulatory analysis.

He is experienced in the full range of field techniques in relation to wetland boundary determination, environmental inventory, and impact assessment. He has assisted in the design and implementation of numerous successful wetland mitigation projects. He has provided public testimony on specific projects. He has provided public commentary on a range of issues including proposed federal and state environmental regulations, hydric soil criteria and indicators, wetland delineation methodologies, and impacts from fossil fuel extraction.

1997-Present Senior Ecologist, Schmid & Company, Inc. (Media PA) 1985-1997 Ecologist, Schmid & Company, Inc. (Media PA)

Mr. Kunz's primary responsibilities include project management, wetland delineation and assessment, regulatory review and analysis, preparation of environmental permit applications, client coordination, and report writing and editorial review on projects where property is proposed for development, purchase or sale, or preservation. His responsibilities also include staff training and supervision, public and expert testimony, and the design and implementation of wetland mitigation projects.

1982-1985 Environmental Scientist, Schmid & Company (Media PA)

Mr. Kunz was responsible for fieldwork, technical analysis, and report preparation on projects and sites requiring wetland identification and analysis. He also assisted in the preparation of environmental assessments and permit applications.

1981-1982 Environmental Planner, TERA Corporation (King of Prussia PA)

Mr. Kunz was involved in the preparation of EIS's on proposed developments in Maryland and New York. He was responsible for mapping, data compilation, and data analysis on a major railroad siting and alternatives study. He participated in the development of computer-based programs for interactive graphics.

1979-1981 PLANNER, WAPORA, Inc. (BERWYN PA)

Mr. Kunz participated in numerous environmental assessments and impact reports throughout the middle Atlantic states. He conducted land use analyses requiring preparation of land use inventory maps, calculation of environmental carrying capacity, development of future land use scenarios, and evaluation of land management codes and regulations.

1978-1979 SOCIOECONOMIST, JACK McCORMICK & ASSOCIATES, INC. (BERWYN PA)

Mr. Kunz collected and analyzed demographic and socioeconomic data for the preparation of environmental impact statements dealing with regional wastewater facility projects in southeastern PA and MD, and with proposed coal mining activities in WV. He coordinated with federal, state, regional, and local agencies to identify their planning-related programs, policies, and regulations.

PROFESSIONAL AFFILIATIONS

Ecological Society of America (Certified Senior Ecologist)
New Jersey Academy of Science
Pennsylvania Academy of Science
Society for Human Ecology
Society of Wetland Scientists (Certified Professional Wetland Scientist)
Wetland Journal (Review Board 1999-2001)

CIVIC AFFILIATIONS

Schuylkill Township (PA) Environmental Advisory Council
Pennsylvania Campaign for Clean Water - Exceptional Value (PA-CCWEV) Workgroup

OTHER ACTIVITIES

Technical Review, Protecting Pennsylvania's Cleanest Streams: A Review of Pennsylvania's Antidegradation Policies and Program with Recommendations for Improvements. Prepared by the Delaware Riverkeeper Network, July 2011.

RECENT REPORTS: PRINCIPAL AUTHOR OR COAUTHOR (2007-2018)

- Kunz, Stephen P. 2018. Comments on Scope of Work for 5th Act 54 Five-Year Assessment. Prepared for Citizens Coal Council, Canonsburg, PA. Media PA. 15 p.
- Schmid & Company, Inc. 2017a. Stream protection in Pennsylvania in the context of underground coal mining. Prepared for Citizens Coal Council, Canonsburg, PA. Media PA. 30 p.
- Kunz, Stephen P. 2017b. Comments on "Definition of Waters of the United States" -Recodification of Pre-existing Rules, Docket ID No. EPA-HQ-OW-2017-0203. Submitted to US Environmental Protection Agency, Washington DC. Schmid & Company, Inc., Media PA. 3 p.
- Schmid & Company, Inc. 2017c. Potential impacts of the Atlantic Sunrise pipeline on exceptional value wetlands and special protection waters in Schuylkill County, Pennsylvania. Prepared for Delaware Riverkeeper Network, Bristol, PA, and Schuylkill Pipeline Awareness, Schuylkill County, PA. Media PA. 21 p.
- Schmid & Company, Inc. 2017d. Potential impacts of Mariner East II pipelines on wetlands, streams, and water supplies in Middletown Township and Delaware County, Pennsylvania. Prepared for Middletown Coalition for Community Safety. Media PA. 18 p.
- Schmid & Company, Inc. 2017e. A comparison of the water resource impacts associated with alternative alignments of the proposed Atlantic Sunrise pipeline on and near the Nesbitt property, Luzerne and Wyoming Counties, Pennsylvania. Prepared for Icarus Ecological Services, Inc., Saint Augustine, FL. Media PA. 23 p.
- Schmid & Company, Inc. 2016a. Comments on FERC DEIS for PennEast Pipeline Project in New Jersey. Prepared for the Delaware Riverkeeper Network, Bristol, PA. Media PA. 15 p.
- Schmid & Company, Inc. 2016b. The effects of the proposed PennEast pipeline on exceptional value wetlands in Pennsylvania. Prepared for the Delaware Riverkeeper Network, Bristol, PA. Media PA. 54 p.
- Kunz, Stephen P. 2016c. Comments on the proposal to reissue and modify nationwide permits, Docket No. COE-2015-0017. Submitted to US Army Corps of Engineers, Washington DC. Schmid & Company, Inc., Media PA. 5 p.
- Schmid & Company, Inc. 2016d. Wetland and stream impacts of Sunoco's Mariner East II pipeline. Prepared for Mountain Watershed Association and the Clean Air Council. Media PA. 22 p.
- Schmid & Company, Inc. 2016e. Longwall mining A to Z: learning from the Pennsylvania experience. Prepared for the Citizens Coal Council, Bridgeville PA. Media PA. 56 p.
- Schmid & Company, Inc. 2015a. Undermining the public trust: a review and analysis of PADEP's Fourth Act 54 Five-year Assessment report. Prepared for the Citizens Coal Council, Bridgeville PA. Media PA. 67 p.
- Schmid & Company, Inc. 2015b. Regulated waters and wetlands at the Fairview Golf Redevelopment site, Ridley Township, Delaware County, Pennsylvania. Prepared for Everest EB-5 Capital LLC, Havertown, Pennsylvania. Media PA. 46 p.

- Schmid & Company, Inc. 2015c. Comments to the Office of Surface Mining Reclamation and Enforcement regarding the Proposed Stream Protection Rule, Docket # OSM–2010–0018. Prepared for Foundation for Pennsylvania Watersheds, Alexandria PA. Media PA. 36 p.
- Schmid & Company, Inc. 2014a. The illusion of environmental protection: permitting longwall coal mines in Pennsylvania. Prepared for the Citizens Coal Council, Bridgeville PA. Media PA. 138 p.
- Schmid & Company, Inc. 2014b. PADEP Regulatory Jurisdiction at Green Pond/Traditions of America Site, Bethlehem Township, Northampton County, PA. Prepared for savegreenpond.org. Media PA. 64 p.
- Schmid & Company, Inc. 2014c. Petition to [Pennsylvania] Environmental Quality Board for redesignation of the Upper Browns Creek watershed, Greene County, Pennsylvania. Prepared for the Citizens Coal Council, Bridgeville PA. Media PA. 69 p.
- Stout, Benjamin M. III, Ph.D., and Schmid & Company, Inc. 2013a. Biological assessment of Stony Run, Springfield Township, Fayette County, Pennsylvania. Prepared for University of Pittsburgh Environmental Law Clinic on behalf of Youghiogheny Riverkeeper and Mountain Watershed Association. 18 p.
- Kunz, Stephen P. 2013b. Public comments presented at PADEP Citizens Advisory Council public meeting, 19 February 2013. Schmid & Company, Inc., Media PA. 5 p.
- Schmid & Company, Inc. 2013c. Existing conditions at a site along Dey Road; Block 25, Lot 5; Cranbury Township, Middlesex County, NJ. Prepared in conjunction with an application to NJDEP to confirm wetlands and waters at the subject property. Media, PA. 41 p.
- Schmid & Company, Inc. 2013d. Review of permit applications of Amerikohl Mining Inc. for proposed Walters Mine, Donegal Township, Butler County, Pennsylvania. Prepared for Citizens Coal Council, Bridgeville PA. Media PA. 35 p.
- Schmid & Company, Inc. 2012. Independent technical review of proposed Donegal Mine,
 Donegal Township, Butler County, Pennsylvania. Prepared for PADEP Office of Active and
 Abandoned Mine Operations, on behalf of Rosebud Mining Company. Media, PA. 72 p.
- Kunz, Stephen P. 2012. Comments to Thomas Callaghan, Director, PADEP Bureau of Mining Programs, on proposed Master Agreement with University of Pittsburgh to prepare the Fourth Act 54 Five-Year Review Report. Schmid & Company, Inc., Media, PA 11 p.
- Schmid & Company, Inc. 2012. Delineated wetlands and streams in eastern meadows at Longwood Gardens, Kennett, Pennsbury, and East Marlborough Townships, Chester County, Pennsylvania. Submitted to Philadelphia District Army Corps of Engineers on behalf of Bancroft Engineering and Longwood Gardens. Media, PA. 48 p.
- Schmid & Company, Inc. 2012. Comments to PADEP Division of Dam Safety on Dam Safety Permit Applications D30-079 and D30-080 for proposed Foundation Mine, Center and Jackson Townships, Greene County, Pennsylvania. Media, PA. 11 p.
- Schmid & Company, Inc. 2012. Application to NJDEP for Individual Freshwater Wetland Permit for Lot 2, Block 2301, Paramus Borough, Bergen County, NJ. Submitted on behalf of George Washington Memorial Park Cemetery Association (landowner). Media PA. 48 p.

- Schmid & Company, Inc. 2012. Comments to Pittsburgh District Army Corps of Engineers on Application CELRP-OP-F 2007-891 for proposed Foundation Mine. Center and Jackson Townships, Greene County, PA. Media PA. 17 p.
- Kunz, Stephen P. 2011. Comments on Dam Safety and Encroachments Act Permit Application E5729-014 (for proposed waterlines extending 1.8 miles across exceptional value streams and wetlands to support natural gas drilling). Submitted to PADEP Oil & Gas Management Program on behalf of the Foundation for Pennsylvania Watersheds. Schmid & Company, Inc., Media PA. 24 p.
- Schmid & Company, Inc. 2011. The increasing damage from underground coal mining in Pennsylvania: a review of the third Act 54 report. Prepared for Citizens Coal Council, Washington PA. Media PA. 50 p.
- Schmid & Company, Inc. 2011. Streams and wetlands on properties along Bear Mountain Road Elkland Township, Sullivan County, Pennsylvania. Prepared for Bear Mountain Landowners. Media PA. 79 p.
- Schmid & Company, Inc. 2011. Application to NJDEP for Letter of Interpretation Extension for Lot 3, Block 2l002 in Old Bridge Township, Middlesex County, and Lot 2, Block 176 in Marlboro Township, Monmouth County, NJ. On behalf of David Elkouby (landowner). Media PA. 29 p.
- Schmid & Company, Inc. 2011. Application to NJDEP for Letter of Interpretation Presence/Absence for Lot 2, Block 2301, in Paramus Borough, Bergen County, NJ. Submitted on behalf of George Washington Memorial Park Cemetery Association (landowner). Media PA. 48 p.
- Schmid & Company, Inc. 2010. Protection of water resources from longwall mining is needed in southwestern Pennsylvania. Prepared for Citizens Coal Council, Washington PA, with support from the Sierra Club. Media PA. 195 p.
- Kunz, Stephen P. 2010. Comments to Baltimore District Army Corps of Engineers on Proposal to Issue Pennsylvania State Programmatic General Permit 4. Schmid & Company, Inc., Media PA. 3 p.
- Schmid & Company, Inc. 2010. A need to identify "special protection" status and apply existing use protections to certain waterways in Greene and Washington counties, Pennsylvania. Prepared for Citizens Coal Council, Washington PA. Media PA. 95 p.
- Kunz, Stephen P. 2010. Comments to Pennsylvania Environmental Quality Board on Proposed Rulemaking 25 PA CODE Chapter 95 (Wastewater Treatment Requirements). Schmid & Company, Inc., Media PA. 3 p.
- Schmid & Company, Inc. 2009. Review of a petition to redesignate tributaries to South Fork Tenmile Creek from HQ-WWF to WWF, Center and Jackson Townships, Greene County, Pennsylvania. Prepared for Citizens for Pennsylvania's Future. Media PA. 28 p.
- Kunz, Stephen P. 2009. Comments to the US Army Corps of Engineers on the Proposed Suspension and Modification of Nationwide Permit 21 (Surface Coal Mining Operations). Schmid & Company, Inc., Media PA. 3 p.

- Schmid & Company, Inc. 2009. Application for Wetland General Permits #2, #10A, and #17 and Individual Flood Hazard Area Permit, Lot 18, Block 301; Berkeley Heights Township, Union County, NJ. Submitted on behalf of Ramesh Raman (landowner). Media PA. 65 p.
- Schmid & Company, Inc. 2008. Review of a petition to redesignate Grinnage Run from HQ-WWF to WWF, South Fork Tenmile Creek basin, Gray Township and Richhill Township, Greene County, Pennsylvania. Prepared for Center for Coalfield Justice, Mountain Watershed Association, and Citizens for Pennsylvania's Future. Media PA. 26 p.
- Schmid & Company, Inc. 2008. Application to NJDEP for freshwater wetland General Permits 7 and 11, Towneplace Hotel, Lot 13, Block 2301, Logan Township, Gloucester County, New Jersey. Prepared for SSN Hotel Management, LLC. Newark DE. Media PA. 52 p.
- Schmid & Company, Inc. 2008. Application to NJDEP for General Permit 7 and Transition Area Averaging Waiver, Lots 2 and 3, Block 134, Town of Kearny, Hudson County, New Jersey. Prepared for Arlington Cemetery Association, Kearny NJ. Media PA. 69 p.
- Kunz, Stephen P. 2008. Comments to US-EPA on the Final Environmental Impact Statement (EIS) on Excess Spoil Minimization Stream Buffer Zones. Schmid & Company, Inc., Media PA. 7 p.
- Schmid & Company, Inc. 2008. Application to NJDEP for Letter of Interpretation Extension for Lot 2.03, Block 22.010, South Brunswick Township, Middlesex County, NJ. Submitted on behalf of Country Communities, LLC (landowner). Media PA. 28 p.
- Schmid & Company, Inc. 2007. An investigation of existing and historic environmental conditions at Arlington Cemetery associated with alleged NJDEP violations and a proposed resolution, Lots 2 and 3, Block 134, Town of Kearny, Hudson County, New Jersey. Prepared for Arlington Cemetery Association. Media PA. 108 p.
- Schmid & Company, Inc. 2007. Wetland conditions at a site along Worthington Mill Road, Wrightstown Township, Bucks County, Pennsylvania. Prepared for Brian Bentley. Media PA. 38 p.
- Schmid & Company, Inc. 2007. Wetland conditions at a site in Hatfield Township, Block 77, Montgomery County, Pennsylvania. Prepared for Hatfield 309 LLC. Media PA. 69 p.
- Kunz, Stephen P. 2007. Letter to Office of Surface Mining Reclamation and Enforcement, regarding advanced notice or proposed rulemaking regarding the placement of coal combustion byproducts in active and abandoned coal mines. 13 June 2007. 2 p.
- Schmid & Company, Inc. 2007. Wetland conditions at a property along US Route 9, Lots 13 and 14, Block 176, Marlboro Township, Monmouth County, New Jersey. Prepared for Seasons Real Estate of New Jersey, LLC, Hightstown, New Jersey. Media PA. 41 p.
- Kunz, Stephen P. 2007. Letter to Dennis G. Rice, Office of Surface Mining Reclamation and Enforcement, regarding excess spoil, coal mine waste, and buffers for Waters of the United States. 22 October 2007. 7 p.
- Schmid & Company, Inc. 2007. Application for General Permits #1, #2, and #10A; Lot 51, Block 4701; Pennsville Township, Salem County, New Jersey. Prepared for Robert Mistichelli. Media PA. 41 p.

- Kunz, Stephen P. 2007. Letter to David Hartos, Office of Surface Mining Reclamation and Enforcement, regarding the Draft EIS on excess spoil minimization and stream buffer zones. 21 November 2007. 7 p.
- Kunz, Stephen P. 2007. Letter to Senator Jeff Bingaman, Senate Energy and Natural Resources Committee, regarding OSM administration of SMCRA. 17 December 2007. 7 p.
- Schmid & Company, Inc. 2007. Wetland conditions at a site along PA Route 309 (Bethlehem Pike) near Bergey Road, Block 76, Hatfield Township, Montgomery County, Pennsylvania. Prepared for Hatfield 309 LLC. Media PA. 42 p.

RECENT MAJOR ORAL PRESENTATIONS

- Office of Surface Mining Reclamation and Enforcement, Pittsburgh PA, 16 July 2015 (Longwall Coal Mining in the US)
- PADEP Citizens Advisory Council, Harrisburg PA, 17 March 2015 (Undermining the Public Trust: A Review and Analysis of PADEP's Fourth Act 54 Five-Year Assessment Report)
- Pennsylvania Groundwater Symposium, Penn State University, State College, PA, 7 May 2014 (Undocumented Groundwater Damage from Longwall Coal Mining in Pennsylvania)
- Citizens Coal Council Act 54 Strategic Meeting, Yorktowne Hotel, York PA, 26 September 2013 (*The Need to Reform Act 54*)
- PADEP Citizens Advisory Council, Harrisburg PA, 20 November 2012 (*Major Concerns with Act 54 Reporting*)
- Appalachian Public Interest Environmental Law Conference, Knoxville TN, 27 October 2012 (Lessons From Regulating Longwall Coal Mining in Pennsylvania)
- Mid-Atlantic ESA Annual Meeting and Conference, Blacksburg VA, 14 April 2012 (*Increase in Aquatic Resource Impacts from Longwall Coal Mining Following Revision of Pennsylvania Underground Mining Law*)
- Chester County Citizens for Climate Protection, West Chester PA, 7 December 2011 (*The Need to Reform Act 54*)
- Morris Township Community Center, Nineveh PA, 22 June 2011 (*The Increasing Damage from Underground Coal Mining in Pennsylvania: A Review of the Third Act 54 Report*)
- PADEP Citizens Advisory Council, Harrisburg PA, 19 April 2011 (*The Increasing Damage from Underground Coal Mining in Pennsylvania: A Review of the Third Act 54 Report*)
- US Environmental Protection Agency, Philadelphia PA, 10 November 2010 (*Protection of water resources from longwall mining is needed in southwestern Pennsylvania*)
- Schuylkill River Watershed Congress, Pottstown PA, 13 March 2010 (Are "Special Protection" Waters Getting the Protection they Deserve?)

JAMES A. SCHMID

EDUCATION

Ph.D., Geography, University of Chicago, 1972

M.A., Geography, University of Chicago, 1969

A.B., Geography, Columbia College, Columbia University, 1966

CERTIFICATIONS

Ecological Society of America: Senior Ecologist (1983; recertified 1988, 1993, 1999, 2008, 2014) Society of Wetland Scientists: Professional Wetland Scientist #284 (1995; recertified 2007, 2012)

US Army Corps of Engineers, Baltimore District: Wetland Delineator Program

(Provisional Certification #93MD0310008A)

US Fish & Wildlife Service: Habitat Evaluation Procedures (HEP 1981)

CONTACT INFORMATION

Schmid & Co., Inc., Consulting Ecologists 1201 Cedar Grove Road Media PA 19063-1044

SUMMARY OF EXPERIENCE

1985- **President, Schmid & Company, Inc.**, Consulting Ecologists. Dr. Schmid's current responsibilities include fieldwork, administration of contracts, writing and editing reports, regulatory analysis, client representation before agencies, expert testimony in court and at hearings, and overall management of the firm.

1981-1985 **Principal, Schmid & Company**, Consulting Ecologists. Dr. Schmid was responsible for fieldwork, project management, consultation with clients and regulatory agency personnel, the preparation and delivery of testimony in court and at public meetings, and the technical and editorial supervision of multidisciplinary reports.

1981-1982 **Principal Environmental Scientist, TERA Corporation.** Dr. Schmid provided technical supervision for a major environmental impact statement on alternative railroads in Niagara County, New York, and managed analyses of wetland fill and mitigation proposed in the New York and Philadelphia metropolitan areas and in the New Jersey Pine Barrens. He also worked on lignite mining projects in the Red River basin of western Louisiana.

1979-1981 **Principal Scientist, WAPORA, Inc.** Dr. Schmid supervised a statewide impact assessment of coal mining in Appalachia for the Environmental Protection Agency and provided technical direction for seven areawide environmental assessments of future coal mining in West Virginia. He managed impact statements for oil and coal terminals and prepared an extensive report on coastal zone management for the New Jersey Department

of Environmental Protection. He also served as senior technical advisor on projects in the Mississippi River basin, the eastern Kentucky coal fields, and the Texas Gulf Coast.

1973-1979 Chairman of the New York office (1973-1974) and Vice President, Jack McCormick & Associates, Inc., Pennsylvania office (1974-1979). Dr. Schmid managed environmental assessments and reports on proposed residential, industrial, and commercial developments at Brigantine, Secaucus, East Rutherford, North Bergen, Hoboken, and Camden, New Jersey; Philadelphia, Pennsylvania; and Beachville, Maryland. He directed inventories and analyses of the Fire Island National Seashore for the National Park Service and of the New York Bight for the National Oceanic and Atmospheric Administration. He designed and implemented a major analysis of environmental regulations and their effects on private industry for the US Department of Commerce and the President's Council on Environmental Quality.

1970-1973 Assistant Professor and Instructor in the Department of Biological Sciences, Barnard College and Columbia University. Dr. Schmid taught graduate and undergraduate courses in ecology, biogeography, environmental science, and cultural geography. His prime research interests were in the environmental effects of urbanization, the role of vegetation in cities, and the conceptualization and quality control of environmental assessments.

1968-1970 He served as **technical editor for research papers in the Department of Geography at the University of Chicago**.

Dr. Schmid has been a guest lecturer on environmental analysis and wetlands at the University of Pennsylvania, Columbia University, Cabrini College, Clark University, West Chester State University, Rutgers University, and the Delaware County Community College. He has often addressed wetland issues at the Polley Associates School of Real Estate. He has served on the Standing Committee on Environmental Education for the Association of American Geographers and has contributed reviews to the Geographical Review and to Ecology. He has served on the Board of Professional Certification of the Ecological Society of America and on the Certification Standards Committee of the Society of Wetland Scientists Professional Certification Program, Inc. For many years he served on the Environmental Advisory Board of Marple Township, Delaware County, Pennsylvania. He has peer reviewed journal articles for Wetlands and grant proposals submitted to the National Science Foundation, the US Department of State, and the National Geographic Society. Dr. Schmid has served as the elected president of the Chester County Beekeepers Association.

HONORS AND AWARDS

Columbia College Scholarship

Columbia College Phi Beta Kappa

A.B. cum laude, Columbia College, Columbia University

NDEA Title VI fellowship awards (U. Chicago, U. Wisconsin at Madison, U. Washington at Seattle, Johns Hopkins U.)

American Men of Science

Gubernatorial appointment to Pennsylvania Department of Environmental Protection's Citizens Advisory Council

PROFESSIONAL AFFILIATIONS

American Association for the Advancement of Science Association of American Geographers Association of State Wetland Managers Ecological Society of America New Jersey Academy of Science New York State Wetlands Forum, Inc. Society of Wetland Scientists

PROJECT EXPERIENCE

Dr. Schmid's career in environmental analysis began in the late 1960s. He has worked for all types of clients, including federal agencies, state agencies, municipalities, private developers, utilities, conservation groups, attorneys, architects, and engineering firms on many kinds of assignments.

While on the faculty of Biological Sciences at Columbia University, Dr. Schmid introduced students to the ecology of the New York-New Jersey metropolitan area and the New Jersey Pine Barrens. His scholarly research focuses on urban vegetation and historic changes in vegetation affected by human activity. His first environmental impact assessment and recommendations for minimizing impacts were prepared for a developer while he was still a graduate student and dealt with a proposed residential subdivision in the Thorn Creek Woods of suburban Will County, Illinois.

During his graduate studies in plant ecology at the University of Chicago, Dr. Schmid became familiar with the bogs and floodplain vegetation of northern Illinois, northern Indiana, and southern Michigan. While a visiting graduate student at the University of California at Los Angeles, he worked on the flora of the Mojave Desert and Santa Monica Mountains of southern California with Mildred Mathias, and he accompanied Jonathan Sauer on a flora collecting expedition to San Clemente Island. He helped Monte Lloyd collect periodic cicadas in Illinois, Ohio, and West Virginia. His master's thesis dealt with historic vegetation change in the subhumid to semi-arid limestone Edwards Plateau of southcentral Texas.

During his six years as Project Manager and Vice President at Jack McCormick & Associates, Dr. Schmid was closely associated with the late Dr. McCormick (a nationally recognized authority on wetlands and environmental assessment), both in field analyses and in project planning aimed at preserving, enhancing, restoring, or creating wetland ecosystems.

Dr. Schmid has participated in more than 100 environmental impact statements prepared using Federal, State, or local guidelines. He wrote a major analysis of the effects of the National Environmental Policy Act and Federal EISs on private industry for the US Department of Commerce, and conducted a follow-on seminar sponsored by the Council on Environmental Quality and the American Management

Association. He prepared a shortened version of the report for distribution by the Commerce Department and the Business Roundtable. As senior scientist he worked on diverse projects in Maine, West Virginia, Kentucky, Illinois, Iowa, Texas, Louisiana, Washington State, and Pacific coastal Nicaragua, not to mention the mid-Atlantic States. He participated in several wastewater treatment system EISs in suburban Philadelphia, suburban Baltimore, and at Oakwood Beach, Staten Island.

In the Hackensack Meadowlands of New Jersey, Dr. Schmid was responsible for the analyses and negotiations that led to issuance of major Federal and State permits (Clean Water Act Section 404) to fill wetlands and the Hackensack River at the Harmon Cove residential development (96 acres) and for compliance monitoring at the New Jersey Sports Complex (federal permit, 35 acres; State permit, 250 acres of tidal and non-tidal wetlands). He also was involved with assessments of a proposed new freeway (US 1 & 9), the initial Hartz Mountain Harmon Meadows Tract shopping and residential development proposal, the redevelopment of a city park (Lincoln Park West) in Jersey City, and a plan for wetlands enhancement in connection with a proposed sand and gravel operation in North Bergen. He was responsible for environmental studies, mitigation plans, and technical negotiations that led to issuance of a major Corps permit to fill 127 acres of marsh with compensation by enhancing 151 acres. He recently analyzed historic land use activities at a cemetery at the edge of the Meadowlands to ascertain the extent of wetland violations and aid the landowner in attaining compliance with NJDEP requirements.

Dr. Schmid directed a comprehensive inventory of Fire Island National Seashore in Suffolk County, New York, for the National Park Service. In New Jersey, he assisted Dr. McCormick in designing satisfactory restoration leading to permits for filling 11 acres for development in the southernmost section of Brigantine Island facing Atlantic City. In New Jersey he has worked on several analyses of beach protection and the effects of altering sand dunes, a major concern also at Fire Island National Seashore. He has participated in numerous wetland permit applications and resolution of enforcement cases in Staten Island and Brooklyn.

Dr. Schmid wrote a Federal EIS on a proposed fuel oil transfer and storage terminal in the Hudson River under contract to the New York District of the Army Corps of Engineers. Dr. Schmid also was responsible for coastal wetland projects along the Shark River, at Ocean City, and along Barnegat Bay. He supervised an analysis of the freshwater tidal marsh at Fish House Cove on the Delaware River for the Camden County Environmental Agency and a comprehensive review of proposed development in salt marshes along a barrier beach in Sussex County, Delaware, for the Delaware Department of Natural Resources and Environmental Control. Dr. Schmid supervised evaluations of several marshes along Delaware Bay in New Jersey and Delaware for National Natural Landmark status on behalf of the National Park Service.

His extensive analysis of coastal zone management in New Jersey, with a detailed account of the administration of the (Tidal) Wetlands Act and other wetland

regulations, formed a major part of a four-volume Estuarine Study submitted to the New Jersey Department of Environmental Protection in 1979. Dr. Schmid managed a residential development analysis near the mouth of the Potomac River at Beachville, Maryland, and he wrote the foreword to Dr. McCormick's monumental report on the coastal wetlands of Maryland at the request of the Maryland Department of Natural Resources.

Dr. Schmid has represented developers in regulatory negotiations concerning wetlands at Bethany Beach, Delaware; near the mouth of the Raritan River for a major new town associated with New Jersey's largest industrial park; in Gloucester City, New Jersey, where a freshwater tidal marsh was restored; at the DuPont Chambers Works, a major chemical plant adjacent to the Delaware River in Salem County, New Jersey; and in Bucks County, Pennsylvania, where a waterfront slag plant was proposed. He successfully designed mitigation for a major marine container terminal expansion, which entailed the filling of 16 acres in the Delaware River and 8 acres of freshwater tidal marsh and oversaw the restoration of a tidal marsh on the Neshaminy Creek. He has achieved full success in all of his wetland restoration and creation projects.

For the National Oceanic and Atmospheric Administration Dr. Schmid assembled a multidisciplinary panel to establish priority chemical contaminants of the New York Bight. This report formed the basis for funding by NOAA of research on chemicals in the 15,000 square miles of ocean waters off New York and New Jersey.

Dr. Schmid has worked on behalf of developers, environmental groups, and regulatory agencies in the Pinelands of southern New Jersey. Dr. Schmid's analyses enabled the New Jersey Pinelands Commission to approve development on a site with 355 acres of wetlands in Burlington County for more than 2,500 housing units under a hardship application. He assembled a review of vegetation and critical areas mapping in the Pinelands on behalf of a developer near Mays Landing. He wrote a critique of the Pinelands Commission's inventory mapping for the Sierra Club, and he defended a developer and the Pinelands Commission in a challenge to a regulatory decision approving a residential project. He represented the New Jersey Conservation Foundation, Environmental Defense Fund, and other conservation groups challenging a Pinelands Commission hardship waiver on a major residential development. He also supervised a critique of the proposed USEPA designation of a sole-source aquifer in southern New Jersey on behalf of the South Jersey Homebuilders Association. He analyzed the significance of potential impacts on wetlands and other resources by railroad construction in upstate New York under a third-party agreement to produce the major Federal EIS which preceded project approval.

Dr. Schmid assisted in an evaluation of development adjacent to the Tannersville Bog in Monroe County, Pennsylvania, on behalf of The Nature Conservancy. He demonstrated that a proposed nearby housing development posed no threat to the National Landmark bog. He has worked on other wetlands at several locations in the

Poconos where delineations and permit approvals were necessary. He oversaw a National Natural Landmarks evaluation of the Great Piece Meadows in northern New Jersey for the National Park Service and an assessment of impacts from regional sewer construction on the Great Swamp of the upper Passaic River for the US Environmental Protection Agency.

He supervised analyses of proposed development around Lake Valhalla in Morris County, and his testimony helped Montville Township zoning withstand challenge and appeal through the New Jersey court system. He managed the successful technical defense of a highway contractor, accused of polluting Lake Saginaw in Sussex County, New Jersey, with sediment, on behalf of Liberty Mutual Insurance Company. In Morris County he oversaw wetland boundary mapping on a 200+ acre tract and successfully defended the mapping through agency review and intervenor challenge. His project work has taken him to most of the major wetlands in the Passaic River Basin of northern New Jersey: Great Piece Meadows, Troy Meadows, Bog and Vly Meadows, Black Meadow, and Hatfield Swamp.

In Pennsylvania Dr. Schmid has supervised permitting for numerous residential, industrial, and commercial developments including landfills and shopping malls. He analyzed impacts and prepared reports and expert testimony on the impacts of coal mines, surface mines, fiber-optic cables, water wells, and residential subdivisions for various clients including the Izaak Walton League of New Jersey, the Raymond Proffitt Foundation, the Delaware Riverkeeper, the Center for Coalfield Justice, the Mountain Watershed Association, and the Green Valleys Association. He prepared the wetland-related sections of the Crum Creek Rivers Conservation Plan for the Department of Conservation and Natural Resources. He has examined a number of sites for rare species such as bog turtle and beach plum.

Dr. Schmid's principal expertise and professional interest lie in the analysis of urban vegetation and in the design and establishment of functioning ecosystems in the form of new wetlands, reclaimed landfills, mined areas, and other vegetated spaces in the increasingly human-dominated environment. Under his supervision, Schmid & Company has participated in many hundreds of wetland projects throughout New Jersey, Pennsylvania, and New York State, as well as projects in other States.

When the US Fish & Wildlife Service Pleasantville Office evaluated actual compliance with approval conditions by all the Clean Water Act Section 404 fill permits issued by the Corps of Engineers in the State of New Jersey during the period 1985-1992, every Schmid & Company mitigation project was judged in the field to exhibit full compliance with all requirements and mitigation goals. Schmid & Company mitigation projects represented 21% of all the mitigation projects judged fully successful in New Jersey by USFWS in its written report to USEPA.

PUBLICATIONS

ACADEMIC RESEARCH

<u>Doctoral Dissertation</u>: Urban vegetation, a review and Chicago case study. University of Chicago, Department of Geography (published in full; see below).

<u>Masters Thesis</u>: The wild landscape of the Edwards Plateau of southcentral Texas: a study of developing livelihood patterns and ecological change. University of Chicago, Department of Geography. 1969. 144 p.

BOOKS

- Schmid, James A. 2003. Checklist and synonymy of Maryland higher plants, with special reference to their rarity, protected, and wetland indicator status. First edition. Schmid & Company, Inc. Media PA. 406 p.
- Schmid, James A. 2003. Checklist and synonymy of Delaware higher plants, with special reference to their rarity and wetland indicator status. First edition. Schmid & Company, Inc. Media PA. 302 p.
- Schmid, James A. 2003. Checklist and synonymy of New York higher plants, with special reference to their protective, rarity, and wetland indicator status. First edition. Schmid & Company, Inc. Media PA. 460 p.
- Schmid, James A. 2001. Checklist and synonymy of New Jersey higher plants, with special reference to their rarity and wetland indicator status. Third edition. Schmid & Company, Inc. Media PA. 325 p.
- Schmid, James A. 2001. Checklist and synonymy of Pennsylvania higher plants, with special reference to their rarity and wetland indicator status. Second edition. Schmid & Company, Inc. Media PA. 365 p.
- Schmid, James A. 1994. Checklist and synonymy of New Jersey higher plants with special reference to their rarity and wetland indicator status: Volume I field manual. Second edition. Schmid & Company, Inc. Media, PA. 17O p.
- Schmid, James A., and John T. Kartesz. 1994. Checklist and synonymy of New Jersey and Pennsylvania higher plants with special reference to their rarity and wetland indicator status: Volume II desk manual. First edition. Schmid & Company, Inc. Media, PA. 443 p. (Reviewed by: Kraus, M. 1995. Wetland Journal 7(1):21.)
- Schmid, James A. 1994. Checklist and synonymy of Pennsylvania higher plants with special reference to their rarity and wetland indicator status: Volume I field manual. First edition. Schmid & Company, Inc. Media, PA. 182 p.
- Schmid, James A. 1990. Checklist and synonymy of New Jersey higher plants with special reference to their rarity and wetland indicator status. First edition. Schmid & Company, Inc. Media, PA. 2 vols. (247 + 177 p.)
- Schmid, James A. 1975. Urban Vegetation: a review and Chicago case study.

 Department of Geography, University of Chicago, Research Paper 161.

 Chicago IL., 266 p.

 REVIEWED BY:

Küchler, A.W. 1976. Bioscience 26(7):454.

de Laubenfels, D.B. 1976. Geographical Review 66(3):370-71.

Barkham, J.P. 1976. Journal of Ecology 64(3):1113.

Haefner, H. 1977. Geographica Helvetica, p.53.

Wagner, P.L. 1977. Annals of the Association of American Geographers 67(1):171-73. Levenson, J.B. 1977. Ecology 58(2):465.

Gutte, P. 1978. Petermanns Geographische Mitteilungen (1):56.

T., J. 1978. Annales de Géographie (481):382.

PROFESSIONAL PAPERS AND BOOK CHAPTERS

- Schmid, James A. 2007. Draft Atlantic and Gulf coastal plain regional supplement to the 1987 Wetland Delineation Manual. The Forum 14(1):5, 8, 11. New York State Wetlands Forum, Inc.
- Schmid, James A. 2005-2006. Introduced, non-native, and invasive plants in mid Atlantic woods and wetlands: is there a problem in the human habitat? The Forum 11(2) and 12(1). New York State Wetlands Forum, Inc.
- Schmid, James A. 2003. Evaluating created wetlands in New Jersey: how credible is NJDEP? (Abstract). New Jersey Academy of Science Bulletin 48 (1): 28.
- Schmid, James A. 2001. So you think you have hydrophytic vegetation? Wetland Journal 13(2):29-31.
- Schmid, James A. 2000. Wetlands as conserved landscapes in the United States. In A. B. Murphy and D. L. Johnson, eds. Cultural Encounters with the Environment: Enduring and Evolving Geographic Themes. Rowman & Littlefield. Lanham MD. p. 133-155.
- Schmid, James A. 1997. Wetland mitigation case studies. Chapter 9 in Mark S. Dennison. Wetland Mitigation. Rockville MD. Government Institutes Press. p. 157-182.
- Schmid, James A. 1996. More on fire sales. National Wetlands Newsletter 18(5):4 Schmid, James A. 1996. Fire sale in Pennsylvania. National Wetlands Newsletter 18(1):4-5.
- Schmid, James A. 1994. Wetlands in the urban landscape of the United States. In R. H. Platt, R. A. Rowntree, and P. C. Muick (eds.). The Ecological City: Preserving and Restoring Urban Biodiversity. University of Massachusetts Press. Amherst MA. p. 106-133.
- Schmid, James A. 1994. Wetland creation using native plants. "A Preference for Natives". Proceedings of the symposium, 22 March 1991. Longwood Graduate Program, University of Delaware, Longwood Gardens. Kennett Square PA. p. 30-47.
- Schmid, James A. 1989. Mitigation for fills in wetlands: the promise and some recent experience in New Jersey. (Abstract) Bulletin of the New Jersey Academy of Science 34(2):34.
- Schmid, James A. 1989. Aboveground primary productivity in marshes of the Raritan River estuary, Middlesex County, NJ. (Abstract) Bulletin of the New Jersey Academy of Science 34(2):34.

- Schmid, James A. 1989. Dune destruction at Normandy Shores, Dover Township, Ocean County: is NJDEP minding the shore? (Abstract) Bulletin of the New Jersey Academy of Science 34(2):34.
- Schmid, James A. 1985. Atlantic whitecedar in the Hackensack Meadowlands, New Jersey: its historic extirpation and future reestablishment. In A. D. Laderman (ed.). Atlantic White Cedar Wetlands. Westview Press. Boulder CO. p. 317-322.
- Schmid, James A. 1984. What and where are New Jersey's inland wetlands? (Abstract) Bulletin of the New Jersey Academy of Science 29(1):31.
- Jurka, Valdis, and James A. Schmid. 1981. Contaminants in runoff from a parking structure in Northern New Jersey. (Abstract) Bulletin of the New Jersey Academy of Science 26(2):74.
- Munro, John W., and James A. Schmid. 1981. Primary productivity in a backbarrier tidal marsh, northern Sussex County, Delaware. (Abstract) Bulletin of the New Jersey Academy of Science 26(2):69.
- Schmid, James A. 1981. New Jersey's coastal wetlands: will they be protected? (Abstract) Bulletin of the New Jersey Academy of Science 26(2):64.
- Schmid, James A. 1980. The effects of the National Environment Policy Act on corporate decision making. Early Corporate Environmental Assessment: Selected Papers. U.S.Department of Commerce, Office of Environmental Affairs. Washington DC. p. 1-9.
- Schmid, James A., and David H. Dike. 1979. Biological resource information and coal mine assessment in the Gauley and Monongahela river basins, West Virginia. In Duane G. Nichols, R. A. Servais, and E. J. Ralinski (eds.). Proceedings of the Sixth National Conference on Energy and the Environment. Dayton Section, American Institute of Chemical Engineers. Dayton OH. p. 177-181.
- Schmid, James A. 1979. Biological resource information and coal mine assessments in the Gauley and Monongahela river basins. Surface Mining and Fish/Wildlife Needs in the Eastern United States. U.S. Fish and Wildlife Service Publication FWS/OBS-78/81A. Washington DC. p. 87-90.
- Schmid, James A. 1979. Vegetation types, functions, and constraints in metropolitan environments. Chapter 21. Planning the Uses and Management of Land. American Society of Agronomy. Madison WI. p. 499-528.
- Schmid, James A. 1978. The urban habitat. In G. W. Frankie and C. S. Kohler (eds.). Perspectives in Urban Entomology. Academic Press. New York NY. p. ix-xiii.
- Schmid, James A. 1977. Research and management: The case of Fire Island National Seashore. In J. H. Noyes and E. H. Zube (eds.). Coastal recreation resources in an urbanizing environment. Cooperative Extensive Service, University of Massachusetts. Amherst MA. p. 119-127.
- Schmid, James A., D. Pennington, and J. McCormick. 1975. Ecological impact of the disposal of municipal sludge onto the land. Proceedings of the 1975 National Conference on Municipal Sludge Management and Disposal. Information Transfer, Inc. Rockville MD. p. 156-168.
- Schmid, James A. 1974. The environmental impact of urbanization. In I. R. Manners and M. W. Mikesell (eds.). Perspectives on Environment. Association of American Geographers, Commission of College Geography Publication 13. Washington DC. p. 213-251.

Schmid, James A. 1974. The environmental impact of plants and animals. Ekistics 37(218):53-61.

LECTURES

- Schmid, James A. 2015. Powerlines, pipelines, wetlands, and streams: data are critical for decisionmaking. Schuylkill Watershed Congress. Pottstown PA.
- Schmid, James A. 2015. How not to design and regulate onlot residential sewage systems---someone might be paying attention. American Water Resources Association, Philadelphia Metropolitan Area Section. Philadelphia PA.
- Schmid, James A. 2014. Water quality protection: a "wicked" problem in Pennsylvania. Cabrini College. Radnor PA.
- Schmid, James A. 2014. To keep New York green, learn from Pennsylvania's mistakes. New York State Wetlands Forum, Inc. Annual Meeting, Rochester NY.
- Schmid, James A. 2014. Shale gas, pipelines, and rural water supplies. Pennsylvania Rural Watershed Association Annual Meeting. Harrisburg PA.
- Schmid, James A. 2014. How precarious is environmental protection in Pennsylvania? Precarious Alliance Energy in Transition Symposium. Doylestown PA.
- Schmid, James A. 2013. How not to protect streams and wetlands, Pennsylvaniastyle. Ecological Society of America Mid-Atlantic Chapter Annual Meeting. Dover DE.
- Schmid, James A. 2013. Natural gas extraction and its impacts in the landscape. Fourth Annual Choose Clean Water Conference. Baltimore MD.
- Schmid, James A. 2012. Wetland science versus wetland regulation: observations of a practicing ecologist. Society of Wetland Scientists Mid-Atlantic Chapter Annual Conference. New Brunswick NJ.
- Schmid, James A. 2012. Let mother nature clean up our mess: an attempted misuse of science to avoid protecting streams and wetlands. Society of Wetland Scientists Mid-Atlantic Chapter Annual Conference. New Brunswick NJ.
- Schmid, James A. 2012. When sorcerers' apprentices fail to protect streams and wetlands. New York State Wetlands Forum, Inc. Annual Meeting, Utica NY.
- Schmid, James A. 2011. Marcellus shale gas impacts on Pennsylvania wetlands and streams. Ecological Society of America Mid-Atlantic Chapter and New Jersey Academy of Sciences Annual Meeting. Montclair NJ.
- Schmid, James A. 2011. Marcellus shale gas impacts on Pennsylvania wetlands and streams. New York State Wetlands Forum, Inc. Annual Meeting, Lake Placid NY.
- Schmid, James A. 2010. Marcellus shal gas: what, where, whence, why now, so what? One ecologist's observations. Cabrini College. Radnor PA.
- Schmid, James A. 2009. Regulatory gaps in Pennsylvania headwaters stream protection. Association of American Geographers Annual Meeting. Las Vegas NV.
- Schmid, James A. 2009. Searching for bog turtles in southeastern Pennsylvania. Greater Philadelphia Herpetological Society and Marple Township Environmental Advisory Board. Broomall PA.

- Schmid, James A. 2009. Protecting significant headwaters in Pennsylvania: Lessons from real projects in five counties, southeast and southwest. Schuylkill Watershed Congress. Pottstown PA.
- Schmid, James A. 2009. Clean coal? Impacts of longwall mining in Pennsylvania. PennEnvironment and Sierra Club of Southeastern Pennsylvania. Free Library of Philadelphia. Philadelphia PA.
- Schmid, James A. 2008. Ecological and soil regions along the Atlantic coastal plain---rules for Clean Water Act wetland delineation. Association of American Geographers Annual Meeting. Boston MA.
- Schmid, James A. 2007. The missing geography of wetlands in the United States. Association of American Geographers Annual Meeting. San Francisco CA.
- Schmid, James A. 2006. A consulting ecologist's observations on environmental regulation in the real world---focus on the National Environmental Policy Act and wetlands protection. Columbia University, Department of Ecology, Evolution, and Environmental Biology. New York NY.
- Schmid, James A. 2003. Multiple wetland boundaries on a single tract of land: when different levels of government undermine credible regulation. New York State Wetland Forum, Inc., Annual Meeting. Saratoga Springs NY.
- Schmid, James A. 2002. NWI wetland indicator status---are there any significant differences between 1988 and 1997 indicators for plants in the mid Atlantic states? US Environmental Protection Agency Wetlands Workshop. Atlantic City NJ.
- Schmid, James A. 2002. Rare plants, protected plants, native plants, and wetlands in the mid Atlantic states. New York State Wetlands Forum, Inc., Annual Meeting. Syracuse NY.
- Schmid, James A. 2001. So you think you have hydrophytic vegetation? US Environmental Protection Agency Wetlands Workshop. Atlantic City NJ.
- Schmid, James A. 2001. Calculating hydrophytic vegetation: select the method that gives you the result you want? Society of Wetland Scientists Annual Meeting. Lake Placid NY.
- Schmid, James A. 2001. Assembling the plant list for New Jersey: sources of wetland indicator status information. US Environmental Protection Agency Wetlands Workshop. Atlantic City NJ.

REVIEWS

- Schmid, James A. 2007. City trees: A historical geography from the Renaissance through the nineteenth century, by Henry W. Lawrence. Geographical Review 97(4):572-574.
- Schmid, James A. 2001. My, how much we need to learn about wetlands! Wetland ecology: principles and conservation, by Paul A. Keddy. Ecology 82(7): 2085
- Schmid, James A. 1999. Days afield: exploring wetlands in the Chesapeake Bay region, by William S. Sipple. Wetland Journal 11(4):21.
- Schmid, James A. 1998. Discovering the unknown landscape: a history of America's wetlands, by Ann Vileisis. Wetland Journal 10(2): 30.

- Schmid, James A. 1977. Worldwide human modification of ecosystems. Ecology 58(1):221-222.
- Schmid, James A. 1977. Politics of shore erosion: Westhampton Beach, by J. M. Heikoff. Geographical Review 67(4):491-93.

SELECTED CONTRACT REPORTS

Principal Authorship

- JMA. 1974. Environmental impact assessment on the construction and operation of a residential and commercial development, Specially Planned Area I, Town of Secaucus, Hudson County, New Jersey. Submitted to the State of New Jersey, Hackensack Meadowlands Development Commission, Lyndhurst NJ, by Hartz Mountain Industries, Inc. Devon PA. 241 p.
- JMA. 1975. Draft environmental impact statement on construction permits for a proposed fuel storage terminal in the Hudson River, Weehawken Cove, Hudson County, New Jersey. Prepared for the United States Army Engineer District, New York City. Devon PA. 217 plus 103 p.
- JMA. 1975. Environmental inventory of the Fire Island National Seashore and the William Floyd Estate, Suffolk County, New York. Submitted to the National Park Service, Denver CO. Devon PA. 461 p. plus map folio.
- JMA. 1975. The potential impact of urbanization on the fringe of megalopolis. Prepared for the Committee for the Preservation of Northern Montville, Montville NJ. Devon PA. 36 p.
- JMA. 1976. Community development block grant program environmental assessment report on the Gateway Project. Prepared for the City of Camden NJ. Berwyn PA. 70 p.
- JMA. 1977. Final report on environmental aspects of the new source NPDES permit program for the West Virginia surface coal mining industry, 1977-1980. Prepared for the US Environmental Protection Agency Region III, Philadelphia PA. Berwyn PA. 219 p.
- JMA. 1977. Supplemental socioeconomic environmental impact assessment on the construction and operation of an Island Residential development on Specially Planned Area I, Town of Secaucus, Hudson County, New Jersey. Submitted to the State of New Jersey, Hackensack Meadowlands Development Commission, Lyndhurst NJ, by Hartz Mountain Industries, Inc. Berwyn PA. 201 p.
- JMA. 1977. Effects of the National Environment Policy Act on corporate decisionmaking: A draft report for review. Prepared for the United States Department of Commerce, Washington DC. Berwyn PA. 268 p.
- JMA. 1978. Draft environmental impact statement for the proposed Ravenscliff Subdivision, Radnor and Newtown Townships, Delaware County, Pennsylvania. Prepared on behalf of Ravenscliff Land Co., Devon PA, for submission to Radnor Township. Berwyn PA. 85 p.
- JMA. 1979. New source NPDES permits and environmental impacts of the coal mining industry in the Monongahela and Gauley River Basins, West Virginia. Prepared for US Environmental Protection Agency Region III, Philadelphia, PA. Berwyn PA.
- WAPORA. 1979. The estuarine study, Volume I, Part 3, management report and recommendations. Prepared for the New Jersey Department of Environmental Protection, Trenton NJ. Chevy Chase MD. 220 p.
- WAPORA. 1979. Potential environmental impacts of energy facilities and other development on Fish House Cove, Delaware River.

 Prepared for Camden County Environmental Agency, Camden NJ. 78 p. plus folio map.
- WAPORA. 1979. Analysis of sole source designation pursuant to Section 1424(e) of the Safe Drinking Water Act and the proposed coastal New Jersey designation. Prepared for Homebuilders League of South Jersey, Cherry Hill NJ. Berwyn PA. 39 p.
- WAPORA. 1979-1980. New Jersey Sports Complex monitoring reports 59 through 66. Prepared for submission to regulatory agencies by the New Jersey Sports and Exposition Authority. Berwyn PA. (combined) 353 p.
- WAPORA. 1979-1980. Quarterly reports 2 through 6 updating the 1978 Hearing Officers' Report on the construction and operation of the New Jersey Sports Complex. Prepared on behalf of the New Jersey Sports and Exposition Authority for presentation to the Environmental Liaison Committee. Berwyn PA. (combined) 68 p.
- WAPORA. 1979-1980. Monthly official minutes of the Environmental Liaison Committee pertaining to the construction and operation of the New Jersey Sports Complex, East Rutherford, New Jersey. Meetings 57 through 71. Berwyn PA. (combined) 110 p. exclusive of attachments.
- Munro, John W., and James A. Schmid. 1980. A technical review of vegetation, land use, and critical areas mapping in the Pinelands of New Jersey, with recommendations for enhanced resource protection and public benefit. Prepared on behalf of the New Jersey Sierra Club for submission to the New Jersey Pinelands Commission. Media PA. 45 p.
- Schmid & Co. 1981. Summary review of environmental aspects of the proposed expansion of the general marine cargo terminal, Gloucester, New Jersey. Prepared for Holt Hauling & Warehousing Systems, Inc., Gloucester NJ. Media PA. 35 p.
- TERA. 1981. Report on environmental conditions at Leisure Towne, Southampton Township, Burlington County, New Jersey. Prepared for Leisure Technology Inc., Lakewood NJ. King of Prussia PA. 16 p.
- TERA. 1981. Environmental mitigation plan to offset the proposed loss of tidal wetlands on lands in North Bergen and Secaucus, Hackensack Meadowland District, New Jersey. Prepared for Hartz Mountain Industries, Inc., Secaucus, New Jersey. King of Prussia PA. 12 p.
- TERA. 1981. Specifications for site work and revegetation, terminal expansion, and park site mitigation, Camden County, New Jersey.

 Prepared for Holt Hauling & Warehousing System, Inc., Gloucester NJ. King of Prussia PA. 16 p.

- TERA. 1982. Draft environmental impact statement for Foxcroft, Farmbrook, Timberline Subdivisions, Frederick County, Maryland. Prepared for US Department of Housing and Urban Development, Region III. King of Prussia PA. 130 p.
- TERA. 1982. Description of proposed marine terminal expansion, proposed mitigations, and assessment of compliance with coastal policies. Prepared for Holt Hauling & Warehousing Systems, Inc., Gloucester NJ, for submission to Tidelands Resource Council, Division of Coastal Resources, New Jersey Department of Environmental Protection. King of Prussia PA. 44 p.
- TERA. 1982. Wetland values on the Hartz Mountain project site, Secaucus and North Bergen, Hudson County, New Jersey. Prepared for Hartz Mountain Industries, Inc., Secaucus NJ. King of Prussia PA. 59 p.
- TERA. 1982. Proposed mitigation plan and environmental assessment, Hartz Mountain permit application, Public Notice 112255-82-391-J2. For submission to Army Engineer District, New York City. King of Prussia PA. 21 p. plus appendixes.
- TERA. 1982. Supplement to proposed mitigation plan and environmental assessment, Hartz Mountain Permit Application 82-391. For submission to Army Engineer District, New York City. King of Prussia PA. 7 p.
- TERA. 1982. Summary environmental assessment report concerning tidal wetlands proposed for development in North Bergen and Secaucus, Hackensack Meadowland District, Hudson County, New Jersey. King of Prussia PA. 25 p.
- Schmid & Co. 1982. Environmental assessment of a proposed solid fill bridge for a private truck crossing, Delaware River tributary cove, Falls Township, Bucks County, Pennsylvania. Prepared on behalf of the Warner Company, Real Estate Division, for submission to Third Coast Guard District, Governors Island, New York City. Media PA. 40 p. plus appendixes.
- Schmid & Co. 1982. Analysis of proposed mitigation for filling of wetlands, Hartz permit application, Public Notice 112255-82-391-J2. For submission to Army Engineer District, New York City. Media PA. 20 p.
- Schmid & Co. 1983. Measures to offset unavoidable adverse impacts on wetlands from proposed development of a site in Barnegat Light, Ocean County, New Jersey. Prepared for S. T. Hudson Engineers, Inc., on behalf of Myers Clamming, Inc. Media PA. 2 p. plus drawings.
- p. plus drawings.

 Schmid & Co. 1983. Metals in marsh sediments and implications for development of a site in North Bergen and Secaucus, New Jersey.

 Prepared for Hartz Mountain Development Corporation. Media PA. 20 p.
- Schmid & Co. 1983. Statement of Dr. James A. Schmid regarding site conditions and potential impacts of development on the Oxly tract, Stafford Township, Ocean County, New Jersey. Prepared in defense of a hardship waiver granted by the New Jersey Pinelands Commission. Media PA. 16 p.
- Schmid & Co. 1984. Wetlands on the site of the proposed Florham Park Corporate Centre, Borough of Florham Park, Morris County, New Jersey. Prepared for the Linpro Company, Morristown NJ. Media PA. 32 p.
- Schmid & Co. 1984. Probable extent of lands not subject to Department of the Army jurisdiction under section 4O4 of the Clean Water Act on a site in the Borough of Florham Park, Morris County, New Jersey. Prepared on behalf of the Linpro Company for submission to Army Engineer District, New York City. Media PA. 36 p.
- Schmid & Co. 1984. Identification of wetlands and wetland values on a site in the Borough of Florham Park, Morris County, New Jersey.

 Prepared for the Linpro Company for submission to the New Jersey Department of Environmental Protection. Media PA. 49 p.
- Schmid & Co. 1984. Supplement to a report identifying wetlands on a site in the Borough of Florham Park, Morris County, New Jersey.

 Prepared for the Linpro Company. Media PA. 5 p.
- Schmid & Co. 1984. Recommendations on the use of herbicides for the control of common reedgrass on a site in Secaucus and North Bergen, Hackensack Meadowland District, Hudson County, New Jersey. Prepared for Hartz Mountain Development Corporation. Media PA. 13 p.
- Schmid & Co. 1984. Preliminary feasibility analysis of hybrid poplar sylviculture using municipal sludge on dredged spoil disposal areas, Logan Township, Gloucester County, New Jersey. Prepared for S. T. Hudson Engineers, Inc. Media PA. 10 p.
- Schmid & Co. 1984. Existing conditions and potential wetland impacts on a site in the Township of Parsippany-Troy Hills, Morris County, New Jersey. Prepared on behalf of Crow-Foody Central, Pine Brook NJ, for submission to Army Engineer District, New York City. Media PA. 15 p.
- Schmid & Co. 1984. Potential impacts on the proposed Hamilton Woods Adult Residential Development adjacent to wetlands on a site in Hamilton Township, Atlantic County, New Jersey. Prepared on behalf of P. and A. Greenberg, Cherry Hill NJ, for submission to the New Jersey Pinelands Commission. Media PA. 10 p.
- Schmid & Co. 1984. Plan for mitigation to compensate for environmental values associated with proposed fill of an excavated barge slip, Petty Island, Camden County, New Jersey. Prepared for S. T. Hudson Engineers and Crowley/Trailer Marine Terminal. Media PA. 2 p.
- Schmid & Co. 1984. Summary of environmental sensitivity of the southwestern section of Petty Island, Pennsauken Township, Camden County, New Jersey. Prepared for S. T. Hudson Engineers and Crowley/Trailer Marine Terminal. Media PA. 2 p.
- Schmid & Co. 1985. Permit requirements and potential environmental impacts of a proposed marine bulk orange juice handling and storage terminal, Port Elizabeth, New Jersey. Prepared for Cargill Citro-America, Inc., Minneapolis MN. Media PA. 23 p.
- Schmid & Co. 1985. Wetlands on the site of the proposed Greenlands project, South Brunswick Township, Middlesex County NJ.

 Prepared for Cavendish Development Co. for submission to Army Engineer District, New York City. Media PA. 20 p.
- Schmid & Co. 1985. Wetlands on the site of the proposed Bromley project, Burlington Township NJ. Prepared for GSRA Associates for submission to Army Engineer District, Philadelphia PA. Media PA. 30 p.
- Schmid & Co. 1985. Wetlands on the Pinson site, proposed Allen Road Development, Liberty Corner, Bernards Township, Somerset County NJ. Prepared for Paulus Sokowlowski & Sartor, Consulting Engineers, for submission to Army Engineer District, New York City. Media PA. 10 p.
- Schmid & Co. 1985. Report on site conditions at a proposed warehouse development, Fairfield Township, Essex County, Passaic River Basin, New Jersey. Prepared on behalf of New Jersey Management Corporation, for submission to the Army Corps of Engineers. Media PA. 12 p.
- Schmid & Co. 1985. Report on a field inspection of a site, East Rutherford, Bergen County, New Jersey. Prepared on behalf of Oakdale Hotels, Inc., for submission to the Army Corps of Engineers. Media PA. 11 p.

- Schmid & Co. 1985. Wildlife habitat values on the Laurel Harbor proposed resubdivision project site, Lacey Township, Ocean County, New Jersey. Prepared on behalf of Charles H. Mackie Associates for submission to New Jersey Department of Environmental Protection (CAFRA Permit Application 85-0716-5). Media PA. 11 p.
- Schmid & Co. 1985. Wetlands on the site of the proposed Quadrant 3 urban renewal site, Wayne Township, Passaic County, New Jersey. Prepared on behalf of Farcal Realty, Inc., for submission to the Army Corps of Engineers. Media PA. 22 p.
- Schmid & Co. 1985. Wetlands, fill, and mitigation at the Summit Corporate Research Center, Edison Township, Middlesex County. New Jersey. Prepared on behalf of Summit Associates, Inc., for submission to Army Corps of Engineers. Media PA. 25 p.
- Schmid & Co. 1985. Wetlands on an office building site, Borough of Roseland, Essex County, New Jersey. Prepared for Cali Associates for submission to the Army Corps of Engineers. Media PA. 13 p.
- Schmid & Co. 1985. Wetlands adjacent to the Oradell Reservoir, Borough of Emerson, Bergen County, New Jersey. Prepared on behalf of the Hackensack Water Company for submission to the Army Corps of Engineers. Media PA. 14 p.
- Schmid & Co. 1985. Wetlands on the Washington Greene project site, Washington Township, Mercer County, New Jersey. Prepared on behalf of Toll Brothers for submission to the Army Corps of Engineers. Media PA. 21 p.
- Schmid & Co. 1985. Environmental conditions on a proposed residential project site. West Windsor Township. Mercer County, New Jersey. Prepared on behalf of Crow, Terwilliger & Dressler, Inc., for submission to the Army Corps of Engineers. Media PA. 17 p.
- Schmid & Co. 1985. Environmental conditions on a 37-acre project site in Hillsborough Township, Somerset County, New Jersey. Prepared on behalf of the Garden State Lands Company for submission to the Corps of Engineers. Media PA. 14 p.
- Schmid & Co. 1985. Wetlands on the East Harbour III study site, Morse Reservoir, Hamilton County, Indiana. Prepared on behalf of the Shorewood Corporation, for submission to the Army Corps of Engineers. Media PA. 23 p.
- Schmid & Co. 1985. Wetlands on the site of the proposed Timber Ponds development. South Brunswick Township, Middlesex County. New Jersey. Prepared for Toll Brothers, Horsham PA. Media PA. 18 p.
- Schmid & Co. 1985. Wetlands at a site along Omar Avenue, Woodbridge Township, Middlesex County, New Jersey. Prepared for Federal Business Centers, Inc., Edison, NJ. Media PA. 15 p.
- Schmid & Co. 1985, Wetlands on the site of the proposed Forest Park Corporate Center, West Deptford Township, Gloucester County, New Jersey. Prepared for Trammell Crow Company, Philadelphia PA. Media PA. 17 p.
- Schmid & Co. 1985. Wetlands on the NJHA Bowers Associates site, Alexander Road, West Windsor Township, Mercer County, New Jersey. Prepared for Bowers Design Associates, Princeton NJ. Media PA. 17 p.
- Schmid & Co. 1985. Wetlands on the 16 Roszel Road project site, West Windsor Township, Mercer County, New Jersey. Prepared for Bowers Design Associates, Princeton NJ. Media PA. 19 p.
- Schmid & Co. 1985. Wetlands on a site along Little Bear Brook, West Windsor Township, Mercer County, New Jersey. Prepared for Waters McPherson McNeill and Jamieson, Moore, Peskin & Spicer. Media PA. 14 p.
- Schmid & Co., Inc. 1985. Compliance with US Environmental Protection Agency guidelines for fill placement--Clean Water Act Section 404 (b)(1)--on an urban renewal site, Quadrant 3, Wayne Township, Passaic County, New Jersey. Prepared for Farcal Realty, Inc., for submission to Army Corps of Engineers. Media PA. 46 p.
- Schmid & Co., Inc. 1986. Environmental impact statement on the construction and operation of the proposed Bromley at Burlington Phase I development, Burlington Township, Burlington County, New Jersey. Prepared for GSRA Associates and Bromley Enterprises for submission to Burlington Township. Media PA. 59 p.
- Schmid & Co., Inc. 1986. Wetlands on the Pinebrook project site, Montville Township, Morris County, New Jersey, Prepared for Pine Valley Development Co. Media PA. 17 p.
- Schmid & Co., Inc. 1986. Probable extent of wetlands at Atrium at Two Bridges site, Fairfield Township, Essex County, New Jersey. Prepared for Sprout Development Corporation. Media PA. 14 p.
- Schmid & Co., Inc. 1986. Comments regarding the extent and implication of wetlands on a tract in Woodbridge Township, Middlesex County, New Jersey. Prepared for Waters McPherson McNeill and the Trust for Public Lands. Media PA. 13 p.
- Schmid & Co., Inc. 1986. Preliminary environmental guidance concerning a tract in Tinton Falls Borough, Monmouth County, New Jersey. Prepared for Bottone Realty Group, Port Monmouth NJ. Media PA. 9 p.
- Schmid & Co., Inc. 1986. Wetlands on the Lincoln Park Airport site, Borough of Lincoln Park, Morris County, New Jersey. Prepared for Lincoln Park Airport. Media PA. 23 p.
- Schmid & Co., Inc. 1986. Extent of wetlands on the site of the proposed East Windsor Business Park, East Windsor Township, Mercer County, New Jersey. Prepared for Winitsky Associates, Abington PA. Media PA. 17 p.
- Schmid & Co., Inc. 1987. Review of federal environmental assessment on proposed access ramps to Interstate 95, Ridgefield Park, Bergen County, New Jersey. Prepared for RKO Century Warner Theaters, Inc. Media PA. 14 p.
- Schmid & Co., Inc. 1987. Compliance with US Environmental Protection Agency guidelines for fill placement at Raritan Center, Middlesex County, New Jersey, pursuant to the Clean Water Act. Section 404 (b)(1). Prepared for Summit Associates, Inc. Media PA. 20 p.
- Schmid & Co., Inc. 1987. Environmental evaluation of the Penllyn Woods site, Lower Gwynedd Township, Montgomery County, Pennsylvania. Prepared for Lower Gwynedd Township Commissioners. Media PA. 34 p.
- Schmid & Co., Inc. 1987. Draft analysis of ocean dune destruction project proposed by Normandy Shores Beach Association, Long Beach Island, Dover Township, Ocean County, New Jersey. Media PA. 8 p.
- Schmid & Co., Inc. 1987. Compliance with EPA 404(b)(1) guidelines for placement of fill material at a proposed sanitary landfill, Shade Township, Somerset County, New Jersey. Prepared for Resource Conservation Corporation, Johnstown PA, for submission to Pittsburgh District, Army Corps of Engineers. Media PA. 135 p.
- Schmid & Co., Inc. 1988. Federal wetland requirements and policies at Summit Corporate Research Center, Edison Township, Middlesex County, New Jersey. Prepared for Summit Associates, Inc. Media PA. 15 p.
- Schmid & Co., Inc. 1988. The impacts of wastewater discharge permit violations on Delaware River water quality and biota at the AMSPEC Chemical Corporation plant, Gloucester City, Camden County, New Jersey, May 1984-October 1987. Prepared for Terris, Edgecombe, Hecker & Wayne, Washington DC. Media PA. 16 p.
 Schmid & Co., Inc. 1988. Assessment of environmental impacts for a proposed PUD development on a site at Raritan Center. Prepared
- for Garden State Buildings, L.P., and Summit Associates, Inc. Media PA. 27 p.

- Schmid & Co., Inc. 1988. Wetland inventory of the Chambers Works wastewater treatment plant, Upper Penns Neck Township, Salem County, New Jersey. Prepared for E.I. DuPont de Nemours & Co., Inc. Media PA. 50 p.
- Schmid & Co., Inc. 1989. Oceanfront dune destruction, Normandy Shores Beach Association, Island Beach, Dover Township, Ocean County, New Jersey. Prepared for Harold V. Cano, M.D., and Elmer Johnson, Normandy Shores, New Jersey. Media, PA. 60 p.
- Schmid & Co., Inc. 1989. Environmental review of the proposed River Birch Estates subdivision, Block 78, Lots 21.02, 21.03, and 22, Manalapan Township, Monmouth County NJ. For submission to New Jersey Department of Environmental Protection on behalf of Garden State Buildings, Edison NJ. Media PA. 20 p.
- Schmid & Co., Inc. 1989. Environmental review of the Woodloch Springs site and assessment of proposed development, Lackawaxen Township, Pike County, Pennsylvania. Prepared for SMC Martin, Inc. and Woodloch Springs Resort for submission to the Pennsylvania Department of Environmental Resources. Media PA. 52 p.
- Schmid & Co., Inc. 1990. Wetlands at 24 Paper Mill Road, Newtown Township, Delaware County, Pennsylvania. Prepared for Neighbors Organized to Stop Effluent to Darby Creek. Media PA. 29 p.
- Schmid & Co., Inc. 1990. Wetland creation concept in mitigation for the proposed expansion of the Meadville Mall, Vernon Township, Crawford County, Pennsylvania. Prepared for George D. Zamias, Johnstown PA. Media PA. 14 p.
- Schmid & Company, Inc. 1991. Conceptual plan for wetland creation, Lakeview Estates subdivision, Lehigh Township, Wayne County, Pennsylvania. Prepared for Lakeview Estates International Corporation, Valley Forge PA. Media PA. 6 p.
- Schmid & Company, Inc. 1991. Wetland identification at the DuPont Chambers Works, Carneys Point and Pennsville Townships, Salem County, New Jersey. Prepared for E.I. DuPont de Nemours & Company, Inc., Deepwater NJ. Media PA. 74 p.
- Schmid & Company, Inc. 1992. Review of proposed wetland boundary determinations at Penllyn Woods, Lower Gwynedd Township, Montgomery County, Pennsylvania, with recommendations for regulatory decisionmaking. Prepared on behalf of Supervisors of Lower Gwynedd Township. Media PA. 103 p.
- Schmid & Company, Inc. 1992. Chambers Works secure landfill D final landscape/site plan for lands within 500 feet of the Delaware River, Carneys Point Twp., Salem Co., NJ. Prepared for E. I. DuPont de Nemours & Co., Inc. Media PA. 6 p.
- Schmid & Company, Inc. 1992. Conceptual revegetation plan, Monroeville Landfill, Allegheny County, Pennsylvania. Prepared for Chambers Development Company. Media PA. 9 p.
- Schmid & Company, Inc. 1992. Final monitoring report on wetland creation, wastewater treatment plant expansion, Chambers Works, Carneys Point Township, Salem County, New Jersey. Prepared for E. I. DuPont de Nemours & Co., Inc., Deepwater NJ. 44 p.
- Schmid & Company, Inc. 1993. Summary report on functions and values of wetlands at the Meadville Mall, Vernon Township, Crawford County, Pennsylvania. Prepared for George D. Zamias, Developer. Media PA 4 p.
- Schmid & Company, Inc. 1993. Conceptual plan for a proposed wetland mitigation bank in Salem County, New Jersey, for the DuPont Chambers Works. Prepared for the DuPont Chambers Works, Deepwater NJ. Media PA. 49 p.
- Schmid & Company, Inc. 1993. Wetland primer for realtors. Prepared for Mark P. Klein, Polley Real Estate Education Co., Newtown Square PA. Media PA. 23 p.
- Schmid & Company, Inc. 1993. Alternatives for restoration of intertidal shallows and marsh creation, Mallard View subdivision, Brick Township, Ocean County, New Jersey. Prepared for Yardville National Bank, Morrisville NJ. Media PA. 17 p.
- Schmid & Company, Inc. 1994. Ecological assessment of a forested wetland swale at the American Nickeloid Company's Walnutport facility, Northampton County, Pennsylvania. Prepared for American Nickeloid Company, Peru IL. Media PA. 22 p.
- Schmid & Company, Inc., and ACT Engineers, Inc. 1994. Statement of compliance with NJDEPE Coastal Resource and Development Rules for a Waterfront Development Permit application. Prepared for Yardville National Bank, Trenton NJ. Media PA. 8 p.
- Schmid & Company, Inc. 1994. Wetlands, wetland destruction by a sanitary sewer project, and recommendations for wetland protection and impact mitigation in Lower Makefield Township, Bucks County, Pennsylvania. Prepared for D. and M. Bechis, Yardley PA. Media PA. 60 p.
- Schmid & Company, Inc. 1994. Applicant's response to comments to Corps of Engineers Public Notice CENAP-OP-R-1994-00847,
 Mallard View Subdivision, Kettle Creek Lagoon, Brick Township, Ocean County, New Jersey. Prepared for the Yardville
 National Bank. Trenton NJ. Media PA. 18 p. plus attachments.
- Schmid & Company, Inc. 1994. Wetland conditions and former uses at a site in Tinicum Township, Delaware County, Pennsylvania.

 Prepared for Harper Associates, Ridley Park PA. Media PA. 86 p.
- Schmid & Company, Inc. 1995. Location and extent of apparent wetlands on the Loch Aerie project site, East Whiteland Township, Chester County, Pennsylvania. Prepared for Greenberg-Farrow Architecture, Inc., Atlanta GA. Media PA. 36 p.
- Schmid & Company, Inc. 1995. Groundwater monitoring and wetland investigation, Block 544, Lot 233B, Hamilton Township, Mercer County, New Jersey. Prepared for Gallo, Stein, Celler & Burke, Trenton NJ. Media PA. 77 p.
- Schmid & Company, Inc. 1995. Environmental conditions on the Greenwood Square Phase II site, Bensalem Township, Bucks County, Pennsylvania. Prepared for Greenwood Square Associates, Bensalem PA. Media PA. 46 p.
- Schmid & Company, Inc. 1995. Wetland investigations at Arbor Meadow Farm, Horsham Townsip, Montgomery County PA. Prepared for Dr. Norman Werther. Media PA. 54 p.
- Schmid & Company, Inc. 1995. Wetland mitigation plan, NJDEP Permit 0809-90-12.4-FWIP and USACE Permit CENAP-OP-R-199500016-15, Logan Township, Gloucester County, New Jersey. Prepared for Godwin Pumps of America, Inc. Media PA. 51 p.
- Schmid & Company, Inc. 1995. Respondent's proposed restoration and enhancement, Consent Order EPA-CWA-II-87-78. Prepared for Garden State Buildings, L.P., and Summit Associates, Inc. Media PA. 4 sheets. Scale, 1:1,200.
- Schmid & Company, Inc. 1996. Wetland investigation at the Paradise Pools site, Block 8, Lot, 8, West Windsor Township, Mercer County, New Jersey. Prepared for Paradise Pools, Inc., Mercerville NJ. 94 p.

- Schmid & Company, Inc. 1996. Wetland mitigation plan for Estates Boulevard, Hamilton Township, Mercer County, New Jersey. Prepared for Township of Hamilton. Media PA. 51 p.
- Schmid & Company, Inc. 1996. Joint permit application for Eagleton Farms Subdivision, Newtown Township, Bucks County, Pennsylvania. Prepared for Newtown Enterprises. Media PA. 81 p.
- Schmid & Company, Inc. 1996. Joint permit application for Williamson Free School of Mechanical Trades, Middletown Township, Delaware County, Pennsylvania. Media PA. 103 p.
- Schmid & Company, Inc. 1997. Environmental conditions at a site on Manhattan Street near Surf Avenue, Tottenville, Borough of Staten Island, Richmond County, New York. Prepared for Calvanico Associates, Inc. Media PA. 40 p.
- Schmid & Company, Inc. 1997. Wetland conditions at the BGP II, Inc., tract, Middletown Township, Delaware County, Pennsylvania. Prepared for BGP II, Inc. Media PA. 50 p.
- Schmid & Company, Inc. 1997. Update on planning prior to application for final approval of the Salem River Corridor wetland mitigation bank. Prepared for DuPont Chambers Works. Media PA. 12 p.
- Schmid & Company, Inc. 1997. Wetland conditions at a site in Sayen Park, Hamilton Township, Mercer County, New Jersey. Prepared for Hamilton Township. Media PA. 46 p.
- Schmid & Company, Inc. 1998. Prospectus for a Salem River corridor wetland mitigation bank, Salem County, New Jersey. Prepared for DuPont Chambers Works. Media PA. 31 p.
- Schmid & Company, Inc. 1998. Review of state permits and likely environmental impacts for a proposed valley fill and coal preparation plant, North Bethlehem Township, Washington County, Pennsylvania. Prepared for the Raymond Proffitt Foundation. Media PA. 27 p.
- Schmid & Company, Inc. 1998. Wetlands on a proposed bypass corridor north of New Jersey Route 33, Robbinsville, Mercer County, New Jersey. Prepared for the Township of Washington. Media PA. 33 p.
- Schmid & Company, Inc. 1998. Wetlands on a proposed bypass corridor south of New Jersey Route 33, Robbinsville, Mercer County, New Jersey. Prepared for the Township of Washington. Media PA. 44 p.
- Schmid & Company, Inc. 1998. Wetland investigation in the vicinity of proposed visitor center improvements, Grey Towers National Historic Landmark, Milford Township, Pike County, Pennsylvania. Prepared for Andropogon Associates and the United States Forest Service. Media PA. 29 p.
- Schmid & Company, Inc. 1998. Environmental report to accompany stream encroachment permit application for Landfill C expansion, Cell 5A, Chambers Works, Carneys Point Township, Salem County, New Jersey. Prepared for E.I. DuPont de Nemours & Co., Inc., Deepwater NJ. Media PA. 13 p.
- Schmid & Company, Inc. 1999. Potential impacts of a proposed quarry on streams and wetlands in the Hay Creek watershed, Birdsboro, Berks County, Pennsylvania. Prepared for the Borough of Birdsboro and the Birdsboro Municipal Authority. Media PA. 21 p.
- Schmid & Company, Inc. 2000. Environmental inventory and assessment, proposed expansion of Landfill B, Chambers Works, Carneys Point Township, Salem County, New Jersey. Prepared for E.I. DuPont de Nemours & Co., Inc., Deepwater NJ. Media PA. 38 p.
- Schmid & Company, Inc. 2000. Pennsylvania Chapter 105/Clean Water Act Section 404 joint permit application, Ridley Shopping Center Phase II, Ridley Township, Delaware County, Pennsylvania. Prepared for Harper Associates, Ridley Park PA. Media PA. Variously paged.
- Schmid & Company, Inc. 2000. Wetlands and longwall mining, regulatory failure in southwestern Pennsylvania. Prepared for the Raymond Proffitt Foundation, Langhorne PA. Media PA. 123 p. http://www.schmidco.com/Wetlands%20and%20Longwall%20Mining%202000.pdf
- Schmid & Company., Inc. 2000. Description of site conditions for a jurisdictional determination and plan to provide wetland mitigation for a property along East Ridley Avenue, Ridley Park Borough, Delaware County, Pennsylvania. Prepared for Harper Associates, Ridley Park PA. Media PA. 50 p.
- Schmid & Company, Inc. 2000. Site conditions at a property along Middletown Road at Van Leer Avenue, Middletown Township, Delaware County, Pennsylvania. Prepared for S. Abboud, Wallingford PA. Media PA. 31 p.
- Schmid & Company, Inc. 2000. Critique of special conditions wetland evaluation, Birdsboro Materials Quarrry, Robeson and Union Townships, Berks County, Pennsylvania. Prepared for Borough of Birdsboro and Birdsboro Municipal Authority. Media PA. 23 p.
- Schmid & Company, Inc. 2003. Environmental conditions at a property along Aultman Avenue, Lot 5, Block 2262, Staten Island, Richmond County, New York. Prepared for Kling Real Estate, Ltd., Staten Island, New York. Media PA. 59 p.
- Schmid & Company, Inc. 2003. Wetland resource value classification, Lot 15, Block 60, Borough of Bloomingdale, Passaic County, New Jersey. Prepared for P. Gasperini, San Francisco, California. Media PA. 22. p.
- Schmid & Company, Inc. 2003. Site conditions at the Blue Heron Landing development, Swan Point, Cuckold Point Road, Baltimore County, Maryland. Prepared for Norman Anderson, Baltimore, Maryland. Media PA. 44 p.
- Schmid & Company, Inc. 2003. Environmental report to accompany applications for stream encroachment permit and freshwater wetland general permit #11, Block 185, Lot 1, Carneys Point Township, Salem County, New Jersey. Prepared for E.I. DuPont de Nemours & Co. Chambers Works. Media PA. 43 p.
- Schmid & Company, Inc. 2004. Environmental conditions and potential impacts from a proposed Henderson office campus on the Elwyn Tract along Ridley Creek, Middletown Township, Delaware County, Pennsylvania. Prepared for Chester-Ridley-Crum Creeks Watershed Association, Middletown Land Conservancy, and Upper Providence Open Space. Media PA. 34 p.
- Schmid & Company, Inc. 2004. Response to agency comments regarding Cabela's Retail Center, Tilden Township, Berks County, Pennsylvania. Prepared for Cabela's Inc., Sydney, Nebraska. Media PA. 99 p.
- Schmid & Company, Inc. 2005. Site conditions at the Dia Center site, City of Beacon, Dutchess County, New York. Prepared for Dia Center for the Arts, Inc. Media PA. 44 p.
- Schmid & Company, Inc. 2005. Compensatory mitigation plan for the Kernsville Desilting Basin site. Prepared for Cabela's Retail Center, Tilden Township, Berks County PA. Media PA. 18 p.

- Schmid & Company, Inc. 2007. Wetlands and wetland incursions at Hopewell Nursery Farm 3, Cumberland County, New Jersey. Prepared for RT Environmental Services, Inc. Media PA. 104 p.
- Schmid & Company, Inc. 2007. An investigation of existing and historic environmental conditions at Arlington Cemetery associated with alleged NJDEP violations and a proposed resolution, Lots 2 and 3, Block 134, Town of Kearny, Hudson County, New Jersey. Prepared for Arlington Cemetery Association. Media PA. 106 p.
- Schmid & Company, Inc. 2008. Unnecessary and unacceptable impacts of the proposed Sentinel Ridge development, Marple Township, Delaware County, Pennsylvania; an expert opinion. Prepared for Crum Creek Neighbors, Appellants. Pennsylvania Environmental Hearing Board Docket No. 2007-287-L. Media PA. 95 p.
- Schmid & Company, Inc. 2009. Alleged activities in wetlands and transition areas at Lot 1, Block 1301, Upper Deerfield Township, Cumberland County, New Jersey. Prepared for Neil Yoskin, Esq., Princeton NJ. Media PA. 28 p.
- Schmid & Co., Inc. 2009. Our water quality: Streams and stream protection in the 7th Congressional District of Pennsylvania. Media
- PA. 8 pages plus poster. www.schmidco.com
 Schmid & Company, Inc. 2009. Comments on NPDES Permit Application PA 1023909008, Stubits proposed land development (daycare center), Lot 4B, Block 19, E5, Heidelberg Township, Lehigh County, Pennsylvania. Prepared for D. W. Miles, Esq., and Sierra Club of Pennsylvania. Media PA. 7 p.
- Schmid & Company, Inc. 2009. Protecting our streams in Wallace Township, Chester County PA. Prepared for Guardians of the Brandywine, Inc. Poster. http://www.watchourwaters.org/water_resources.htm
- Schmid & Company, Inc. 2009. Supplemental report on alleged filling of wetlands at Lot 1, Block 1301, Upper Deerfield Township, Cumberland County, New Jersey. Media PA. 42 p.
- Schmid & Company, Inc. 2010. Expert opinion regarding wetlands and wetland incursions at Hopewell Nurseries Farm 3, Deerfield Township, Cumberland County, New Jersey, Prepared for Hopewell Nursery, Bridgeton NJ, Media PA, 124 p.
- Schmid & Company, Inc. 2010. Protection of water resources from longwall mining is needed in southwestern Pennsylvania. Prepared for Citizens Coal Council, Washington PA, with support from The Sierra Club. Media PA. 190 p. http://www.schmidco.com/Final%20Report%2026%20July%202010.pdf
- Schmid & Company, Inc. 2010. Proposed Fredericksville Farms, Berks County, Pennsylvania. Prepared for John Wilmer, Esq. Media PA. 28 p.
- Schmid & Company, Inc. 2011. Streams and wetlands on Bear Mountain, Elkland Township, Sullivan County, Pennsylvania. Prepared for Bear Mountain Homeowners. Media PA. 74 p.
- Schmid & Company, Inc. 2011. Proposed sewage discharges and wetland impacts at the Fredericksville Farms Subdivision, District and Longswamp Townships, Berks County, Pennsylvania. Prepared for: John Wilmer, Esq. Media PA. 15 p.
- Schmid & Company, Inc. 2011. Review of proposed wetland modeling and probable wetland damage, Fredericksville Farms Subdivision, District and Longswamp Townships, Berks County, Pennsylvania. Prepared for John Wilmer, Esq. Media PA 31 p.
- Schmid & Company, Inc. 2011. Comments on proposed natural gas development regulations for the Delaware River basin. Presented to the Delaware River Basin Commission. Media PA. 18 p.
- Schmid & Company, Inc. 2012. Delineated wetlands and streams in the eastern meadows at Longwood Gardens, Kennett, Pennsbury, and East Marlborough Townships, Chester County, Pennsylvania. Prepared for Bancroft Construction Company and Longwood Gardens. Media PA. 46 p.
- Schmid & Company, Inc. 2012. Pilot contract for an independent technical review of the proposed Donegal Mine, Donegal Township, Butler County, Pennsylvania. Prepared for Pennsylvania Department of Environmental Protection on behalf of Rosebud Mining Company. Media PA 130 p. Schmid & Company, Inc. 2012. Recommendations to expedite the Department's underground bituminous coal mine permit application
- reviews. Submitted to PADEP Office of Active and Abandoned Mine Operations, Harrisburg PA, Media PA, 17 p.
- Schmid & Co., Inc. 2013. Natural resource concerns during proposed development at the Woodlawn Tract, Concord Township, Delaware County PA. Prepared for the Beaver Valley Conservancy, Concordville PA. Media PA. 62 p.
- Schmid & Co., Inc. 2013. Streams and wetlands on the College Arms apartments property, 74 East Fifth Avenue, Collegeville Borough, Montgomery County PA. Prepared for TriRealty Company and Reed-Smith LLC. Media PA. 75 p. plus attachments.
- Schmid & Co., Inc. 2014. The effects of converting forest or scrub wetlands to herbaceous wetlands in Pennsylvania. Prepared for the Delaware Riverkeeper Network, Bristol PA. Media PA. 48 p.
- Schmid & Co., Inc. 2014. Analysis of impacts on wetlands and buffers, proposed Williams Transco Leidy Southeast Franklin Loop D Pipeline, Monroe and Luzerne Counties, Pennsylvania. Prepared for Delaware Riverkeeper Network, Bristol PA. Media PA. 49 p.
- Schmid & Co., Inc. 2014. Supplement to streams and wetlands at the College Arms Apartments property. Prepared for TriRealty Company. Media PA. 23 p.
- Schmid & Company, Inc. 2014. PADEP Regulatory Jurisdiction at Green Pond/Traditions of America Site, Bethlehem Township, Northampton County, PA. Prepared for savegreenpond.org. Media PA. 64 p.
- Schmid & Co., Inc.. 2015. Natural resource concerns during development at the Woodlawn Tract, Concord Township, Delaware County, Pennsylvania. Prepared on behalf of the Beaver Valley Conservancy and Eileen Mutschler for submission to the Board of Supervisors, Concord Township. Media PA. 74 p.
- Schmid & Co., Inc., and Patrick J. Fasano. 2015. Forest conditions at the site of the proposed Vineyard Commons Subdivision, Concord Township, Delaware County, Pennsylvania. Prepared for the Beaver Valley Conservancy and Eileen Mutschler. Media PA. 66 p.
- Schmid & Co., Inc. 2015. Potential impacts on streams and wetlands from a proposed residential subdivision, Fredericksville Farms, District and Longswamp Townships, Berks County, Pennsylvania. Prepared for John Wilmer, Esquire, and the Pine Creek Valley Watershed Association. Media PA. 77 p.

- Schmid & Co., Inc. 2015. Further comments on streams and wetlands from a proposed residential subdivision, Fredericksville Farms,
 District and Longswamp Townships, Berks County, Pennsylvania, in response to an expert report by Thomas Starosta PE dated 13
 November 2015. Prepared for John Wilmer, Esquire, and the Pine Creek Valley Watershed Association. Media PA. 43p.
- Schmid & Co., Inc. 2016. Regulated waters on the property of Tri Realty Company and within Bum Hollow, Collegeville Borough, Montgomery County, Pennsylvania. Prepared for Tri Realty Company. Media PA. 64 p.
- Schmid & Co., Inc. 2018. Expert report on wetlands and streams at a property in Union Township, Huntingdon County, Pennsylvania. Prepared for Richard Raiders, Esq. Media PA. 30 p
- Schmid & Co., Inc. 2018. Comments on proposed regulations of the Delaware River Basin Commission concerning high volume fracturing to produce oil and gas. Prepared for Delaware Riverkeeper Network. Media PA. 19 p.

Substantial Input

- JMA. 1973. Environmental impact statement on the construction and operation of Ocean Harbor, a residential and commercial development in the City of Brigantine, Atlantic County, New Jersey. Prepared for Brigantine Harbour, Inc., for submission to the New Jersey Department of Environmental Protection. Devon PA. 206 p.
- JMA. 1975. The existing water quality of Lake Valhalla, Morris County, New Jersey, and an assessment of potential impacts on water quality of development in the watershed. Prepared for the Committee for the Preservation of Northern Montville. Devon PA. 22 p.
- JMA. 1975. Natural resource inventory of the Middle Run study area, New Castle County, Delaware. Prepared for the New Castle County Department of Parks and Recreation. Devon PA. 129 plus 32 p.
- JMA. 1975. Environmental assessment for the feasibility study for the land reclamation project, complementary urban development, City of Corinto, Nicaragua. Prepared for submission to the Autoridad Portuaria de Corinto and US-AID by Boswell-Amman & Whitney-Lamsa, Ingenieros Consultores. Devon PA. 116 p. plus folio maps.
- JMA. 1975. Waterfowl in the Meadowlands Freeway (US Routes 1 & 9) study area, Hackensack Meadowlands District, Hudson and Bergen Counties, New Jersey. Submitted to the New Jersey Department of Transportation by Louis Berger & Associates, Inc. Berwyn PA. 25 p.
- JMA. 1975. Inventory reports for Legislative Route 202 project area, Chester County, Pennsylvania. Prepared on behalf of Pennsylvania Department of Transportation, District 6-0. Berwyn PA. Variously paged, 377 p.
- JMA. 1975. Request for the determination of eligibility for listing on the National Register of Historic Places of six historic sites in the corridor for the proposed improvements to Legislative Route 202, Charlestown Township and Schuylkill Township, Pennsylvania. Submitted to the Pennsylvania Historic and Museum Commission by the Pennsylvania Department of Transportation, District 6-0. Berwyn PA. 63 p.
- JMA. 1976. Draft environmental impact statement, L.R. 202 (Phoenixville Pike), Pennsylvania Turnpike to City Line Avenue, Borough of Phoenixville, Chester County, Pennsylvania. Prepared for the Pennsylvania Department of Transportation, District 6-O, and the Federal Highway Administration. Berwyn PA. 170 p.
- JMA. 1976. Application for the construction and operation of a residential development in Ocean County, Cape May County, New Jersey. Prepared on behalf of EVED Enterprises, Inc. for submission to the New Jersey Department of Environmental Protection. Berwyn PA. 26 p.
- JMA. 1976. An assessment of beach erosion, with recommendations for the Borough of Ocean City, Cape May County, New Jersey. Berwyn PA. 102 p.
- JMA. 1976. Archaeological investigations of a cartway and various structures at the Peter Wentz Farmstead, a National Register site, Shulz Road, Worcester Township, Montgomery County, Pennsylvania. Prepared for the Historical Advisory Board, Commissioners of Montgomery County. Berwyn PA. 37 p. plus map folio.
- JMA. 1976. Quick response environmental impact assessment of dredging and filling at Harmon Cove, Specially Planned Area I, Secaucus, New Jersey. Submitted to the State of New Jersey, Hackensack Meadowlands Development Commission, by Hartz Mountain Industries, Inc. Berwyn PA. 10 p.
- JMA. 1976. A report on the water quality and aquatic macroinvertebrates of Lake Saginaw, Sparta Township, Sussex County, New Jersey. Prepared for the Liberty Mutual Insurance Co., East Orange NJ. Berwyn PA. 25 p.
- JMA. 1977. Evaluation of the potential effects of the Penn Estates development on the Tannersville Bog, Monroe County, Pennsylvania. Prepared for The Nature Conservancy, Boston MA. Berwyn PA. 65 p.
- JMA. 1977. Final report on a document review and an archaeological reconnaissance of the William Floyd Estate and the Fire Island Lighthouse Tract, Suffolk County, New York, 1976. Submitted to Denver Service Center, National Park Service. Berwyn PA. 208 p.
- JMA. 1977. Report on the feasibility of providing a housing program for low and moderate income residents of Lower Merion Township,
 Pennsylvania. Prepared on behalf of the Board of Commissioners, Lower Merion Township, Montgomery County PA. Berwyn PA. 100 p.
- JMA. 1977. Environmental impact assessment of producing fast land at Harmon Cove in the Hackensack River, Secaucus, New Jersey. Prepared for Hartz Mountain Industries, Inc., Secaucus NJ. Berwyn PA. 41 p.
- JMA. 1977. Short-term analysis of police services in the Town of Secaucus, New Jersey, and of police service requirements for the proposed Harmon Cove development. Prepared for Hartz Mountain Industries, Inc. Secaucus NJ. Berwyn PA. 5 p.
- JMA. 1977. Revised analysis of municipal cost-review balance of proposed Harmon Cove development, Secaucus, New Jersey. Prepared for Hartz Mountain Industries, Inc., Secaucus NJ. Berwyn PA. 21 p.
- JMA. 1977. Preliminary draft report on chemical pollutants of the New York Bight which should receive priority research attention.

 Prepared by a panel of invited experts for the Marine EcoSystems Analysis Project, National Oceanic and Atmospheric Administration, Stony Brook NY. Berwyn PA. 282 p.

- JMA. 1978. Draft environmental impact statement for the proposed Lower Armstrong Power Station, Armstrong County, Pennsylvania.

 Prepared for the US Environmental Protection Agency, Region III, Philadelphia PA. Berwyn PA. 197 p.
- JMA. 1978. Working draft environmental impact statement on the Horsham, Warminster, Warrington, Pennsylvania, 201 wastewater facilities construction grant applications. Prepared for US Environmental Protection Agency, Region III, Philadelphia PA. Berwyn PA. 502 p.
- JMA. 1978. Cultural resource overview of the Olympic National Forest, Washington. Prepared for USDA Forest Service, Olympia WA. Berwyn PA. Volume 1. 213 p.
- O'Connor, Joel S., and H. M. Stanford (eds.) 1979. Chemical pollutants of the New York Bight: priorities for research. Environmental Research Laboratories, US Department of Commerce, National Oceanic and Atmospheric Administration. Boulder CO. 217 p.
- WAPORA. 1979. Draft environmental impact statement, administrative action: disposal of surplus Federal real property of the Frankford Arsenal, Philadelphia, Pennsylvania. Prepared for the General Services Administration in association with Harland Bartholomew & Associates. Inc. Berwyn PA. 230 p.
- WAPORA. 1979. Stormwater quality evaluation from the proposed parking garage at Harmon Cove IV, V, and VI. Prepared for Hartz Mountain Industries, Inc., Secaucus NJ. Berwyn PA. 20 p.
- WAPORA. 1979. Environmental factors affecting surface mining of steeply pitching and coal seams. Prepared for Ketron, Inc., Wayne PA, for US Bureau of Mines. Berwyn PA. 134 p.
- WAPORA. 1980. Cultural resources survey of six areas proposed for land exchanges and timber sales within the Olympic National Forest, Washington. Prepared for USDA Forest Service, Olympia WA. Berwyn PA. 289 p.
- WAPORA. 1980. Draft task report on the development of NEPA compliance strategies for the Eastern Kentucky coalfield (New Source NPDES permit program). Prepared for US Environmental Protection Agency, Region IV, Atlanta GA. Berwyn PA. 151 p.
- WAPORA. 1980. Report of a comprehensive archaeological reconnaissance and National Register eligibility tests at the Terror Lake hydroelectric project site, Kodiak Island, Alaska, 1980. Prepared for International Engineering Company, San Francisco CA. Berwyn PA. Variously paged, 183 p.
- USEPA Region III. 1980. Coal/Kanawha River Basin supplemental information document, areawide environmental assessment for issuing New Source NPDES permits for coal mines. Philadelphia PA. Variously paged, 992 p.
- WAPORA. 1981. An inventory of environmental resources and an analysis of potential impacts of proposed development on backbarrier tidal marsh along the central Delaware Bay coast at Slaughter Beach, Sussex County, Delaware. Prepared for Delaware Department of Natural Resources and Environmental Control, Dover DE. Berwyn PA. 79 p.
- USEPA Region III. 1981. Environmental impact assessment and finding of no significant impact on new source coal mining in West Virginia. Philadelphia PA. 61 p.
- TERA. 1981. Supplemental draft environmental impact statement, Finance Docket No. 29254, Somerset Railroad Corporation, construction and operation of a line of railroad in Niagara County, New York. Prepared for Interstate Commerce Commission. King of Prussia PA. 454 p. plus map atlas.
- TERA. 1982. Stream encroachment permit application for Collings Avenue cargo yards, Newton Creek, Gloucester NJ, for submission to Bureau of Floodplain Management, NJ Department of Environmental Protection. King of Prussia PA, 25 p.
- TERA. 1982. Stream encroachment application for marginal wharf, Delaware River, Gloucester, NJ, for submission to Bureau of Floodplain Management, NJ Department of Environmental Protection. King of Prussia PA. 50 p.
- TERA. 1982. Draft environmental impact statement on Churchill Town Sector, Germantown, Montgomery County, Maryland. Prepared for the US Department of Housing and Urban Development, Region III. King of Prussia PA. 195 p.
- Schmid & Co. 1983. Final environmental impact statement on Churchill Town Sector, Germantown, Montgomery County, Maryland. Prepared for US Department of Housing and Urban Development. Region III. Media PA. 57 p.
- Schmid & Co. 1983. Specifications for wetland reclamation and mitigation site work, Camden County Park site, Camden County, New Jersey. For submission to Army Engineer District, Philadelphia PA and New Jersey Division of Coastal Resources. Media PA. 51 n
- Schmid & Co. 1983. Water balance analysis and implications for pond management, West Side Avenue Impoundment No. 1, North Bergen, New Jersey. Prepared for Hartz Mountain Development Corporation. Media PA. 9 p.
- Meredith/Boli & Associates, Inc., and Schmid & Co. 1984. Review of state-level electric power transmission line siting programs. Prepared for Edison Electric Institute, Washington DC. Beverly Hills CA. 77 p.
- Schmid & Co. 1984. Input to environmental assessment, Lewisburg Bridge reconstruction, Lewisburg, Pennsylvania, Susquehanna River. For submission to Pennsylvania Department of Transportation by Ketron, Inc., Wayne PA. Media PA. 29 p.
- Schmid & Co., Inc. 1985. Shoreline enhancement study, vegetation and non-structural methods, Baltimore County, Maryland. Prepared for Rogers, Golden & Halpern and Baltimore County Office of Planning and Zoning. Media PA. 49 p.
- Schmid & Co., Inc. 1986. Wetland mitigation plan for the proposed Steward's Watch project, West Windsor Township, Mercer County, New Jersey. Prepared for Crow, Terwilliger & Dressler, Inc. Media PA. 13 p.
- Schmid & Co., Inc. 1986. Inventory of environmental resources on the site of the proposed sanitary landfill, Shade Township, Somerset County, Pennsylvania. Prepared for Resource Conservation Corporation, Johnstown PA. Media PA. 65 p.
- Schmid & Co., Inc. 1986. Floodplains and wetlands on the Baldwin Locomotive site, Eddystone Borough, Ridley Park Borough, and Ridley Township, Delaware County, Pennsylvania. Prepared for the Henderson Group, Sharon Hill PA. Media PA. 30 p.
- Schmid & Co., Inc. 1987. Raritan Center environmental inventory. Prepared for Summit Associates, Inc. and Federal Business Centers. Media PA. 2 vols. (335 + 232 p.)

- Schmid & Co., Inc. 1987. Wetlands on the Lake Watawga study area, Wayne and Monroe Counties, Pennsylvania. Prepared for Lakeview Estates Corporation, Valley Forge PA. Media PA. 32 p.
- Schmid & Co., Inc. 1987. Environmental inventory of the J. T. Mine study area proposed for compensation wetlands, Shade Township, Somerset County, Pennsylvania. Prepared for Resource Conservation Corporation, Johnstown PA. Media PA. 30 p.
- Schmid & Co., Inc. 1987. Environmental inventory of the Willie Will Mine study area proposed for compensation wetlands, Shade Township, Somerset County, Pennsylvania. Prepared for Resource Conservation Corporation, Johnstown PA. Media PA. 31 p.
- Schmid & Co., Inc. 1987. Environmental inventory of the Westbrooke residential project site, West Windsor Township, Mercer County, New Jersey. Prepared for Garden State Lands Group, Cranbury NJ. Media PA 29 p.
- Schmid & Co., Inc. 1988. Wetlands on the Shadow Oaks project site, West Windsor Township, Mercer County, New Jersey. Prepared for Garden State Land Group, Cranbury NJ. Media PA. 25 p.
- Schmid & Co., Inc. 1988. Wetland evaluation of the Shadow Oaks at Cranbury site, Block 21, Lot 8, Cranbury Township, Middlesex County, New Jersey. Prepared for Garden State Land Group, Cranbury NJ. Media PA. 31 p.
- Schmid & Co., Inc. 1988. Wetland evaluation of the Cushetunk Lake site, Readington Township, Hunterdon County, New Jersey.

 Prepared for Trammell Crow Company, Princeton NJ. Media PA. 35 p.
- Schmid & Co., Inc. 1989. Wetland identification at the Meadville Mall site, Vernon Township, Crawford County, Pennsylvania. Prepared for George D. Zamias, Johnstown, Pennsylvania. Media PA. 35 p.
- Schmid & Co., Inc. 1989. Mitigation plan for the Wastewater Treatment Plant expansion at Chambers Works, Deepwater, New Jersey. Prepared for E.I. DuPont de Nemours & Co., Inc., Chambers Works, Deepwater NJ. Media PA. 20 p.
- Schmid & Co., Inc. 1989. Wetland identification at the Bi-County development site, Oakland Borough (Bergen County) and Wayne Township (Passaic County), New Jersey. Prepared for Bi-County Development Corporation, Brooklyn NY. Media PA. 31 p.
- Schmid & Co., Inc. 1989. Wetland identification at the Altman/Young Tracts, East Caln and Uwchlan Townships, Chester County, Pennsylvania. Prepared for T.H. Cahill & Associates, West Chester PA. Media PA. 39 p.
- Schmid & Co., Inc. 1989. Wetland creation plan for mitigation of fill at wastewater treatment plant expansion, DuPont Chambers Works, Carneys Point Township, Salem County NJ. Prepared for submission to Philadelphia District, Army Corps of Engineers, by E. I. DuPont de Nemours & Co., Inc. Deepwater NJ. Media PA. 25 p.
- Schmid & Co., Inc. 1990. Environmental impact statement, Weatherstone proposed residential development, Lots 14 and 145, Section 21, West Windsor Township, Mercer County, New Jersey. Prepared for Garden State Land Group, Cranbury NJ. Media PA. 17 p. plus appendix.
- Schmid & Co., Inc. 1990. Wetland identification at the Hellertown site, City of Bethlehem, Northampton County, Pennsylvania. Prepared for Environmental Strategies Corporation, Vienna VA. Media PA. 28 p.
- Schmid & Co., Inc. 1990. Wetland evaluation for Due Process Stable, Colts Neck Township and Tinton Falls Borough, Monmouth County, New Jersey. Media PA. 48 p.
- Schmid & Co., Inc. 1990. Wetland identification at the Godwin Pumps site, Block 33, Lot 8.02, Logan Township, Gloucester County NJ. Prepared for Godwin Pumps of America. 20 p.
- Schmid & Co., Inc. 1990. Wetland identification at the DuPont Chambers Works, Carneys Point and Pennsville Townships, Salem County, New Jersey. (Draft) Prepared for E. I. DuPont de Nemours & Co., Inc., Deepwater NJ, for submission to the New Jersey Division of Coastal Resources. Media PA. 74 p.
- Schmid & Co., Inc. 1990. Wetland identification at the Floodgate Road site, Logan Township, Gloucester County, New Jersey. Prepared for American Dredging Co., Camden NJ. Media PA. 34 p.
- Schmid & Co., Inc. 1990. Phase I environmental site assessment for Lots 14 and 145, Section 21 (Cranbury Golf Course), West Windsor Township, Mercer County, New Jersey. Prepared for Garden State Land Group, Cranbury NJ. Media PA. 28 p.
- Schmid & Co., Inc. 1990. Wetland investigation for the Bender Road easement at the Lakeview Estates subdivision, Lehigh Township, Wayne County, Pennsylvania. Prepared for Lakeview Estates International Corporation, Valley Forge PA. Media PA. 61 p.
- Schmid & Co., Inc. 1990. Wetlands at Block 195, Lots 6, 7, and 8, Brick Township, Ocean County, New Jersey, and regulatory implications. Prepared for the Trust for Public Lands, New York NY. Media PA. 29 p.
- Schmid & Co., Inc. 1991. Wetland identification, Wings Field tract, Whitpain Township, Montgomery County, Pennsylvania. Prepared for LHC Realty/Wings Field Associates. Plymouth Meeting PA. Media PA 40 p.
- Schmid & Co., Inc. 1991. Wetland investigations at Block 1DD, Lots 2-4, and Block 1BB, Lots 26-30, Pine Hill Borough, Camden County, New Jersey. Prepared for Richard B. Heller, Newtown Square PA. Media PA. 17 p.
- Schmid & Co., Inc. 1991. Wetlands at Block 109, Lots 28, 29, and 31, Brick Township, Ocean County, New Jersey, and regulatory implications. Prepared for the Trust for Public Lands, New York NY. Media PA. 9 p.
- Schmid & Co., Inc. 1991. Wetland investigation at the Suttmeier Tract, West Windsor Township, Mercer County, New Jersey. Prepared for Garden State Land Group. Media PA. 38 p.
- Schmid & Co., Inc. 1991. Wetland investigation at Labato clay pit, Block 13, Lot 7, Alloway Township, Salem County, New Jersey. Prepared for Chambers Works, E. I. DuPont de Nemours & Co., Inc. Media PA. 36 p.
- Schmid & Co., Inc. 1992. Phase I environmental audit and assessment, Shore Oaks Golf Club, Howell Township, Monmouth County, New Jersey. Prepared for Cannon Golf Enterprises, Inc., and McCarter & English, Newark NJ. 35 p.
- Schmid & Co., Inc. 1993. Wetland conditions at the Gulph Road Bridge over Crow Creek, Upper Merion Township, Montgomery County, Pennsylvania. Prepared for Raymond Keyes Associates, Tarrytown NY. Media PA. 23 p.
- Schmid & Co., Inc. 1994. Wetland conditions at the Woodside Road site, Washington Township, Mercer County, New Jersey. Prepared for Cenlar Federal Savings Bank, Princeton NJ. Media PA. 47 p.
- Schmid & Co., Inc. 1994. Wetland identification, Envirotest Buck 2 facility site, Plumstead Township, Bucks County, Pennsylvania.

 Prepared for Envirotest Partners, Bala Cynwyd PA. 24 p.

- Schmid & Co., Inc. 1994. Wetland conditions at the Envirotest Buck 5 inspection facility site, Falls Township, Bucks County, Pennsylvania. Prepared for Envirotest Partners, Bala Cynwyd PA. 31 p.
- Schmid & Co., Inc. 1995. Wetland conditions on Lots 6, 12, and 233-A, Block 544, Hamilton Township, Mercer County, New Jersey. Media PA. 48 p.
- p.
 Schmid & Co., Inc. 1995. Vegetation and wildlife inventory, Estates Boulevard project site, Hamilton Township, Mercer County, New Jersey. Prepared for Township of Hamilton. Media PA. 13 p.
- Schmid & Co., Inc. 1995. Application to NJDEP for a regulatory line verification, Lot 10.03, Block 9, Kingwood Township, Hunterdon County, New Jersey. Prepared for Cenlar Federal Savings Bank. Media PA.
- Schmid & Co., Inc. 1995. Wetland conditions at Morrows Marina, Ridley Township, Delaware County, New Jersey. Prepared for Driftwood Marina, Inc. Media PA. 31 p.
- Schmid & Co., Inc. 1995. Wetland conditions at a site along Morton Avenue and MacDade Boulevard, Ridley Township, Delaware County, Pennsylvania. Prepared for Harper Associates, Ridley Park PA. Media PA. 44 p.
- Schmid & Co., Inc. 1995. Wetland conditions at a site along George Dye Road and Klockner Road, Hamilton Township, Mercer County, New Jersey. Prepared for Stanley Neuman. Media PA. 72 p.
- Schmid & Co., Inc. 1995. Wetland conditions at a site along Stouts Lane, South Brunswick Township, Middlesex County, New Jersey. Prepared for S. N. Golden Estates, Inc. Hamilton Square NJ. 36 p.
- Schmid & Co., Inc. 1995. Wetland conditions at the Summit Avenue site, Norwood Borough, Delaware County, Pennsylvania. Prepared for T & E Contractors, Inc. Springfield PA. Media PA. 33 p.
- Schmid & Company, Inc. 1995. Wetland conditions at a site along Cardiff Lane, Hamilton Township, Mercer County, New Jersey. Prepared for Mercer Capital Management, Inc., L.P. Hamilton, New Jersey. Media PA. 35 p.
- Schmid & Co., Inc. 1995. Wetland conditions at the Harrison Tract, Newtown Township, Delaware County, Pennsylvania. Prepared for Durkin Associates, Inc., Erdenheim, Pennsylvania. Media PA. 42 p.
- Schmid & Co., Inc. 1995. Wetland conditions at a site along Whitehorse-Hamilton Square Road, Block 542, Lot 8.02, Hamilton Township, Mercer County, New Jersey. Prepared for Kol-Tov Associates, Hamilton Square, New Jersey. Media PA. 43 p.
- Schmid & Co., Inc. 1995. Application for Statewide General Permit, West Windsor Township, Mercer County, New Jersey. Prepared for Mercer Capital Management. Media PA.
- Schmid & Co., Inc. 1996. Application for Transition Area Waiver, Lot 26, Block 535, Hamilton Township, Mercer County, New Jersey. Prepared for Estates Boulevard Company. Media PA. 25 p.
- Schmid & Co., Inc. 1996. Wetland conditions at Wings Field, Whitpain Township, Montgomery County, Pennsylvania. Prepared for Wings Field Associates. Media PA. 58 p.
- Schmid & Co., Inc. 1997. Wetland investigation: The Hamptons at Wayside, Ocean Township, Monmouth County, New Jersey. Prepared for Ocean 110, L.L.C. Media PA. 34 p.
- Schmid & Co., Inc. 1997. Wetland conditions at Lot 4.003, Section 540.02, Hamilton Township, Mercer County, New Jersey. Prepared for TPM Partnership. Media PA. 52 p.
- Schmid & Co., Inc. 1997. Wetland conditions at a site between Kuser Road and Interstate 195, Hamilton Township, Mercer County, New Jersey. Prepared for John T. Gervasoni. Media PA. 49 p.
- Schmid & Co., Inc. 1997. Wetland conditions at the Yardville National Bank site, Section 96, Lot 359, Hamilton Township, Mercer County, New Jersey. Prepared for Yardville National Bank. Media PA. 39 p.
- Schmid & Co., Inc. 1997. Wetland conditions at the Oak Meadow Lane site, Easttown Township, Chester County, Pennsylvania. Prepared for Durkin Associates, Inc. Media PA. 32 p.
- Schmid & Co., Inc. 1997. Wetland conditions at Culligan Water Conditioning site, Sunfield Avenue, Raritan Center, Edison Township, Middlesex County, New Jersey. Prepared for Culligan Water Conditioning, Inc. Media PA. 30 p.
- Schmid & Co., Inc. 1997. Wetland conditions at a property along Barclay and Brunswick Avenues, City of Margate, Atlantic County, New Jersey. Prepared for A. Silverstein. Media PA. 33 p.
- Schmid & Co., Inc. 1997. Wetland conditions at a site along Patterson Avenue, Hamilton Township, Mercer County, New Jersey. Prepared for W. Matisa. Media PA. 31 p.
- Schmid & Co., Inc. 1997. Preliminary site assessment for a site along Hobson and Emeline Avenues, Hamilton Township, Mercer County, New Jersey. Prepared for Hamilton Township Division of Planning. Media PA. 62 p.
- Schmid & Co., Inc. 1997. Preliminary site assessment for a site along Kuser Road, Hamilton Township, Mercer County, New Jersey. Prepared for Hamilton Township Division of Planning. Media PA. 55 p.
- Schmid & Co., Inc. 1997. Preliminary site assessment for a site along Paxson Avenue, Hamilton Township, Mercer County, New Jersey.

 Prepared for Hamilton Township Division of Planning. Media PA. 51 p.
- Schmid & Co., Inc. 1997. Wetland conditions at a site along Melrich Road, South Brunswick Township, Middlesex County, New Jersey. Prepared for Summit/Greene Associates. Media PA. 40 p.
- Schmid & Co., Inc. 1998. Wetland conditions at a site along Yardville-Hamilton Square Road, Hamilton Township, Mercer County, New Jersey. Prepared for Sharbell Development Corporation. Media PA. 36 p.
- Schmid & Co., Inc. 1998. Wetland redelineation for the Ganes Chemicals property, Pennsville Township, Salem County, New Jersey. Prepared for Ganes Chemicals, Inc. Media PA. 59 p.
- Schmid & Co., Inc. 1998. Wetland resource value classification at the Ganes Chemicals property, Pennsville Township, Salem County, New Jersey. Prepared for Ganes Chemicals, Inc. Media PA. 38 p.
- Schmid & Co., Inc. 1998. Wetland conditions along Pascack Road, Lot 2, Block 7706, Paramus Borough, Bergen County, New Jersey. Prepared for the Borough of Paramus. Media PA. 35 p.
- Schmid & Co., Inc. 1999. Wetland conditions at the South Valley Road Site, Willistown Township, Chester County, Pennsylvania. Prepared for Richard G. Mingey, Newtown Square PA. Media PA. 44 p.

- Schmid & Co., Inc. 1999. Wetland conditions at a site along Amboy Road, Block 7799, Lots 17, 23, and 30, Borough of Staten Island, Richmond County, New York. Prepared for Fred P. Goldhirsch, New York NY. Media PA. 31 p.
- Schmid & Co., Inc. 2000. Site conditions at a property along Domorah Drive, Montgomeryville Industrial Park, Montgomery Township, Montgomery County, Pennsylvania. Prepared for Nappen & Associates, Montgomeryville PA. Media PA. 35 p.
- Schmid & Co., Inc. 2000. Wetland conditions at a site along Sunfield Avenue in Raritan Center, Block 395, Lot 31.02, Edison Township, Middlesex County, New Jersey. Prepared for Garden State Buildings, L.P., Edison NJ. Media PA. 33 p.
- Schmid & Co., Inc. 2000. Wetland conditions at a site along George Davison Road, Block 23, Lots 1, 102.02, 104, and 108, Cranbury Township, Middlesex County, New Jersey. Prepared for MGD Development Group, L.L.C., Hopewell NJ. Media PA. 47 p.
- Schmid & Co., Inc. 2000. Environmental impact statement for The Woods at Cranbury, Block 23, Lots 1, 102.02, 104, and 108, Cranbury Township, Middlesex County, New Jersey. Prepared for MGD Development Group, L.L.C., Hopewell NJ. Media PA. 37 p.
- Schmid & Co., Inc. 2000. Existing conditions and potential impacts of proposed development at the Pitcher Property along French Creek Road, West Vincent Township, Chester County, Pennsylvania. Prepared for French and Pickering Creeks Conservation Trust, Pottstown PA. Media PA. 20 p.
- Schmid & Co., Inc. 2000. Site conditions at a property along Sherwood Avenue, Block 6784, Lots 73, 75, 79, and 81, Borough of Staten Island, Richmond County, New York. Prepared for Robert Kelly, Staten Island NY. Media PA. 31 p.
- Schmid & Co., Inc. 2001. Site conditions at a property along Richmond Valley Road, Block 7584, Lot 4, Borough of Staten Island, Richmond County, New York. Prepared for P. De Paulis, Staten Island NY. Media PA. 36 p.
- Schmid & Co., Inc. 2001. Wetland conditions at a site along Hutchinson Road and Washington Boulevard, Washington Township, Mercer County, New Jersey. Prepared for P. A. Tafrow, Robbinsville NJ. Media PA. 33 p.
- Schmid & Co., Inc. 2001. Wetland conditions at a site known as Lot 13, Block 22, East Windsor Township, Mercer County, New Jersey. Prepared for East Windsor Business Campus Center, L.P., Jenkintown PA. Media PA. 40 p.
- Schmid & Co., Inc. 2001. Site conditions at a property along Rustic Lane, Willistown Township, Chester County, Pennsylvania. Prepared for The Meadows at Willistown, LLC, Media PA. Media PA. 35 p.
- Schmid & Co., Inc. 2001. Site conditions at a property along PA Route 291, Tinicum Township, Delaware County, Pennsylvania. Prepared for SmartPark Inc., Essington PA. Media PA. 30 p.
- Schmid & Co., Inc. 2001. Wetland conditions at Lot 5, Block 46, Tewksbury Township, Hunterdon County, New Jersey. Prepared for Tewksbury/Oldwick Associates, Edison NJ. Media PA. 35 p.
- Schmid & Co., Inc. 2001. Wetland conditions at a site known as Block 4801, Lot 5.01, Pennsville Township, Salem County, New Jersey. Prepared for Ganes Chemicals Inc., Pennsville NJ. Media PA. 37 p.
- Schmid & Co., Inc. 2001. Site conditions at a property along Father Capodanno, Lot 42, Block 3500, Borough of Staten Island, Richmond County, New York. Prepared for R. Crenshaw, Potomac Falls, Virginia. Media PA. 29 p.
- Schmid & Co., Inc. 2001. Site conditions at a property along Quincy and Naughton Avenues, Lot 51, Block 3834, Borough of Staten Island, Richmond County, New York. Prepared for L. S. Huie, Brooklyn, New York. Media PA. 26 p.
- Schmid & Co., Inc. 2002. Site conditions at a property along Father Capodanno, Lot 34, Block 3500, Borough of Staten Island, Richmond County, New York. Prepared for S. Krebushevski, Staten Island, New York. Media PA. 27 p.
- Schmid & Co., Inc. 2002. Site conditions at a property along Jefferson Avenue, Lots 114 and 116, Block 3864, Staten Island, Richmond County, New York. Prepared for V. Grinberg, Staten Island, New York. Media PA. 43 p.
- Schmid & Co., Inc. 2002. Site conditions at a property along Father Capodanno Boulevard, Lot 7, Block 3864, Staten Island, Richmond County, New York. Prepared for L. Huie, Staten Island, New York. Media PA. 35 p.
- Schmid & Co., Inc. 2002. Wetland conditions, Reed Sod Farm, Lots 22 and 22.02, Block 43, Upper Freehold Township, Monmouth County, New Jersey. Prepared for MGD Development Group, LLC, Hopewell, New Jersey. Media PA. 43 p.
- Schmid & Co., Inc. 2002. Site conditions at Tax Parcels 101 and 102, Tinicum Township, Delaware County, Pennsylvania. Prepared for Tinicum LandVest, LLC, Chester Heights, Pennsylvania. Media PA. 40 p.
- Schmid & Co., Inc. 2002. Wetland conditions at a site along Fellowship Road and Church Road, Mount Laurel Township, Burlington County, New Jersey. Prepared for M. Rourke, Fairfax Station, Virginia. Media PA. 39 p.
- Schmid & Co., Inc. 2002. Site conditions at a property along Slater Boulevard, Lots 4, 7, 11, and 33, Block 3830, Staten Island, Richmond County, New York. Prepared for S. Krebushevski, Staten Island, New York. Media PA. 37 p.
- Schmid & Co., Inc. 2002. Site conditions at a property along Father Capodanno, Lot 30, Block 3500, Borough of Staten Island, Richmond County, New York. Prepared for S. Krebushevski, Staten Island, New York. Media PA. 29 p.
- Schmid & Co., Inc. Site conditions at Hamanassett, Chester Heights Borough, Delaware County, Pennsylvania. Prepared for Hamanassett at Darlington LLC, Media, Pennsylvania. Media PA. 37 p.
- Schmid & Co., Inc. 2002. Wetland conditions at a site along Blueball Avenue and Interstate 95, Upper Chichester Township, Delaware County, Pennsylvania. Prepared for Moser-Knauer Associates, Boothwyn, Pennsylvania. Media PA. 59 p.
- Schmid & Co., Inc. 2002. Site conditions at a property along Aultman Avenue, Lot 5, Block 2262, Staten Island, Richmond County, New York. Prepared for Kling Real Estate, Ltd., Staten Island, New York. Media PA. 52 p.
- Schmid & Co., Inc. 2002. Wetland conditions at a site along Naamans Creek and Interstate 95, Upper and Lower Chichester Townships, Delaware County, Pennsylvania. Prepared for Chichester School District, Aston, Pennsylvania. Media PA. 48 p.
- Schmid & Co., Inc. 2002. Wetland conditions at the Geisinger Tract, Lots 24, 24-1, and 35, Norwood Borough, Delaware County, Pennsylvania. Prepared for Darby Realty, Inc., and the Estate of Faye L. Goodman, Springfield, Pennsylvania. Media PA. 45 p.
- Schmid & Co., Inc. 2003. Site conditions at the Valley Park Business Center, Hillsborough Township, Somerset County, New Jersey. Prepared for SAI Middlesex Farms, LP, Edison, New Jersey. Media PA. 43 p.
- Schmid & Co., Inc. 2003. Wetland conditions at the Hillsborough Business Center, Lot 1.09, Block 58, Hillsborough Township, Somerset County, New Jersey. Prepared for SAI Middlesex Farms, LP. Edison, New Jersey. Media PA. 43 p.
- Schmid & Co., Inc. 2003. Site conditions at a property along Aultman Avenue, Lots 3, 4, and 7, Block 2261, Staten Island, Richmond County, New York. Prepared for P. Zahakos, Rosedale, New York. Media PA. 43 p.

- Schmid & Co., Inc. 2003. Wetlands at a property along Little Britain Road, Section 97, Block 1, Lot 40.1, Town of Newburgh, Orange County, New York. Prepared for Ginsburg Development LLC, Pomona, New York. Media PA. 36 p.
- Schmid & Co., Inc. 2003. Site conditions at a property along Mace Street, Lot 9, Block 2259, Borough of Staten Island, Richmond County, New York. Prepared for P. Grima, Staten Island, New York. Media PA. 39 p.
- Schmid & Co., Inc. 2003. Wetlands at a property along Golf Links Road, Section 73, Block 1, Lots 31.2, 33.2, and 33.3, Town of Wallkill, Orange County, New York. Prepared for Ginsburg Development, LLC, Pomona, New York. Media PA 41 p.
- Schmid & Co., Inc. 2003. Application for Letter of Interpretation (Presence/Absence), Lots 19 and 20, Block 5601, Lawrence Township, Mercer County, New Jersey. Prepared for C. and S. Costa, Lawrenceville, New Jersey. Media PA. 40 p.
- Schmid & Co., Inc. 2003. Wetland conditions at a site along South Broad Street, Lot 23, Block 2363, Hamilton, New Jersey. Prepared for J. Seefeldt, Hamilton, New Jersey. Media PA. 37 p.
- Schmid & Co., Inc. 2004. Wetland conditions at a site along Columbia Turnpike, Lots 9 and 16, Block 2002, Florham Park Borough, Morris County, New Jersey. Prepared for R. DiPopolo, Belleville, New Jersey. Media PA. 48 p.
- Schmid & Co., Inc. 2004. Wetland conditions at the Hoffman Road site, Lots 10, 11.01, 19.02, and 20, Block 32, Monroe Township, Middlesex County, New Jersey. Prepared for Whitherb Associates, Inc., Dayton, New Jersey. Media PA. 49 p.
- Schmid & Co., Inc. 2004. Wetland conditions at the Merk Tract, Lot 1.02, Block 1504, Hamilton Township, Mercer County, New Jersey. Prepared for Grez & Kaluzny Land Development, LLC, Hamilton, New Jersey. Media PA. 36 p.
- Schmid & Co., Inc. 2004. Wetland conditions at a site along Christmas Tree Lane, Lot 51, Block 4701, Pennsville Township, Salem County, New Jersey. Prepared for M. Staci, Wilmington, Delaware. Media PA 46 p.
- Schmid & Co., Inc. 2004. Wetland conditions at the Prospect Hill site along NY Route 17A, Town of Goshen, Orange County, New York. Prepared for Ginsburg Development LLC, Pomona NY. Media PA. 49 p.
- Schmid & Co., Inc. 2004. Wetland conditions at a site along Mullica Hill-Woodstown Road, Harrison Township, Gloucester County, New Jersey. Prepared for Ginsburg Development LLC, Hopewell, New Jersey. Media PA. 42 p.
- Schmid & Co., Inc. 2005. Wetlands at Britain Commons, Sections III and IV, Town and City of Newburgh, Orange County, New York. Prepared for Ginsburg Development, LLC, Pomona, New York, Media PA. 41 p.
- Schmid & Co., Inc. 2005. Application for General Permit #6, Lots 24 and 31, Block 501, Logan Township, Gloucester County, New Jersey. Prepared for Logan Sand & Gravel, Bridgeport, New Jersey. Media PA. 68 p.
- Schmid & Co., Inc. 2005. Wetland conditions at the West Tract, Washington Township, Berks County, Pennsylvania. Prepared for Barto Mall, Inc., Newtown Square, Pennsylvania. Media PA. 59 p.
- Schmid & Co., Inc. 2006. Wetland conditions at a site along Camptown Drive at Kuntz Avenue, Lot 18, Block 301, Berkeley Heights Township, Union County, New Jersey. Prepared for Ramesh Raman. Media PA. 36 p.
- Cahill & Associates, Schmid & Co., Inc, and PennFuture. 2006. Natural conservation area analysis for the Elwyn tract, Middletown Township, Delaware County, Pennsylvania. Prepared for Middletown Township Land Conservancy and Chester-Ridley-Crum Watershed Association. Media PA. 8 p. www.pennfuture.org/UserFiles/ElwynConservationAreaAnalysis.pdf.
- Schmid & Co., Inc. 2006 Freshwater wetland permit application for water wells, Prospect Hill property, Town of Goshen, Orange County, New York. Prepared for GDC Group. Media PA. Variously paged (33 p.).
- Schmid & Co., Inc. 2006. Wetland conditions at 623 Texas Road, Old Bridge and Marlboro Townships, Middlesex and Monmouth Counties, New Jersey. Prepared for Garden Plaza LLC. Media PA 36 p.
- Schmid & Co., Inc. 2006. Application for transition area averaging waiver for Lot 5.03, Block 409, Lower Township, Cape May County, New Jersey. Prepared for Dominick Paglione. Media PA. Variously paged (36 p).
- Schmid & Co., Inc. 2006. Wetland conditions at a site along Fellowship Road, Church Road, Beaver Avenue, and Route 73, Mount Laurel Township, Burlington County, New Jersey. Prepared for Develcom. Media PA. 42 p.
- Schmid & Co., Inc. 2006. Wetland conditions at a site along Preston and Sycamore Avenues, Lots 12, 13, 14, and 15, Block 14, Voorhees Township, Camden County, New Jersey. Prepared for Voorhees Preston LLC. Media PA. 53 p.
- Schmid & Co., Inc. 2007. Wetland conditions at a site along Worthington Mill Road, Wrightstown Township, Bucks County, Pennsylvania. Prepared for Brian Bentley. Media PA. 38 p.
- Schmid & Co., Inc. 2007. Wetland conditions at a site in Hatfield Township, Block 77, Montgomery County, Pennsylvania. Prepared for Hatfield 309 LLC. Media PA. 69 p.
- Schmid & Co., Inc. 2007. Wetland conditions at a site along PA Route 309 (Bethlehem Pike) near Bergey Road, Block 76, Hatfield Township, Montgomery County, Pennsylvania. Prepared for Hatfield 309 LLC. Media PA. 42 p.
- Schmid & Co., Inc. 2007. Application for General Permits 1, 2, and 10A, Lot 51, Block 4701, Pennsville Township, Salem County, New Jersey. Prepared for Robert Mistichelli, Pennsville NJ. Media PA. 35 p.
- Schmid & Co., Inc. 2008. Freshwater wetland application for General Permits 7 and 11, Towneplace Hotel, Lot 13, Block 2301, Logan Township, Gloucester County, New Jersey. Prepared for SSN Hotel Management, LLC. Newark DE. Media PA. 52 p.
- Schmid & Co., Inc. 2008. Application for General Permit 7 and Transition Area Averaging Waiver, Lots 2 and 3, Block 134, Town of Kearny, Hudson County, New Jersey. Prepared for Arlington Cemetery Association, Kearny NJ. Media PA. 69 p.
- Schmid & Co., Inc. 2008. Review of a petition to redesignate Grinnage Run from HQ-WWF to WWF, South Fork Tenmile Creek basin, Gray Township and Richhill Township, Greene County, Pennsylvania. Prepared for Center for Coalfield Justice, Mountain Watershed Association, and Citizens for Pennsylvania's Future. Media PA. 26 p. www.schmidco.com
- Schmid & Company, Inc. 2008. Freshwater wetland application for letter of interpretation extension, Dunhams Corner Road Site, Block 22.010, Lot 2.03, South Brunswick Township, Middlesex County, New Jersey. Prepared for Creative Communities LLC. Media PA. 46 p.
- Schmid & Co., Inc. 2009. Review of a petition to redesignate tributaries to South Fork Tenmile Creek from HQ-WWF to WWF, Center and Jackson Townships, Greene County, Pennsylvania. Prepared for Citizens for Pennsylvania's Future. Media PA. 28 p.

- Schmid & Company, Inc. 2010. A need to identify "Special Protection" status and apply existing use protections to certain waterways in Greene and Washington Counties, Pennsylvania. Prepared for Citizens Coal Council. Media PA. 15 p. plus appendix.
- Schmid & Co., Inc. 2011. The increasing damage from underground coal mining in Pennsylvania, a review and analysis of the PADEP's Third Act 54 Report. Prepared for Citizens Coal Council, Bridgeville PA. Media PA. 50 p. http://www.schmidco.com/17April2011SchmidAct54Analysis.pdf
- Schmid & Co., Inc. 2011. Comments on DESA Permit Application E5729-014. Perpared on behalf of the Foundation for Pennsylvania Watersheds. Media PA. 24 p.
- Schmid & Co., Inc. 2012. Individual freshwater wetland permit application, Lot 2, Block 2301, Paramus Borough, Bergen County, New Jersey. Prepared for George Washington Memorial Park Cemetery Association. Media PA. 90 p.
- Schmid & Company, Inc. 2012. Comments to Pittsburgh District Army Corps of Engineers on Application CELRP-OP-F 2007-891 for proposed Foundation Mine. Center and Jackson Townships, Greene County, PA. Media PA. 17 p.
- Schmid & Co., Inc. 2013. Review of Foundation Mine, a new longwall mine. Prepared for Greene County Watershed Association, Waynesburg PA. 60 p.
- Schmid & Co., Inc. 2013. Existing conditions at a site along Dey Road, Lot 5, Block 5, Cranbury Township, Middlesex County NJ. Prepared for Skyhail LLC, Bayonne NJ. 28 p. plus attachments.
- Schmid & Company, Inc. 2013. Review of permit applications of Amerikohl Mining Inc. for proposed Walters Mine, Donegal Township, Butler County, Pennsylvania. Prepared for Citizens Coal Council, Bridgeville PA. Media PA. 35 p.
- Schmid& Co., Inc. 2014. Summary review of Foundation Mine. Prepared for Greene County Watershed Association. Waynesburg PA. 15 p.
- Schmid & Co., Inc. 2014. The illusion of environmental protection: permitting longwall coal mines in Pennsylvania. Prepared for Citizens Coal Council, Bridgeville PA. 138 p.
- Schmid & Co., Inc. 2015. Undermining the public trust: a review and analysis of PADEP's Fourth Act 54 Five-year Assessment report. Prepared for the Citizens Coal Council, Bridgeville PA. Media PA. 67 p.
- Schmid & Co., İnc. 2015. Comments on Docket İD: OŠM–2010–0018 (Proposed Stream Protection Rule). Prepared Foundation for Pennsylvania Watersheds, Alexandria PA. Media PA. 36 p.
- Schmid & Company, Inc. 2015. Regulated waters and wetlands at the Fairview Golf Redevelopment site, Ridley Township, Delaware Schmid & Company, Inc. 2016. Wetland and stream impacts of Sunoco's Mariner East II pipeline. Prepared for Mountain Watershed Association and the Clean Air Council. Media PA. 22 p.
- Schmid & Company, Inc. 2016. Longwall mining A to Z: learning from the Pennsylvania experience. Prepared for the Citizens Coal Council, Bridgeville PA. Media PA. 56 p.
- Schmid & Company, Inc. 2015. Regulated waters and wetlands at the Fairview Golf Redevelopment site, Ridley Township, Delaware County, Pennsylvania. Prepared for Everest EB-5 Capital LLC, Havertown, Pennsylvania. Media PA. 46 p.
- Schmid & Company, Inc. 2016. The effects of the proposed PennEast pipeline on exceptional value wetlands in Pennsylvania.

 Prepared for the Delaware Riverkeeper Network, Bristol, PA. Media PA. 54 p.
- Schmid & Company, Inc. 2016. Comments on FERC DEIS for PennEast Pipeline Project in New Jersey. Prepared for the Delaware Riverkeeper Network, Bristol, PA. Media PA. 15 p.
- Schmid & Company, Inc. 2017. A comparison of the water resource impacts associated with alternative alignments of the proposed Atlantic Sunrise pipeline on and near the Nesbitt property, Luzerne and Wyoming Counties, Pennsylvania. Prepared for Icarus Ecological Services, Inc., Saint Augustine, FL. Media PA. 23 p.
- Schmid & Company, Inc. 2017. Potential impacts of Mariner East II pipelines on wetlands, streams, and water supplies in Middletown Township and Delaware County, Pennsylvania. Prepared for Middletown Coalition for Community Safety. Media PA. 18 p.
- Schmid & Company, Inc. 2017. Potential impacts of the Atlantic Sunrise pipeline on exceptional value wetlands and special protection waters in Schuylkill County, Pennsylvania. Prepared for Delaware Riverkeeper Network, Bristol, PA, and Schuylkill Pipeline Awareness. Schuylkill County. PA. Media PA. 21 p
- Schmid & Company, Inc. 2017. Stream protection in Pennsylvania in the context of underground coal mining. Prepared for Citizens Coal Council, Cannonsburg, PA. Media PA. 30 p.

Current address

Director Rushing Rivers Institute 592 Main Street Amherst, MA 01002 tel. (413) 687 4740

fax and voice: (208) 693 9330 e-mail:Piotr@RushingRivers.org

http://en.wikipedia.org/wiki/Piotr Parasiewicz

Synopsis

Piotr Parasiewicz was born in Warsaw in 1961 as a son of chemical engineers Dr. Wanda and Kazimerz Parasiewicz. He completed K. Gottwald High School (currently S. Staszic) in Warsaw and started his higher education at the University of Agricultural Sciences in Warsaw (SGGW). In 1982 he left the country and continued his education as a civil and environmental engineer at the University of Agricultural Sciences in Vienna. He started his career in 1988 as a research associate in an interdisciplinary team of biologists, water engineers and landscape ecologist at the Department of Hydrobiology, Fisheries and Aquaculture of the same University. This position strongly influenced his professional development and provided him with multidisciplinary expertise on river ecology and restoration engineering. He was a member of the Austrian Network for Environmental Research advising the Austrian Government on the development of EU environmental and research policy, and actively participated in shaping the EU Water Framework Directive.

In 1999 he received a David H. Smith Fellowship from The Nature Conservancy in the USA, and began his career as a research Professor at Cornell University and later University of Massachusetts, Amherst and Mount Holyoke College. In 2007 he founded the Rushing Rivers Institute, a river research non-profit (www.RushingRivers.org) where he serves as a Director. He is also currently an Adjunct Professor at the University of Nebraska, Lincoln.

Dr. Parasiewicz's career is strongly affected by cross disciplinary collaborations worldwide. He is the creator of the International Aquatic Modeling Group (IAMG), a researcher network aiming to improve knowledge on running water habitats. For his strong aptitude as the president of IAMG in 1999 he received funding from the European Science Foundation that supported COST Action 626: European Aquatic Modelling Network. Scientists from over 40 countries participated in the network, which spawned a number of collaborative publications and international projects. Dr. Parasiewicz's research is supported by federal and state governments, non-profit organizations and industries. Dr.

Parasiewicz frequently serves as a technical advisor for State and Federal Governments in the USA and abroad.

Research expertise and interests

River science and restoration engineering: Instream flow and habitat modeling, river restoration and management, Fish ecology and fisheries management, Fish passage, River Survey and Instrumentation, Geographical Information Systems (GIS), Remote sensing, Digital Terrain Models (DTM), environmental statistics, computer programming, Computer Aided Design (CAD).

Scientific accomplishments:

Dr. Parasiewicz is an applied scientist dedicated to research necessary for sustainable management of running waters. He combines engineering with ecological sciences and developing tools for effective restoration and management planning. He is best known for his development of **MesoHABSIM** (www.MesoHABSIM.org), a multiscale approach for instream habitat modeling. MesoHABSIM is currently used in river restoration and planning worldwide, particularly in the USA, Europe and recently New Zealand. His other scientific accomplishments are among others:

- concept of Virtual River Model,
- concept of Bioperiods,
- concept of Upscalling in habitat modeling,
- Geodetically Based Irregular Sampling protocol for river surveys,
- development of multiplex survey instrument Depth Velocity Position Bar,
- Uniform Continuous Under Threshold Analysis of Habitat Time Series,
- Habitat Meter
- conceptual guidelines for construction and planning of nature-like fish bypass channels.

The results and ideas are published as 68 scientific papers (20 in highly ranked peer reviewed journals) and on-line.

Education:

- 1998 Ph. D. (Doctor rerum naturalium technicarum, doctor of science *summa cum laude*) Natural Resources Management and Water Engineering, University of Agricultural Sciences in Vienna, Austria. Advisors: Univ. Prof. Dr. Mathias Jungwirth and ao. Univ. Prof. Dr. Stefan Schmutz.
- 1993 G. E. (Dipl. Ing.), Environmental and Water Engineering, University of Agricultural sciences in Vienna, Austria.

 Advisors: Univ. Prof. Dr. Mathias Jungwirth and Univ. Prof. Dr. Siegfried Radler.

1988 - B.S., Environmental and Water Engineering, Department of Hydrobiology, Fisheries and Aquaculture, University of Agricultural Sciences, Vienna, Austria.

Memberships in professional societies

International Aquatic Modeling Group, American Fisheries Society International Society for River Science River Management Society

Academic appointments

- 2007-pres. Rushing Rivers Institute, Director.
- 2009-pres. University of Nebraska, Lincoln, NE
 - Adjunct Professor, School of Natural Resources
- 2007-2009. Mt. Holyoke College, Mt. Holyoke, MA
 - Research Associate and Adjunct Professor, Department of Earth and Environment
- 2004-2007 University of Massachusetts, Amherst, MA Research Associate Professor, Department of Natural Resources Conservation
- 2003-2007 University of Connecticut, Storrs, CT
 Adjunct Assistant Professor in Aquatic Ecology and Engineering,
 Department of Natural Resources Management and Engineering
- 2000-2004 Cornell University, Ithaca, NY Research Associate IV. Department of Natural Resources. Director, Instream Habitat Program
- 2000-2004 University of Massachusetts, Amherst, MA
 Adjunct Assistant Professor in Aquatic Ecology and Engineering,
 Department of Natural Resources Conservation.
- 1999-2000 Cornell University, Ithaca, NY
 Post Doctoral Fellow, Aquatic Ecological Engineering, New York
 Cooperative Fish and Wildlife Research Unit

Curriculum Vitae	Piotr Parasiewicz	December 2010
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- 1998-1999 University of Agricultural Sciences, Vienna, Austria
 University Lecturer, Institute of Water Provision, River Ecology and
 Waste Management Department of Hydrobiology, Fisheries and
 Aquaculture
- 1994-1998 University of Agricultural Sciences, Vienna, Austria Research Associate, Institute of Water Provision, River Ecology and Waste Management. Department of Hydrobiology, Fisheries and Aquaculture
- 1988-1994 Research Assistant, Department of Hydrobiology, Fisheries and Aquaculture, University of Agricultural Sciences, Vienna, Austria

Honors and awards

- 2007 US Government. Residency as an individual of extraordinary abilities.
- 2006 American Fisheries Society Certified Fisheries Professional
- 2005 Microsoft Research Grant: A Tiered Smart Client System for Annotating the Land-Water Interface: Enabling Scientific Simulation. Together with Chris Pal. \$50,000
- 1999 The Nature Conservancy: David H. Smith Fellowship International Collaborations. \$25,000.
- 1998 Summa Cum Laude
- 1993 First award and grant "100 Jahre Kulturtechnik und Wasserwirtschaft" for Master Thesis: CAD-application in eco-morphological investigations of running waters. Eternit ATS 10,000

Special training courses

1994 – Instream Flow Incremental Methodology (IFIM) - Stream Habitat Sampling Techniques" Colorado State University, Ft. Collins, CO 1994 - "Using Computer-Based Physical Habitat Simulation (PHABSIM) System", Utah State University, Logan, UT

Languages

Fluent in Polish, Russian, German, English Passive knowledge of Hungarian and Arabic Curriculum Vitae Piotr Parasiewicz December 2010

Current and recent research projects

- An Instream Flow Assessment of the Little River, CT, Town of Putnam.3/2010-3/2011. \$159,000
- Developing Environmental Flows in the Niobrara River for Fish and Wildlife.
 Nebraska Department of Games and Parks. 7/2009-6/2011. Co-PI with M.Pegg. \$795,050
- An interactive, GIS-based application to estimate target fish communities in Northeastern streams. Regional Conservation Needs. Northeast Association of Fish and Wildlife Agencies. 1/2009-12/2010. \$64,000.
- Development of a mitigation method and ecological impacts offset for spring water withdrawals on downstream habitats for fish and invertebrates. Reconnaissance study on Wekepeke Brook. Nestlé Corporation. 6/2008-5/2010. \$200,000
- Development of Draft Environmental Flow Recommendations for the Saugatuck River Watershed. The Nature Conservancy 6/2008-3/2009. \$50,000.

Past Research Projects (since arrival in US 1999)

- Pine Brook Habitat Assessment and Restoration Planning reconnaissance survey. Mass. Riverways Program. 4/2008-6/2008. \$15,000.
- Using hydromorphological signatures to determine flow related habitat thresholds for instream communities. Co-PI with Christina Cianfrani of Hampshire College. USGS 3/2006-3/2008. \$50,000
- Instream flow studies and watershed management plan for the Lamprey River Designated Reach. New Hampshire Department of Environmental Services. Co-PI with Don Kretchmer, Normandeau Associates and Tom Ballestero, University of New Hampshire. 8/05-12/07. \$250,000
- Validation of In-Stream Habitat Models for the Fenton River, Storrs, Connecticut. Connecticut Department of Environmental Protection. Co-Pi with Glen Warner. 7/05-5/07. \$71,000.
- Dwarf Wedgemussel Habitat Study on the Upper Delaware River. US Fish and Wildlife Service 6/05 – 12/08. \$631,000
- Instream flow studies and watershed management plan for the Souheagan River Designated Reach. New Hampshire Department of Environmental Services. Co-PI with Tom Ballestero, University of New Hampshire and Don Kretchmer, Normandeau Associates. 6/04-5/06. \$250,000
- Eightmile River Instream Flow Study. National Park Service. 2/04/-5/06. \$87,000
- Developing a sustainable management plan for the Pomperaug River watershed. Phase II. Pomperaug River Watershed Coalition. Principal Investigator. 3/04-1/06. \$55,000
- Feasibility study of removal of Hatfield Dam Hatfield, MA. Massachusetts Environmental Trust. Co-Principal Investigator (with S. Jackson). \$30,000

- Fish habitat study for Long-Term Impact Analysis of the University of Connecticut's Fenton River Water Supply Wells on the Habitat of the Fenton River. University of Connecticut. Principal Investigator. 4/03-8/05. \$46,300
- Defining restoration needs for Beartrap Creek. Onondaga Lake Partnership and Isaak Walton League. Principal Investigator. 6/03-12/03. \$4,700
- Instream habitat evaluation of Santee River, South Carolina below Wilson Dam. Santee Cooper AG. Principal Investigator. 1/03-1/05. \$250,000
- Developing a sustainable management plan for the Pomperaug River watershed. Pilot study. Connecticut Department of Environmental Protection. Principal Investigator. 6/02-10/03. \$25,000
- Application of MesoHABSIM on Stony Clove PHASE I and Demonstration of integrating instream habitat assessment into local watershed management. Green County Soil and Water Conservation District and New York City Department of Environmental Protection. Principal Investigator. 6/02-8/03. \$43,800
- Demonstration of integrating instream habitat assessment into local watershed management. New York State Water Resources Institute. Principal Investigator. 3/01-2/02. \$18,000
- Conservation planning on the Mill River on Hatfield. The Nature Conservancy and Massachusetts Environmental Trust. Principal Investigator. 11/2001-10/2002. \$24,000
- Instream Flow Requirements of Mill River Hatfield, MA. Massachusetts Department of Environmental Management. Co-Principal Investigator (with S. DeStefano and S. Jackson). 6/2000-6/2001. \$30,000
- River Scale Instream Flow Simulation New York State Water Resources Institute. Principal Investigator. 3/2000-2/2001. \$6,000
- Ecohydrology study of Quinebaug River. Principal Investigator. New England Interstate Water Pollution Control Commission. Principal Investigatior. 10/1999-12/2003. \$508,000
- International Network to Harmonize and Improve Knowledge and Assessment Methods of Biotic-Abiotic Interactions in Running Waters as a Conservation Tool. The Nature Conservancy. Principal Investigator. 12/1999-12/2000. \$25,000

Select professional services

Scientific advisor:

National Oceanic and Atmospheric Administration. Reviewer of fish passage barriers manual. 2010.

Massachusetts Executive Office of Environmental Affairs. Sustainable Water Initiative Technical Subcommittee. Boston, MA. 2009-present. River Network Science Task Force. USA. 2009

- Connecticut Department of Environmental Protection. Science and Technical Workgroup on Water Flow Regulations for the State, Hartford, CT 2006 2007
- American Fisheries Society. Bioengineering Section. Education committee for development of fluvial engineering curriculum. USA. 2002 -2004
- **Potomac River Basin Commission.** Potomac Minimum Instream Flow Methods Workshop, Potomac, MD. 4/8-9/2003
- Rhode Island Water Resources Board. Water Allocation Program Advisory Council, Providence, RI, 2003
- New York Department of Environmental Conservation. Hydrological Habitat Modification workgroup of Non-Point Source Pollution Committee, Albany, NY. 2001-2004
- Connecticut Water Planning Council Technical Committee . New Britain, CT 6/30/2002
- **Austrian Network for Environmental Research.** River Ecology Sub-network 1997-99

Invited speaking engagements:

- **Keynote for EUROMECH Colloquium 523** Clermont-Ferrand, France, 15-17 June, 2011
- **Leibniz-Institute of Freshwater Ecology and Inland Fisheries.** Seminar on Application of MesoHABSIM. Berlin. 10/4/2010
- **New Zealand Regional Council of Governments.** 2 Day Seminar on Application of MesoHASBIM approach.
- **ETH Zurich.** Seminar on Application of MesoHABSIM. Kastanienbaum, Switzerland. 10/30/2009.
- **EPFL Lausanne.** Seminar Use of the Mesohabitat Simulation Model (MesoHABSIM) for Instream Habitat Assessments, Lausanne, Switzerland. 10/29/2009.
- **University of Montreal**. Application of MesoHABSIM model and habitat time series analysis for flow management and river restoration. Montreal, Canada. 1/25/2009.
- **Polish Ministry of Industrial Development.** Contemporary techniques in River management. Warsaw, Poland 5/22/05
- **European Commission.** European Aquatic Modelling Network. Final conference of COST Action 626 in Silkeborg, Denmark 5/19-20/2005
- NOAA Restoration Center. "Connecting science to Application". 4/13/05
- **Institute of Ecosystem Studies**. Conference Hudson River Tributaries: the State of Our Knowledge. Millbrook, NY. 6/12/2003.
- INRS Eau terre et Environnement, Canada. International workshop on "State of the art in habitat modeling and conservation flows", Quebec City, Canada. 3/4 -5/2003

- **Iowa Institute of Hydraulic Research.** Workshop Hydroscience and Engineering, The University of Iowa, Iowa City, IA. 2/7/2003
- New York Chapter of American Fisheries Society. "Restoring Natural Flow Regimes: Dam Removal as a Tool in River Restoration" Canandaigua, NY. 1/9/2003
- **European Science Foundation.** "Upscaling Workshop" of COST Action 626: "European Aquatic Modelling Network", Gent, Belgium. 12/11-13/2002
- Massachusetts River Restore Program. Environmental Risk for Dams, Marlborough, MA. 11/19/2002
- University of Wisconsin-Madison. Engineering Innovative Fish Passage Dam Removal and Nature-like Fishways, Waterville Valley, NH. 10/20-10/24/2002
- American Fisheries Society Organizing committee of Fisheries Bioengineering Symposium, Baltimore, MD. 8/25-30/2002
- **New England Interstate Water Pollution Control Commission.** Instream Habitat Program, New London, CT 5/16/2002
- Nebraska Department of Game and Parks. Platte River Workshop. Pallid Sturgeon/Sturgeon Chub Task Force. Lincoln, NE 1/23-24/2002
- **The Nature Conservancy.** Managing the flows for biodiversity A conference on science, policy and conservation action. Colorado State University. Fort Collins, CO 7/30-8/2/2001
- **European Science Foundation.** COST Action 626 "European Aquatic Modelling Network", Trondheim, Norway, 5/11-12/2001
- **University of Oslo, Norway.** Zoological Museum of University of Oslo, Oslo, Norway. 5/8/2001
- **US Fish and Wildlife Service.** Eastern Hydropower Licensing Workshop Northeast and Southeast Regions. National Conservation Training Center, Shepherdstown, WV, 8/29–31/2000
- **HydroVision 2000 Conference.** Session: International Water Power Regulations and Compliance, Charlotte, NC, August 2000
- **Instream Flow Council.** National Meeting. Higgins Lake, MI. 5/22-24/2000.
- **US Army Corps of Engineers.** Worksop "Passage for Non-Salmonid Fishes in Streams and Rivers: A Critical Element in Ecosystem Management and Restoration", Wilmington, NC, 4/25-4/27/2000
- **US Fish and Wildlife Service.** Roanoke River hydropower licensing workshop, Raleigh, NC.11/30-12/2/99.
- **European Commission.** International workshop "Water Related Conflicts: Research Deficits and Demands" in preparation of Fifth Framework Program. Katowice, Poland 1998.

For profit consulting and professional services.

2009	Stroughan Environmental. Expert review of White Marsh fishway design.
2008	Trout Unlimited and Connecticut River Watershed Council Expert witness for Appeal of Massachusetts Department of Environmental Protection permitting of Biomass Gasification Project in Russell, MA
2008	Friends of Quinebaug River Expert witness for Connecticut Department of Environmental Protection Review of the proposed Biomass Gasification Project in Plainfield, CT.
2008	Residents for Alternatives to Trashing Southbridge Expert witness for Board of Health Review of the proposed expansion of the Southbridge Landfill.
2007/2008	Trout Unlimited Consultant. Impact of planned Yale Farm Golf Club on the ecology of adjacent streams.
2004	Trout Unlimited Expert witness for Issues Conference for the Belleayre Project at Catskill Park
2003	US Army Corps of Engineers. Consultant. Habitat Restoration Team an oversight committee of Onondaga Lake Watershed Restoration project, Syracuse, NY.
2002	Natural Resources Council of Maine. Consultant. Review of existing by-pass channels for dam removal study. Augusta, ME.
2002	US Bureau of Reclamation Consultant. Expertise on fish passage options at San Acacia Dam on Middle Rio Grande River, Albuquerque, NM.
2002	US Fish and Wildlife Service. Consultant. Expertise on instream flow settings on the Santee River below Willson Dam, FERC re-licensing project, Charleston, SC.
2001-2002	US Army Corps of Engineers. Consultant. Supervision of planning of nature-like bypass channel on Lock and Dam Number 1 on the Cape Fear River, Wilmington, NC.

2001-2002 US Fish and Wildlife Service.

Consulting expert for construction of fish-passage facility on New Savannah Bluff Dam, Savannah River, Augusta, GA.

2001 Trout Unlimited.

Consultant. Report: Instream flows of the Upper Delaware River, Roscoe, NY.

Teaching experience

2008-2009 Technical University of Madrid, Spain

MesoHABSIM: Instream Data collection and modeling.

2007-2009 Rushing Rivers Institute, Amherst

MesoHABSIM: Instream Data collection and modeling.

MesoHABSIM Approach and Application

MesoHABSIM Computation and SIM-Stream Software

MesoHABSIM Field Techniques

2004-2007 University of Massachusetts

NRC 597R: MesoHABSIM: Instream Data collection and modeling.

Guest lecturer: WFCON 597W Wetland Conservation

2001-2003 Cornell University.

Guest lecturer NTRES 110, Introduction to the Field of Natural

Resources, Department of Natural resources

Guest lecturer BEE 371, Hydrology and the Environment

Department of Biological and Environmental Engineering,.

1995 -1999 University of Agricultural Sciences, Vienna

"Eco-morphology of running waters" within the hydrobiology lab. This practical course enrolled annually over 200 undergraduate and graduate students. It took place in Lunz am See in the Austrian mountains, and consisted of lectures and field work.

Professional education courses in US:

US Fish & Wildlife Service, National Conservation Training Center – Invited instructor for Fish Passageways & Bypass Facilities-East Course, Hadley, MA, measure and Nature-like bypass channels. 7/10/2000

University of Wisconsin-Madison - invited lecturer Engineering Innovative Fish Passage Dam Removal and Nature-like Fishways, Waterville Valley, New Hampshire, 10/20-10/24, 2002.

University of Wisconsin-Madison - invited lecturer. Urban Channel Design and Rehabilitation: Biotechnical engineering, Watershed concepts, recapturing the stream corridor, Engineering alternatives, Madison, Wisconsin, 11/28-11/30, 2000

PUBLICATIONS AND REPORTS

Dissertations

- PARASIEWICZ P. 1998. Computer aided methods for biological investigations of hydro-morphological attributes of running waters Selected aspects of data collection and analysis. Ph. D. Dissertation. Department of Hydrobiology, Fisheries and Aquaculture, University of Agricultural Sciences, Vienna, Austria.
- PARASIEWICZ P. 1993. CAD-application in eco-morphological investigations of running waters. Master Thesis. Department of Hydrobiology, Fisheries and Aquaculture, University of Agricultural Sciences, Vienna, Austria.

Refereed articles

- 1. VEZZA P., PARASEWICZ P., ROSSO M., COMOGLIO C., (in press). Defining environmental flows requirements at regional scale by using meso-scale habitat models and catchments classification. *Rivers Research and Application*.
- 2. GORTÁZAR J, PARASIEWICZ P., GONZÁLEZ C. A. & D. G. DE JALÓN (in press). Physical habitat assessment in the river tajuña (Spain) by means of the mesohabsim approach. Limnetica special volume in river habitats.
- 3. PARASIEWICZ P., RUBIAL J. G., SANCHEZ M. M. & D. G. DE JALÓN (2009) Mesohabsim: an effective tool for river and watershed management [Mesohabsim: una herramienta eficaz para la gestión de ríos y cuencas fluviales]. Tecnologia del Agua. 29 (309):20-26.
- 4. JACOBSON R. A., WARNER G., PARASIEWICZ P., BAGTZOGLOU R. & F. OGDEN (2009) An Interdisciplinary Study of the Effects of Groundwater Extraction on Freshwater Fishes. *International Journal of Ecological Economics & Statistics.* **12** (F08) :7-26.
- 5. PARASIEWICZ P. (2008): Habitat time-series analysis to define flow-augmentation strategy for the Quinebaug River, Connecticut and Massachusetts, USA. *River Research and Application*. **24**: 439–452.
- 6. PARASIEWICZ P. (2008): Application of MesoHABSIM and target fish community approaches for selecting restoration measures of the Quinebaug River, Connecticut and Massachusetts, USA. *River Research and Application*. **24**: 459–471.
- 7. PARASIEWICZ P. (2007): The MesoHABSIM Model Revisited. *River Research and Application* **23** (8):893-903.
- 8. PARASIEWICZ P. & J. D. Walker (2007): Comparing and testing results of three different micro and meso river habitat models. *River Research and Application* **23** (8): 904-923.

- 9. PARASIEWICZ P. (2007): Developing a reference habitat template and ecological management scenarios using the MesoHABSIM model. *River Research and Application* **23** (8): 924-932.
- 10. NADIM F., BAGZTZOGLO A. C., BAUN S.A., WARNER G., JACOBSON R. A. & P. PARASIEWICZ (2007): Management of adverse impact of a public water supply well-field on the aquatic habitat of a stratified drift stream in eastern Connecticut, *Water Environment Research*. **79** (1) 43-56(14).
- 11. WERLE S. F., JOHNSON N.A., DUMONT E. R. & P PARASIEWICZ (2007): Nei's ecological distance analysis: a novel use of Nei's modified genetic distance (DA). Northeastern Naturalist **14**(3):439–446.
- 12. PARASIEWICZ P. (2003): Upscaling: Integrating habitat model into river management. *Canadian Water Resources Journal*. Special Issue: State-of-the-Art in Habitat Modelling and Conservation of Flows **28** (2) p. 283-300.
- 13. PARASIEWICZ P. (2001): MesoHABSIM a concept for application of instream flow models in river restoration planning. *Fisheries* **29** (9) p. 6-13.
- 14. PARASIEWICZ P. & M. J. DUNBAR (2001): Physical habitat modelling for fish a developing approach Archiv für Hydrobiologie. Suppl. (Large Rivers Vol. 12), 135/2-4 p. 239-268. PARASIEWICZ P., HOFMANN H. C. & B. HÖGLINGER (1999): The DVP Depth Velocity Position Bar a multiplex instrument for physical habitat measurements in small riverine domains Regulated Rivers: Research and Management, 15, 77-86.
- 15. PARASIEWICZ P., HÖGLINGER B. &. H. C. HOFMANN (1998): Der DVP Stab. Depth Velocity Position Bar Ein multifunktionales Gerät für morpphometrische Aufnahmen an Fließgewässern *Österreichs Fischerei,* Jahrgang 51, **10**, 232-239.
- 16. PARASIEWICZ P., SCHMUTZ S. & O. MOOG, (1998): The effects of managed hydropower peaking on the physical habitat, benthos and fish fauna in the Bregenzerach, a nival 6th order river in Austria, *Fisheries Management and Ecology*, 1998, **5**, 403-417.
- 17. SCHMUTZ S., MOOG O. & P. PARASIEWICZ (1997): Bewertung der ökologischen Funktionsfähigkeit in Ausleitungsstrecken zoozönotischer Ansatz.- *Wasserwirtschaft* 87 (7-8): 354-355.
- 18. PARASIEWICZ, P. (1996): Estimation of physical habitat characteristics using automation and geodesic-based sampling. *Regulated Rivers: Research & Management*, Vol. 12, 575-583.
- 19. SCHMUTZ S., PARASIEWICZ P., KAUFMANN M., & G. PARTL, (1995): Bewertung der ökologischen Funktionsfähigkeit in Ausleitungsstrecken anhand von Fischzönosen. *Wasserbau-Mitteilungen der Technischen Hochschule Darmstadt*, Nr. 40:191-207.

Book Chapters

- 20. PARASIEWICZ, P., N. GILLESPIE, D. SHEPPARD & T. WALTER (2010) Strategy for Sustainable Management of the Upper Delaware River Basin. In: F. De Carlo and A. Bassano (ed). Freshwater Ecosystems and Aquaculture Research. Nova Science Publishers, Inc. pp. 249-264. ISBN: 978-1-60741-707-1.
- 21. PARASIEWICZ, P., J. NESTLER, N.L. POFF & A. GOODWIN. (2008) Virtual Reference River: A Model for Scientific Discovery and Reconciliation. 2008. In: M. S. Alonso, I. M. Rubio (ed) Ecological Management: New Research, Nova Science Publishers, Inc. pp. 189-206. ISBN: 978-1-60456-786-1
- 22. BORSÁNYI P. & PARASIEWICZ, P. (2004): Contrasting two individually developed, meso-scale based habitat evaluation systems. In Fifth International Symposium on Ecohydraulics. Aquatic Habitats: Analysis & Restoration (eds D.G.d. Jalón & P.V. Martínez), Vol. 2, pp. 845-850. IAHR, Madrid, Spain.
- 23. WILDMAN L, PARASIEWICZ P., KATOPODIS C. & U. DUMONT 2003. An illustrative handbook on nature-like fishways summarized version. American rivers. Washington , DC. 21pp
- 24. JACOBSON, R. & PARASIEWICZ, P. (2002): Methods for Defining Instream Flow Standards: New developments in habitat modeling. In proceedings of Connecticut Instream Flow Conference. Berlin, CT March 23, 2001, p. 99 113. Yale University.
- 25. NESTLER, J, P. PARASIEWICZ, N. L. POFF, AND Z. BOWEN (2002). First principles based attributes for describing a template to develop the reference river. –"Environmental flows for river systems." International Working Conference on Assessment and Implementation, incorporating the fourth international Ecohydraulic symposium, Cape Town, South Africa. On CD. March 3-8, 2002.
- 26. MODER K. & P. PARASIEWICZ (1999): Statistical comparison of physical habitat sampling strategies in streams. Proceedings of workshop on correlated data modeling: The estimating function approach, Trieste, Italy, October 22-23, 1999. On CD.
- 27. PARASIEWICZ P., EBERSTALLER J., WEISS S. & S. SCHMUTZ (1998): Conceptual guidance for nature-like bypass channels, In: M. Jungwirth, S. Schmutz, S. Weiss (eds), Fish Migration and Fish Bypasses, Fishery News Books, Blackwell Science, Oxford. pp. 348-362.
- 28. EBERSTALLER, HINTERHOFER M. & P. PARASIEWICZ (1998): The effectiveness of two nature-like bypass-channels in aiding the upstream migration of a rhithral fish assemblage, In: M. Jungwirth, S. Schmutz, S. Weiss (eds), Fish Migration and Fish Bypasses, Fishery News Books, Blackwell Science, Oxford. pp. 363-383.

- 29. PARASIEWICZ P. & S. SCHMUTZ (1997): Integritá ecologica e deflusso minimo vitale. In AGAC Deflusso minimo vitale. Methodi ed esperienze per un corretto utilizzo della risorsa idrica nel rispetto degli usi ambientali del corsi d'aqua. Convegno nazionale.p 159-163.
- 30. PARASIEWICZ P., S. SCHMUTZ & O. MOOG, (1996): The effects of managed hydropower peaking on the physical habitat, benthos and fish fauna in the Bregenzerach, a nival 6th order river in Austria. Proceedings of 2nd International Symposium on Habitat Hydraulics "Ecohydraulics 2000" in Quebec, Juni 1996, p. A685-A698.
- 31. PARASIEWICZ P. & S. SCHMUTZ, (1999) Running water ecology research in Austria. Publication of Austrian Network for Environmental Research. Federal Ministry of Science and Transportation, Vienna, Austria, 80 pp.
- 32. PARASIEWICZ, P. & H. MADER (1991). Ökomorphometrische Flußvermessung und deren Auswertung. Proceedings of Informationstagung Mikroelektronik ME91 Vienna, August 1991, p. 243-249.
- 33. PARASIEWICZ P., ROGERS J. N., GORTAZAR J., VEZZA P., WIŚNIEWOLSKI W. & C. Comglio. (in review). The MesoHABSIM Simulation Model development and applications. In Maddock I., Harby A., Kemp P., Wood P. Ecohydraulics: an integrated approach. John Wiley & Sons Ltd.

Scripts and text books

34. PARASIEWICZ P., ROGERS J.N. & J. LEGROS (2008). MesoHABSIM Field Procedures Manual. Northeast Instream Habitat Program, Mount Holyoke College, MA, USA. pp 49.

Abstracts

- 41. PARASIEWICZ P., WERLE S., JOHNSON L., ROGERS J. & LONGWORTH B. Northeast Instream Habitat Program. Annual Meeting of New England Association of Environmental Biologist, Lake George, NY, March 16-18, 2005.
- 42. PARASIEWICZ P., EHMANN S., CORP P. & H. KITSON: Fish Habitat Restoration on Stony Clove Stream, NY. 133rd American Fisheries Society Annual Meeting, Quebec City, QC, August 10-14, 2003. PARASIEWICZ P. Restoration planning on Quinebaug River, MA. Fisheries Bioengineering Symposium, 132nd American Fisheries Society Annual Meeting, Baltimore, MD, August 18-22, 2002.
- 43. PARASIEWICZ P. & S. EHMANN: MesoHABSIM application on the Quinebaug River, MA. Managing the flows for biodiversity A conference on science, policy and conservation action. Colorado State University. Fort Collins, CO July 30- 2, 2001.

- 44. PARASIEWICZ P., MATTL M. & K. MODER: A study of strategies for sampling of stream habitat. EISORS Eight International Symposium on Regulated Rivers Toulouse, France August 17 21, 2000.
- 45. MODER K. & P. PARASIEWICZ (1999): Statistical comparison of physical habitat sampling strategies in streams. Workshop on correlated data modeling: The estimating function approach, Trieste, Italy, October, 22-23, 1999. On CD.
- 46. GRASSER U., PARASIEWICZ P., SCHMUTZ S., JUNGWIRTH M., MOOG O. & S. MUHAR. Assessment of ecological integrity in minimum flow studies. The Austrian approach. International conference on "Assessing the ecological integrity of running waters", Vienna, Austria November 9-11, 1998.
- 47. PARASIEWICZ P., HÖGLINGER B. & H. C. HOFMANN. Der DVP Stab, Jahrestagung der Deutschen Gesellschaft für Limnologie gem. mit SIL dt. und österr. Sektion, Klagenfurt, September 28 October 2, 1998.

Technical reports

- 41. ROGERS J. N., PARASIEWICZ P. & A. ELDRIDGE (2010). A GIS-based application to estimate target fish communities in Northeastern streams. Reports for Northeast Association of Fisheries and Wildlife Agencies. Rushing Rivers Institute, Amherst, MA. pp 128.
- 42. PARASIEWICZ P. & J. N., ROGERS (2010). Development of a mitigation method and ecological impacts offset for spring water withdrawals on downstream habitats for fish and invertebrates. Report for Nestlé Waters North America. Rushing Rivers Institute, Amherst, MA. pp 335
- 43. PARASIEWICZ P., THOMPSON D., WALDEN D., ROGERS J.N. & R. HARRIS (2010). Saugatuck River Watershed Environmental Flow Recommendations. Report for The Nature Conservancy and Aquarion. Rushing Rivers Institute, Amherst, MA. pp 678.
- 44. PARASIEWICZ P., ROGERS J., LARSON A., BALLESTERRO T., CARBONEAU L., LEGROS J. & J. JACOBS. (2008), Lamprey River Protected Instream Flow Report. Report for New Hampshire Department of Environmental Services. NHDES-R-WD-08-26, Concord, NH. pp 980.
- 45.PARASIEWICZ P., ROGERS J., LEGROS J. & M. WIRTH. (2007). Assessment and restoration of instream habitat of the Eightmile River in Connecticut Developing MesoHABSIM model. The National Park Service, Wild and Scenic River Study for the Eightmile River and the Eightmile River Wild and Scenic Study Committee. pp 62.
- 46. PARASIEWICZ P., LEGROS J., ROGERS J. & M. WIRTH. (2007). Assessment and restoration of instream habitat for the Pomperaug, Nonnewaug and Weekeepeemee Rivers of Connecticut. Report for Pomperaug Watershed Coalition. Northeast Instream Habitat Program. University of Massachusetts, Amherst. pp 103.

- 47. PARASIEWICZ P., MACBROOM J., AHLFELD D., COMPTON B., JACKSON S., MAS D., WIRTH M., & J. LEGROS (2007). Advocate Dam Removal Feasibility Study, Mill River, Hatfield, Massachusetts. Northeast Instream Habitat Program. University of Massachusetts, Amherst. pp. 88. (BALLESTERRO T., KRETCHMAR D., CARBONEAU L., PARASIEWICZ P., LEGROS J., ROGERS J., STEGER T. & J. JACOBS. (2006), Souhegan River Protected Instream Flow Report, NHDES- R-WD-06-50, Concord, NH. Report for New Hampshire Department of Environmental Services.
- 48. WARNER G. S., OGDEN F. L., BAGTZOGLOU A. C. & P. PARASIEWICZ, (2006) Long-Term Impact Analysis of the University of Connecticut's Fenton River Water Supply Wells on the Habitat of the Fenton River. Report for State of Connecticut, Office of Policy and Management. 211pp.
- 49. WALDEN, D. L. & P. PARASIEWICZ (2005). Integrative Assessment of Biological and Physical Attributes of the Eightmile River. Report for National Park Service, CT pp 116.
- 50. BRAWLEY, H. & P. PARASIEWICZ (2005). Developing Target Fish Communities for The Pomperaug Watershed. Report for Pomperaug River Watershed Coalition. pp 13.
- 51. PARASIEWICZ P. (2005). Ecohydrology study of the Quinebaug River Final Report for New England Interstate Water Pollution Control Commission. Ithaca, NY. pp 385.
- 52. PARASIEWICZ P., EHMANN, S. B. & P. CORP (2003). Fish habitat assessment on Stony Clove Creek, NY using MesoHABSIM. Report for New York City Department of Environmental Protection and Green County Soil and Water Conservation District and New York State Water Resources Institute. pp 410.
- 53. PARASIEWICZ P., KITSON H., SNOPKOSKI L., JACKSON S. & S. DESTEFANO (2003). Measuring ecosystem health in western Massachusetts The Mill River, Hatfield, MA. Report for The Nature Conservancy and Massachusetts Environmental Trust. Ithaca, NY. pp 146.
- 54. PARASIEWICZ P., KITSON H. & L. SNOPKOSKI (2003) Instream Flow Requirements of Mill River Hatfield, MA. Report on Phase I: Dwarf Wedge Mussel Habitat Report for Massachusetts Executive Office of Environmental Affairs. Massachusetts Department of Environmental Management, Ithaca, NY. pp 84.
- 55. PARASIEWICZ P. (2002) Review of Nature-like bypass channels. Report for Natural Resources Council of Maine, Ithaca, NY. pp 30.
- 56. PARASIEWICZ P. & A. GALLAGHER (2002). Ecohydrology Study of Quinebaug River Interim Report. NY Cooperative Fish and Wildlife Research Unit and Department of Natural Resources, Cornell University. Project Report

- for New England Interstate Water Pollution Control Commission. Ithaca, NY. 125 pp.
- 57. PARASIEWICZ P. (2001): Strategy for Sustainable Management of the Upper Delaware River Basin. Trout Unlimited. NY. pp 21.
- 58. PARASIEWICZ P. & S. SCHMUTZ (1999): Biotische Habitatmodellierung. Habitatpotential der Traisen bei unterschiedlichen Struktur- und Abflußverhältnissen. [Habitat modelling as a tool for the development of a river restoration concept at the Traisen River] AP 19b. Gewässerbetreuungskonzept Traisen., HFA-BOKU & DonauConsult. Studie im Auftrag des BMLF, pp 79.
- 59. PARASIEWICZ P. & SCHMUTZ S. (1998): Gewässerbetreuungskonzept Traisen: Arbeitspaket 14: Istbestandsaufnahme- Detailmorphologie, Project report for Authorities of the Government of Lower Austria Bundeswasserbauverwaltung, pp 244.
- 60. GRASSER U., PARASIEWICZ P., PARTHL G. A. & S. SCHMUTZ, (1998) Limnologische Gesammtbeurteilung des KW Alberschwende Synthesis Report for Hydroelectric Company of Vorarlberg, pp 23.
- PARASIEWICZ P., (1997): Morphometrisch/hydraulische & fischökologische Nachuntersuchung des KW Alberschwende Bregenzerach, Fachbereich Morphologie/Hydraulik – Report for Hydroelectric Company of Vorarlberg, pp 174.
- 62. PARASIEWICZ P., SCHMUTZ S. & G. PARTHL, (1997):
 Morphometrisch/hydraulische & fischökologische Nachuntersuchung des KW
 Alberschwende Bregenzerach, Fachbereich Habitatuntersuchung Report for
 Hydroelectric Company of Vorarlberg, pp 51.
- 63. SCHMUTZ S, KAUFMANN M. & P. PARASIEWICZ (1995): Fischökologische und hydraulisch/morphologische Nachuntersuchung der Wagrainer Ache, Expertise for Hydroelectric Company of Upper Austria, pp 159.
- 64. JUNGWIRTH M., PARASIEWICZ P., HINTERHOFER M., MATITZ A., MEISS C., PARTL P. & W. STEINBERGER (1994): Vergleichende Untersuchung des Fischaufstieges an drei Fischaufstiegshilfe im Rhithralbereich.-Wasserwirtschaftskataster, Study report for Austrian Federal Ministry of Agriculture and Forestry, pp 245.
- 65. EBERSTALLER J., JUNGWIRTH M. & P. PARASIEWICZ (1994): Fischaufstiegshilfe bei der Wehranlage des KW Weitenegg I und II Construction planning for H.M. Habicher AG Weitenegg. pp 15.
- 66. PARASIEWICZ, P., (1992): Fischaufstiegshilfe an der Leitha /Trautmanssdorf, Expertise for Authorities of the Government of Lower Austria. pp 15.

- 67. PARASIEWICZ P. & R. TESAR, (1992): Fischaufstiegshilfen an der Schwechat /Achau, Experise for Authorities of the Government of Lower Austria. pp 32.
- 68. JUNGWIRTH M., KAUFMANN T., RADERBAUER J., RATHSCHÜLER O. & P. PARASIEWICZ, (1990): Fischereibiologische Untersuchung der Osterach.-Expertise for Bavarian Office for Watermanagement. pp 46. JUNGWIRTH M., PARASIEWICZ P. & S. SCHMUTZ, (1989): Gutachten über die fischökologischen und fischereiwirtschaftlichen Auswirkungen des Schwellbetriebes des KW Riegler, Kleine Erlauf, Randegg, Expertise for Austrian Fisheries Society. pp 15.

Other publications

WIKIPEDIA: Piotr Parasiewicz, Biography

http://en.wikipedia.org/wiki/Piotr Parasiewicz

Umass Extension: Extension Highlights Going with the Flow

http://www.umassextension.org/index.php/news-events?start=22

Computer programs

PARASIEWICZ P., E. HAMMOND, J. XU & D. IVANOV (2006) Sim-Stream Software

PARASIEWICZ P. (1993): Morpha - CAD software for river morphological surveys

PARASIEWICZ P. (1993): New Wave – 1D Hydrodynamic Simulation model for streams.

Magazine articles

- PARASIEWICZ P. (2010) Book review: Integrated Approaches to Riverine Resource Stewardship. Fisheries (in print).
- PARASIEWICZ P., (1998) Zadania gospodarki rzecznej w Polsce w perspektywie wstapienia do Unii Europejskiej. Środowisko, 12/98: 32-34 (reprinted in Aura and Gospodarka Wodna 1999).

On-line publications

- WILDMAN L, P. PARASIEWICZ, C. KATOPODIS, U. DUMONT 2003. An illustrative handbook on nature-like fishways summarized version. American rivers. http://act.americanrivers.org/site/DocServer/Nature-LikeFishwaysHandbook.pdf?docID=202
- PARASIEWICZ P. & C. PARASIEWICZ, (2009): MeosoHABSIM www.MesoHABSIM.org
- PARASIEWICZ P. & C. PARASIEWICZ, (2008): Rushing Rivers Institute www.RushingRivers.org
- PARASIEWICZ P., C. PARASIEWICZ, M. LICIS, J. ABDOW, A.DEIANA (2008): River Climate Action: www.RiverClimate.org

Government publications

PARASIEWICZ P. & S. SCHMUTZ, (1999) Running water ecology research in Austria. Publication of Austrian Network for Environmental Research. Federal Ministry of Science and Transportation, Vienna, Austria, 80 pp.

Posters

- PARASIEWICZ, P., WERLE, S., JOHNSON, L., ROGERS J. & LONGWORTH B. Northeast Instream Habitat Program. Annual Meeting of New England Association of Environmental Biologist, Lake George, NY, 3/16-18/2005.
- PARASIEWICZ, P., EHMANN, S., P. CORP & H. KITSON: Fish Habitat Restoration on Stony Clove Stream, NY. 133rd American Fisheries Society Annual Meeting, Quebec City, QC, 8/10-8/14/2003.
- PARASIEWICZ, P. Restoration planning on Quinebaug River, MA. Fisheries Bioengineering Symposium, 132nd American Fisheries Society Annual Meeting, Baltimore, MD, 8/18-8/22/2002.
- PARASIEWICZ, P. & S. EHMANN: MesoHABSIM application on the Quinebaug River, MA. Managing the flows for biodiversity A conference on science, policy and conservation action. Colorado State University. Fort Collins, CO 7/30-8/2/2001
- PARASIEWICZ, P., MATTL, M. & K. MODER: A study of strategies for sampling of stream habitat. EISORS Eight International Symposium on Regulated Rivers Toulouse, France 8/17 8/21/2000.
- MODER K. & P. PARASIEWICZ (1999): Statistical comparison of physical habitat sampling strategies in streams. Workshop on correlated data modeling: The estimating function approach, Trieste, Italy, 22-23 .10. 1999.
- GRASSER U., PARASIEWICZ P., SCHMUTZ S., JUNGWIRTH M., MOOG O. & MUHAR S.(1998): Assessment of ecological integrity in minimum flow studies. The Austrian approach. International conference on "Assessing the ecological integrity of running waters", Vienna, Austria 9.-11.11.1998
- PARASIEWICZ P., HÖGLINGER B. & H. C. HOFMANN (1998): Der DVP Stab Poster, Jahrestagung der Deutschen Gesellschaft für Limnologie gem. mit SIL dt. und österr. Sektion, Klagenfurt, 28.9.-2.10.1998.

Presentations

2010

1. PARASIEWICZ P & J. N. ROGERS. Dwarf Wedgemussel Habitat Study on the Upper Delaware River Annual meeting of American Fisheries Society. Pittsburgh, September 10-16, 2010.

2. PARASIEWICZ P. Application of MesoHASBIM approach. New Zealand Regional Council of Governments, Napier, NZ, March 11-12, 2010.

2009

- 3. PARASIEWICZ P. Application of MesoHABSIM. ETH Zurich. Kastanienbaum, Switzerland. October 30, 2009.
- PARASIEWICZ P. Use of the Mesohabitat Simulation Model (MesoHABSIM) for Instream Habitat Assessments, EPFL Lausanne, Lausanne, Switzerland. October 29, 2009.
- PARASIEWICZ P. Application of MesoHABSIM model and habitat time series analysis for flow management and river restoration. University of Montreal. Montreal, Canada. January 25, 2009.
- 6. PARASIEWICZ P., SEAGER T., T.MEYER, E. EDELSON. Actogram and Habitat Meter: tools for real time assessment of the fish habitat status in streams. Ecohydraulics 2009 Concepcion, Chile, January 12-16, 2009

2008

7. PARASIEWICZ P., T. SEAGER, MEYER T., EDELSON E.. Actogram and Habitat Meter: tools for real time assessment of the fish habitat status in streams. Annual meeting of American Fisheries Society. Ottawa, August 17-21, 2008.

2006

8. PARASIEWICZ, P., ROGERS J.N & J. LEGROS. Habitat restoration through habitat structure and instream flows dynamics for the Pomperaug River in Connecticut. 136th American Fisheries Society Annual Meeting, San Francisco, CA, August 10-14, 2006.

- 9. PARASIEWICZ P. Contemporary techniques in River management. Polish Ministry of Industrial Development. Warsaw, Poland May 22, 2005.
- 10. PARASIEWICZ P. Northeast Instream Habitat Program. European Commission. European Aquatic Modelling Network. Final conference of COST Action 626 in Silkeborg, Denmark May 19-20, 2005.
- 11. PARASIEWICZ P. MesoHABSIM Model "Connecting science to Application". NOAA Restoration Center. April 13, 2005.
- 12. PARASIEWICZ, P., BALLESTERO, T.& KRETCHMER D. Instream flow studies and watershed management plan for the Souheagan River Designated Reach. University Council of Water Resources and National Institute of Water Resources 2005 Conference: Lake and River Restoration: Changing Landscapes Portland, ME July 12-14, 2005.

- 13. PARASIEWICZ, P. Northeast Instream Habitat Program European Aquatic Modelling Network. Final conference of COST Action 626 in Silkeborg, Denmark May 19-20, 2005.
- 14. PARASIEWICZ P. WALDEN D. & S.F. WERLE. Biological and Physical Status Assessment of the Eightmile River A Component of the Wild and Scenic River Study. Annual Meeting of New England Association of Environmental Biologist, Lake George, NY March 16-18, 2005.

2004

- 15. FENNESSEY, N.M., P. PARASIEWICZ & M.T. GOETTEL, Assessment of Alternative Streamflow Augmentation Schemes for the Restoration of the Quinebaug River Watershed, Proceedings of the World Water and Environmental Resources Congress 2004, ASCE, Salt Lake City, UT, June 27-July 1, 2004.
- 16. PARASIEWICZ P. Assessing and Visualizing Mesoscale Ecological Flow Requirements. Second Annual MA WRRC Conference: Water Resources in the Northeast: Emerging Issues Amherst, MA. October 22, 2004.
- 17. PARASIEWICZ P., NESTLER, J., POFF N. L. & M. B. BAIN: Virtual Reference River a model of reference habitat conditions. MA. Annual Meeting of New England Association of Environmental Biologist, Jiminy Peak, MA, March 26-28, 2004.

- 18. PARASIEWICZ P., FENNESSEY N. & M GOETTEL, Defining measures to reduce fish habitat degradation in the Quinebaug River, New England. 133rd American Fisheries Society Annual Meeting, Quebec City, QC, August 10-14, 2003.
- 19. PARASIEWICZ P., FENNESSEY N. & M. GOETTEL: Defining measures to reduce fish habitat degradation in the Quinebaug River, New England. 133rd American Fisheries Society Annual Meeting, Quebec City, QC, August 10-14, 2003.
- 20. PARASIEWICZ P., EHMANN, S., P. Corp & H. Kitson: Fish Habitat Restoration on Stony Clove Stream, NY. 133rd American Fisheries Society Annual Meeting, Quebec City, QC, August 10-14, 2003.
- 21. PARASIEWICZ, P.: Site-Specific Case Study, Part II: Quinebaug River, MA. Annual Meeting of New England Association of Environmental Biologist, Wachusett, MA, March 26-28, 2003.
- 22. PARASIEWICZ P.: Upscaling: Integrating habitat model into river management. International workshop on "State of the art in habitat modeling and conservation flows", Quebec City, Canada, March 4 -5, 2003.

2002

- 23. JACOBSON, R. & PARASIEWICZ, P. (2002): Methods for Defining Instream Flow Standards: New developments in habitat modeling. In proceedings of Connecticut Instream Flow Conference. Berlin, CT March 23, 2001, p. 99 113. Yale University.
- 24. NESTLER, J, P. PARASIEWICZ, N. L. POFF, & Z. BOWEN (2002). First principles based attributes for describing a template to develop the reference river. Proceedings of environmental flows for river systems." International Working Conference on Assessment and Implementation, incorporating the fourth international Ecohydraulic symposium, Cape Town, South Africa, March 3-8, 2002.
- 25. PARASIEWICZ P., N., GILLESPIE, D. SHEPPARD, M. T. WALTER (2002). Defining environmental flows for Upper Delaware River. Delaware River Symposium, 132nd American Fisheries Society Annual Meeting, Baltimore, MD, August 18-22, 2002.
- 26. PARASIEWICZ P., NESTLER, J., POFF, N. L. & Z. BOWEN (2002) Virtual Reference River a model of reference habitat conditions. Bioengineering Symposium, 132nd American Fisheries Society Annual Meeting, Baltimore, MD, August 18-22, 2002.
- WILDMAN, L., P. PARASIEWICZ, C. KATOPODIS, U.DUMONT (2002) An Illustrative Handbook on Nature-Like Fishways - Summarized Version. Bioengineering Symposium, 132nd American Fisheries Society Annual Meeting, Baltimore, MD, August 18-22, 2002.
- 28. PARASIEWICZ P. Northeast Instream Habitat Program. Northeast Fish and Wildlife Conference. Portland, ME, April 23-21, 2002.
- 29. NESTLER, J, P. PARASIEWICZ, N. L. POFF, and Z. BOWEN. First principles based attributes for describing a template to develop the reference river. "Environmental flows for river systems." International Working Conference on Assessment and Implementation, incorporating the fourth international Ecohydraulic symposium, Cape Town, South Africa. March 3-8, 2002.

- 30. PARASIEWICZ P. Northeast Instream Habitat Program, European Science Foundation. COST Action 626 "European Aquatic Modelling Network", Trondheim, Norway, 5/11-12/2001.
- 31. PARASIEWICZ P. MesoHABSIM habitat model. University of Oslo, Norway. Zoological Museum of University of Oslo, Oslo, Norway. May 8, 2001.
- 32. PARASIEWICZ, P. How pristine is Beaver Kill River? Managing the flows for biodiversity A conference on science, policy and conservation action. Colorado State University. Fort Collins, CO 7/30-8/2/2001.

- 33. PARASIEWICZ, P. & S. EHMANN: MesoHABSIM application on the Quinebaug River, MA. Managing the flows for biodiversity A conference on science, policy and conservation action. Colorado State University. Fort Collins, CO 7/30-8/2/2001.
- 34. PARASIEWICZ P. (2001): MesoHABSIM application on the Quinebaug River the success story. 57th Northeast Fish and Wildlife Conference, Saratoga Springs, NY, 4/22-25/2001.
- 35. PARASIEWICZ, P. & S. EHEMANN (2001): MesoHABSIM application on the Quinebaug River, MA. Managing the flows for biodiversity A conference on science, policy and conservation action. Colorado State University. Fort Collins, CO 7/30-8/2/2001.
- 36. PARASIEWICZ P. (2001): New developments in habitat modeling. Connecticut Instream Flow Conference held by River Alliance and University of Yale. Berlin, CT 3/23/2001.

2000

- 37. PARASIEWICZ P. (2000): Nature-like bypass channels a concept for construction and planning. Workshop by US Army Corps of Engineers "Passage for Non-Salmonid Fishes in Streams and Rivers: A Critical Element in Ecosystem Management and Restoration", Wilmington, NC, April 2000.
- 38. PARASIEWICZ P. & M. B. BAIN (2000): MesoHABSIM or modeling of physical habitat at the scale relevant to river restoration planning. EISORS Eight International Symposium on Regulated Rivers Toulouse, France 8/17 8/21/2000.
- 39. PARASIEWICZ, P., MATTL, M. & K. MODER (2000): A study of strategies for sampling of stream habitat. EISORS Eight International Symposium on Regulated Rivers Toulouse, France 8/17 8/21/2000.

- 40. MODER K. & P. PARASIEWICZ (1999): Statistical comparison of physical habitat sampling strategies in streams. Proceedings of workshop on correlated data modeling: The estimating function approach, Trieste, Italy, 22-23 October 1999.
- 41. SCHMUTZ, S. & P. PARASIEWICZ (1999): Wasserkraft und Fischfauna Bewertung und Modelle. Proceedings of International Symposium "Problemkreis Pflichtwasserabgabe Ökologisch begründete Mindestabflüsse in Ausleitungsstrecken von Wasserkraftwerken". 21-23. Juni 1999, Brauhaus Puntigam, Graz.
- 42. PARASIEWICZ, P., MATTL, M. & K. MODER (1999): A study of effectiveness of alternative physical habitat sampling strategies in streams. Proceedings of 3rd international symposium on ecohydraulics. Salt Lake City, Utah, USA, July 1999.

1998

- **43.** PARASIEWICZ P., (1998): Long- and midterm measures for flood protection in Poland basic Requirements. Proceedings of EUREKA international conference "Water Source of Life source of danger" in Cracow, March 1998.
- 44. PARASIEWICZ, P. & M. DUNBAR (1998): Physical habitat modelling a developing approach. Invited key note address, International Workshop: 0+ fish as indicators of the ecological status of rivers, University of Vienna. 16.-20.2.1998.
- 45. GRASSER U., PARASIEWICZ P., SCHMUTZ S., JUNGWIRTH M., MOOG O. & S. MUHAR (1998): Assessment of ecological integrity in minimum flow studies. The Austrian approach. International conference on "Assessing the ecological integrity of running waters", Vienna, Austria 9.-11.11.1998.
- 46. PARASIEWICZ P., HARBY A., LE COARER Y., MADER H. & M. MATTL (1998): Spatial sampling strategies in streams accuracy and compatibility concerns. VII International Congress of Ecology: Spatial processes and scaling: Merging field data collection methods and modelling. 19-25. 7. 1998, Florence.
- 47. PARASIEWICZ P., HÖGLINGER B. & H. C. HOFMANN (1998): Der DVP Stab Poster, Jahrestagung der Deutschen Gesellschaft für Limnologie gem. mit SIL dt. und österr. Sektion, Klagenfurt, 28.9.-2.10.1998.

1997

- 48. PARASIEWICZ P., HOFMANN H. C. & B. HÖGLINGER (1997): The DVP Depth Velocity Position Bar a multiplex instrument for physical habitat measurements in small riverine domains SISSORS III Seventh International Symposium on Regulated Streams in Chattanooga, Tennesseee, USA, 25-29 August 1997.
- 49. PARASIEWICZ, P., S., SCHMUTZ & O. MOOG (1997): The biological evaluation of minimum flow and hydro-peaking management plan on two Austrian rivers. SISSORS III Seventh International Symposium on Regulated Streams in Chattanooga, Tennessee 25-29 August 1997.
- 50. PARASIEWICZ P. & C. P. GUBALA (1997): International Aquatic Modelling Group activities report American Fisheries Society 127th Annual Meeting, Monterey, California 24-28 August 1997.

1996

51. PARASIEWICZ P., S. SCHMUTZ & O. MOOG, (1996): The effects of managed hydropower peaking on the physical habitat, benthos and fish fauna in the Bregenzerach, a nival 6th order river in Austria. International Symposium on Habitat Hydraulics "Ecohydraulics 2000" in Quebec, June1996.

Interviews

- Kraft S. (2009): Quiet on the River, The Valley Advocate, Northampton, MA, 2/19/2009
 http://www.valleyadvocate.com/article.cfm?aid=9240
- Palpini K. (2007): Trouble signs in the river: Researchers eye missing shiners.

 Hampshire Gazette,

 http://www.oceanriver.org/documents/Troublesigns in the river Research

 ers.pdf
- WFCR Public Radio (2003) Surveying River water flow. Morning edition: Field notes. Amherst, MA.
- WCNY Public TV (2003): Onondaga Creek Restoration on Hours WCNY. Syracuse, NY.
- Russell, G. (2000): A River of doubt. Power plant plan generates myriad fears for Quinebaug. Telegram & Gazette, Worcester, MA, 8/27/2000.
- Forowicz, K. (1998): Piękne, ale brudne. Rzeczpospolita (Polish national government newspaper). Warsaw, Poland, 8/25/1998.

Resume

Dr. MARVIN RESNIKOFF is an international consultant on radioactive waste issues. A nuclear physicist and a graduate of the University of Michigan, Dr. Resnikoff has worked on radioactive issues since his first project at West Valley, New York in 1974. Throughout his career, he has assisted public interest groups and state and local governments across the US in order to identify and create solutions for radioactive waste storage and transportation issues. His recent research focus has been on the risk of transporting and storing radioactive waste and the health impact of radioactive waste from oil and uranium production. Dr. Resnikoff has also co-authored four books on radioactive issues, including Deadly Defense and Danger Below, both regarding contamination at DOE facilities. In June 2000, he was appointed by DOE secretary Bill Richardson to a Blue Ribbon Panel on Alternatives to Incineration. In August 2010, he was an invited panelist to President Obama's Blue Ribbon Commission on Nuclear Safety. In October 2011, he was an invited panelist at the annual conference of the Water Environment Federation on the subject of radioactivity in Marcellus shale wastes. In November 2013, he was an invited panelist before the Nuclear Waste Technical Review Board on the subject of the implication of high burnup nuclear fuel on decommissioning and transportation.

Since 1992, he has researched NORM issues, continuing to serve as an expert witness in personal injury cases in Mississippi, Louisiana and Texas on behalf of workers injured while cleaning radium-contaminated oil pipes. In 2009, he served as an expert witness for a Texas rancher whose land was contaminated by natural gas operations. He also served as an expert witness for public interest groups concerned with Marcellus shale rock cuttings going to the Chemung County, New York solid waste landfill. In 2012, he prepared a report for public interest groups on the NORM situation in Ohio. He is presently preparing a report on the impact of natural gas exploration and production in Pennsylvania.

He has conducted studies on the remediation and closure of the leaking Maxey Flats, Kentucky radioactive landfill for Maxey Flats Concerned Citizens, Inc. and of the leaking uranium basin on the NMI/Starmet site in Concord, Massachusetts under grants from the Environmental Protection Agency. He co-authored a study on the cost of remediating the former West Valley, New York reprocessing plant site. He also conducted studies of the Wayne and Maywood, New Jersey thorium Superfund sites and proposed low-level radioactive waste facilities at Martinsville (Illinois), Boyd County (Nebraska), Wake County (North Carolina), Ward Valley (California) and Hudspeth and Andrews Counties (Texas). He investigated phosphogypsum plants in Florida, Texas and Alberta, Canada, and served as an expert witness in a personal injury case involving a Texas phosphogypsum worker. He also served as an expert witness for CRPE, a public interest group, regarding the proposed expansion of the Buttonwillow, California NORM landfill. He was an expert witness for Earthjustice re, the licensing of an irradiation facility near the Honolulu airport in Hawaii. He is serving as an expert witness for Niagara County, New York, in a licensing hearing re. an application by CWM to expand its hazardous waste landfill.



Marvin Resnikoff, Ph.D. Curriculum Vitae

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Ph.D., Physics1965, University of MichiganM.S., Physics1962, University of MichiganB.A., Physics/Math1959, University of Michigan

SUMMARY OF PROFESSIONAL EXPERIENCE:

Marvin Resnikoff is Senior Associate at Radioactive Waste Management Associates and is an international consultant on radioactive waste management issues. He is Principal Manager at Associates and is Project Director for dose reconstruction and risk assessment studies of radioactive waste facilities and transportation of radioactive materials. Dr. Resnikoff has concentrated exclusively on radioactive waste issues since 1974. He has authored or co-authored four books on radioactive waste issues.

He has conducted dose reconstruction studies of oil pipe cleaners in Mississippi and Louisiana, residents of Canon City, Colorado near a former uranium mill, residents of West Chicago, Illinois near a former thorium processing plant, and residents and former workers at a thorium processing facility in Maywood, New Jersey. He has also served as an expert witness for plaintiffs in Karnes County, Texas, Milan, New Mexico and Uravan, Colorado, who were exposed to radioactivity from uranium mining and milling activities. He is continuing to work on personal injury cases involving former workers and residents at the ITCO and other oil pipe cleaning yards in Louisiana and Texas. He also evaluated radiation exposures and risks in worker compensation cases involving former workers at Maywood Chemical Works thorium processing plant. He also served as an expert witness in a case involving the Port St. Lucie reactors and brain cancer developed by two children and in a case involving clean-up of an abandoned radioactive materials processing facility in Webster, Texas. He is presently working on several land contamination cases in Louisiana, Texas and New York. In June 2000, he was appointed to a Blue Ribbon Panel on Alternatives to Incineration by DOE Secretary Bill Richardson.

In addition to dose reconstruction and land contamination cases, Dr. Resnikoff also works on the risk of transporting radioactive material. Under a contract with the State of Utah, Dr. Resnikoff was a technical consultant to DEQ on the proposed dry cask storage facility for high-level waste at Skull Valley, Utah. He assisted the State on licensing proceedings before the Nuclear Regulatory Commission. He has also prepared studies on transportation risks and consequences for the State of Nevada and the Nevada counties: Clark, White Pine, Lander and Churchill. In addition, at hearings before state commissions and in federal court, he investigated proposed dry storage facilities at the Point Beach (WI), Prairie Island (MN), Palisades (MI), Maine Yankee, Connecticut Yankee and Vermont Yankee reactors. He is presently working for the State of Nevada on Yucca Mountain repository issues before the Nuclear Regulatory Commission (NRC). He is also serving as an expert witness for Earthjustice on a proposed NRC license for a food irradiator at the Honolulu, Hawaii airport.

He has conducted studies on the remediation and closure of the leaking Maxey Flats, Kentucky radioactive landfill for Maxey Flats Concerned Citizens, Inc. and of the leaking uranium basin on the NMI/Starmet site in Concord, Massachusetts under grants from the Environmental Protection Agency. He co-authored a study on the cost of remediating the former West Valley, New York reprocessing plant site. He also conducted studies of the Wayne and Maywood, New Jersey thorium Superfund sites and proposed low-level radioactive waste facilities at Martinsville (Illinois), Boyd County (Nebraska), Wake County (North Carolina), Ward Valley (California) and Hudspeth County (Texas). He investigated phosphogypsum plants in Florida, Texas and Alberta, Canada, and served as an expert witness in a personal injury case involving a Texas phosphogypsum worker. He also served as an expert witness for CRPE, a public interest groups, regarding the proposed expansion of the Buttonwillow, California NORM landfill. He is presently working for Earthjustice re. the licensing of an irradiation facility near the Honolulu airport in Hawaii.

In Canada, he conducted studies on behalf of the Coalition of Environmental Groups and Northwatch for hearings before the Ontario Environmental Assessment Board on issues involving radioactive waste in the nuclear fuel cycle and Elliot Lake tailings and the Interchurch Uranium Coalition in Environmental Impact Statement hearings before a Federal panel regarding the environmental impact of uranium mining in Northern Saskatchewan. He also worked on behalf of the Morningside Heights Consortium regarding radium-contaminated soil in Malvern and on behalf of Northwatch regarding decommissioning the Elliot Lake tailings area before a FEARO panel. He conducted a study for Concerned Citizens of Manitoba regarding transportation of irradiated fuel to a Canadian high-level waste repository. He is presently working for Greenpeace reviewing the environmental assessment for a proposed intermediate level waste repository under Lake Huron, and for the Provincial Womens Council of Ontario on radioactive waste management costs in a proceeding before the Ontario Energy Board.

In February 1976, assisted by four engineering students at State University of New York at Buffalo, Dr. Resnikoff authored a paper that, according to *Science*, changed the direction of power reactor decommissioning in the United States. His paper showed that power reactors could not be entombed for long enough periods to allow the radioactivity to decay to safe enough levels for unrestricted release. The presence of long-lived radionuclides meant that large volumes of decommissioning waste would still have to go to low-level or high-level waste disposal facilities. He assisted public interest groups on the decommissioning of the Yankee-Rowe, Diablo Canyon, Big Rock Point and Haddam Neck reactors.

He was formerly Research Director of the Radioactive Waste Campaign, a public interest organization conducting research and public education on the radioactive waste issue. His duties with the Campaign included directing the research program on low-level commercial and military waste and irradiated nuclear fuel transportation, writing articles, fact sheets and reports, formulating policy and networking with numerous environmental and public interest organizations and the media. He is author of the Campaign's book on "low-level" waste, *Living Without Landfills*, and co-author of the Campaign's book, *Deadly Defense, A Citizen Guide to Military Landfills*.

Between 1981 and 1983, Dr. Resnikoff was a Project Director at the Council on Economic Priorities, a New York-based non-profit research organization, where he authored the 390-page study, *The Next Nuclear Gamble, Transportation and Storage of Nuclear Waste*. The CEP study details the hazard of transporting irradiated nuclear fuel and outlines safer options.

Dr. Resnikoff is an international expert in nuclear waste management, and has testified often before State Legislatures and the U.S. Congress. He has extensively investigated the safety of the West Valley, New York and Barnwell, South Carolina nuclear fuel reprocessing facilities. His paper on reprocessing economics (Environment, July/August, 1975) was the first to show the marginal economics of recycling plutonium. He completed a more detailed study on the same subject for the Environmental Protection Agency, "Cost/Benefits of U/Pu Recycle," in 1983. His paper on decommissioning nuclear reactors (Environment, December, 1976) was the first to show that reactors would remain radioactive for several hundred thousand years. In March 2004, Dr. Resnikoff was project director and co-author of a study of groundwater contamination at DOE facilities, Danger Lurks Below.

Dr. Resnikoff has prepared reports on incineration of radioactive materials, transportation of irradiated fuel and plutonium, reprocessing, and management of low-level radioactive waste. He has served as an expert witness in state and federal court cases and agency proceedings. He has served as a consultant to the State of Kansas on low-level waste management, to the Town of Wayne, New Jersey, in reviewing the cleanup of a local thorium waste dump, to WARD on disposal of radium wastes in Vernon, New Jersey, to the Southwest Research and Information Center and New Mexico Attorney General on shipments of plutoniumcontaminated waste to the WIPP facility in New Mexico and the State of Utah on nuclear fuel transport. He has served as a consultant to the New York Attorney General on air shipments of plutonium through New York's Kennedy Airport, and transport of irradiated fuel through New York City, and to the Illinois Attorney General on the expansion of the spent fuel pools at the Morris Operation and the Zion reactor, to the Idaho Attorney General on the transportation of irradiated submarine fuel to the INEL facility in Idaho and to the Alaska Attorney General on shipments of plutonium through Alaska. He was an invited speaker at the 1976 Canadian meeting of the American Nuclear Society to discuss the risk of transporting plutonium by air. As part of an international team of experts for the State of Lower Saxony, the Gorleben International Review, he reviewed the plans of the nuclear industry to locate a reprocessing and waste disposal operation at Gorleben, West Germany. He presented evidence at the Sizewell B Inquiry on behalf of the Town and Country Planning Association (England) on transporting nuclear fuel through London. In July and August 1989, he was an invited guest of Japanese public interest groups, Fishermen's Cooperatives and the Japanese Congress Against A- and H- Bombs (Gensuikin).

Between 1974 and 1981, he was a lecturer at Rachel Carson College, an undergraduate environmental studies division of the State University of New York at Buffalo, where he taught energy and environmental courses. The years 1975-1977 he also worked for the New York Public Interest Group (NYPIRG).

In 1973, Dr. Resnikoff was a Fulbright lecturer in particle physics at the Universidad de Chile in Santiago, Chile. From 1967 to 1973, he was an Assistant Professor of Physics at the State University of New York at Buffalo. He has written numerous papers in particle physics, under grants from the National Science Foundation. He is a 1965 graduate of the University of Michigan with a Doctor of Philosophy in Theoretical Physics, specializing in group theory and particle physics. Dr. Resnikoff is a member of the American Public Health Association and the Health Physics Society.

PROFESSIONAL EXPERIENCE:

- April 1989 present **Senior Associate**, Radioactive Waste Management Associates, management of consulting firm focused on radioactive waste issues, evaluation of nuclear transportation and military and commercial radioactive waste disposal facilities.
- 1978 1981; 1983 April 1989 **Research Director**, Radioactive Waste Campaign, directed research program for Campaign, including research for all fact sheets and the two books, *Living Without Landfills*, and *Deadly Defense*. The fact sheets dealt with low-level radioactive waste landfills, incineration of radioactive waste, transportation of high-level waste and decommissioning of nuclear reactors. Responsible for fund-raising, budget preparation and project management.
- 1981 1983 **Project Director**, Council on Economic Priorities, directed project which produced the report *The Next Nuclear Gamble*, on transportation and storage of high-level waste.
- 1974 1981 **Instructor**, Rachel Carson College, State University of New York at Buffalo, taught classes on energy and the environment, and conducted research into the economics of recycling of plutonium from irradiated fuel under a grant from the Environmental Protection Agency.

- 1975 1976 Project Coordinator, SUNY at Buffalo, New York Public Interest Research Group, assisted students on research projects, including project on waste from decommissioning nuclear reactor.
- 1973 **Fulbright Fellowship** at the Universidad de Chile, conducting research in elementary particle physics.
- 1967 1972 **Assistant Professor of Physics**, SUNY at Buffalo, conducted research in elementary particle physics and taught a range of graduate and undergraduate physics courses.
- 1965 1967 **Research Associate**, Department of Physics, University of Maryland, conducted research into elementary particle physics.

PROFESSIONAL ORGANIZATIONS:

Health Physics Society Water Environment Federation

SPECIAL SPEAKING ENGAGEMENTS:

1967	Invited Speaker, w/ O.W. Greenberg, Meeting of the American Physical Society, Washington, D.C., "Symmetric Quark Model of Baryon Resonances," Conf-670414—6.
1976	Invited Speaker, Meeting of the American Nuclear Society, Toronto, Canada, "Comparison of risk assessments of Pu released during transport."
1976	Statement before the Subcommittee on Energy and the Environment of the Interior Committee, House of Representatives, on recycling of plutonium.
1977	Statement before the Subcommittee on Government Operations, House of Representatives, on Nuclear Power Costs
1979	Chaired panel w/Dr. Karl Morgan and Dr. Alice Stewart, Gorleben International Review, on the health effects of radiation, Hanover, Germany.
2000	Invited day-long seminar presentation to the California Department of Health on the health effects of radiation
2002	Testimony before the Committee on Transportation & Infrastructure, United States House of Representatives, on transportation of nuclear materials.
2003	Presentation before the National Academy of Sciences Study Committee on Transportation of Radioactive Waste, Las Vegas, NV, "Baltimore Tunnel Fire: Implications for SNF Transportation Safety."
2006	Biglin, K. and Resnikoff, M, Emergency Response to a Nuclear Waste Shipment Accident, Inyo County, June 15, 2006, paper presented at ESRI Annual Conference, August 2006.
2008	Invited Speaker, Meeting of the American Nuclear Society, Anaheim, CA, "State of Nevada Recommendations for Yucca Mountain Transportation Safety and Security."
2008	Presentation at Waste Management 2008, Phoenix, AZ, "Fugitive Dust Emissions from Uranium Haul Roads."
2008	Presentation at Waste Management 2008, Phoenix, AZ, "State of Nevada Perspective on the US DOE Yucca Mountain Transportation Program."

Books and Articles

Resnikoff, M, "Expensive Enrichment," *Environment*, July/August 1975, pp. 28–35.

- Harwood, S et al, "The Cost of Turning It Off," Environment, December 1976, pp.17-26.
- M. Resnikoff, "Environmental Perspective." Chapter 7 in "The Politics of Nuclear Waste," edited by William Colglazier, Pergamon Press, 1982
- M. Resnikoff, et al, "The Next Nuclear Gamble, Transportation and Storage of Nuclear Waste," Council on Economic Priorities, 1983.
- M. Resnikoff, "Shipping Flasks in Severe Rail Accidents," Chapter 18 in "The Urban Transportation of Irradiated Fuel," edited by John Surrey, Macmillan Press, London, 1984.
- M. Resnikoff, "Living Without Landfills," Radioactive Waste Campaign, 1988.
- M. Resnikoff, et al, "Deadly Defense, A Citizen Guide to Military Landfills," Radioactive Waste Campaign, 1989.
- M. Marvin Resnikoff, "The Generation Time Bomb: Radioactive and Chemical Wastes." Chapter in "Hidden Dangers: Environmental Consequences of Preparing for War," edited by Anne Ehrlich and John Birks, Sierra Club Books, San Francisco, 1990.
- I. Fairlie and M. Resnikoff, "No Dose Too Low," The Bulletin of Atomic Scientists, Nov/Dec 1997.
- M. Resnikoff, "Danger Lurks Below," Alliance for Nuclear Accountability, 2004.
- M Resnikoff, "Radon in Natural Gas from Marcellus Shale," Ethics in Biology, Engineering & Medicine, Vol. 2, Issue 4, 2011, pp. 317-331.

Matthew Kelso

Manager of Data and Technology FracTracker Alliance 112 Sherman Street Pittsburgh, PA 15209

Education

B.A. in Anthropology from Humboldt State University in Arcata, CA (2003, cum laude) Includes one-year study abroad in Xi'an, China at Xibei Daxue.

Summary of Experience

FracTracker Alliance – Manager of Data and Technology (2012 – current)

In this position, Mr. Kelso performs data analysis and print and online Geographic Information Systems (GIS) for the FracTracker Alliance, and oversees standards of these functions within the organization. Software frequently used includes ArcGIS Desktop, ArcGIS Online, Microsoft Word and Microsoft Excel.

University of Pittsburgh Graduate School of Public Health, Center for Healthy Environments and Communities – Data Manager (2010 to 2012)

FracTracker was a project of the Center for Healthy Environments and Communities through 2012, before becoming its own 501 (c)(3) nonprofit organization. Mr. Kelso performed data analysis and print and online GIS functions in this capacity.

KEYS Service Corps – AmeriCorps Member (2009 to 2010)

Mr. Kelso was an AmeriCorps member, chiefly serving as a classroom assistant at the Propel Montour charter school in Kennedy Township, PA

Various Cultural Resources Management Companies – Archaeologist (2004 to 2008)

Mr. Kelso worked as an archaeologist on numerous projects and for a variety of companies. Duties included excavation and survey, artifact analysis, artifact curation, and report writing. Most projects were in New Mexico, with additional projects in Wyoming, Arizona, and Virginia, and typically lasted between two and eight weeks.

Peer Reviewed Publications

Malone, Samantha, Matthew Kelso, Ted Auch, Karen Edelstein, Kyle Ferrar, and Kirk Jalbert. (2015). "Inconsistencies with Data from Unconventional Gas and Oil Basins," Journal of Environment Science and Health, Part A, 50(5):489-498.

Samantha Malone, Matthew Kelso, Drew Michanowicz, Kyle Ferrar, Kyra Naumoff Shields and Jill Kriesky. ENVIRONMENTAL REVIEWS AND CASE STUDIES: FracTracker Survey and Case Studies: Application for Participatory GIS in Unconventional Natural Gas Development. *Environmental Practice* 14:1–10 (2012). doi:10.1017/S1466046612000324.

White Papers

Kelso, Matthew (2018). "A Hazy Future: Pennsylvania's Energy Landscape in 2045", FracTracker Alliance, white paper for the Heinz Endowments. https://www.fractracker.org/a5ej20sjfwe/wp-content/uploads/2018/01/AHazyFuture-FracTracker-2018.pdf

Web Published Projects

Kelso, Matthew. 2018. "High Impact Areas and Donut Holes - Variability in PA's Unconventional O&G Industry." FracTracker Alliance.

http://ft.maps.arcgis.com/apps/MapJournal/index.html?appid=4703763deb4041f3bf11f889338a1951

The Oil and Gas Threat Map. 2016-2017. Earthworks, FracTracker Alliance, and Clean Air Task Force. http://oilandgasthreatmap.com/

Kelso, Matthew. 2017. "What is the Life Expectancy of the Marcellus Shale?" FracTracker Alliance. https://www.fractracker.org/2017/10/life-expectancy-marcellus-shale/

Jalbert, Kirk and Matthew Kelso. 2017. "Susquehanna River Basin Impacts Project," FracTracker Alliance. https://www.fractracker.org/projects/susquehanna-river-basin-impacts-project/

Kelso, Matthew and Kirk Jalbert. 2016. "Allegheny County Lease Mapping Project." FracTracker Alliance. https://www.fractracker.org/projects/lease-mapping/

Invited Talks

"Information Forum – Injection Wells" September 21, 2017, Plum Borough, Allegheny County, Pennsylvania. https://www.youtube.com/watch?v=wX9frQvPhSw

Tom Myers, Ph.D.

Consultant, Hydrology and Water Resources 6320 Walnut Creek Road Reno, NV 89523 (775) 530-1483 Tommyers1872@gmail.com

Curriculum Vitae

Objective: To provide diverse research and consulting services to nonprofit, government, legal and industry clients focusing on hydrogeology specializing in mine dewatering, contaminant transport, natural gas development, groundwater modeling, NEPA analysis, federal and state regulatory review, and fluvial morphology.

Education

Years	Degree	University	
1992-96	Ph.D.	University of Nevada, Reno	
	Hydrology/Hydrogeology	Dissertation: Stochastic Structure of Rangeland Streams	
1990-92		University of Arizona, Tucson AZ	
		Classes in pursuit of Ph.D. in Hydrology.	
1988-90	M.S.	University of Nevada, Reno	
	Hydrology/Hydrogeology	Thesis: Stream Morphology, Stability and Habitat in Northern	
		Nevada	
1981-83		University of Colorado, Denver, CO	
		Graduate level water resources engineering classes.	
1977-81	B.S., Civil Engineering	University of Colorado, Boulder, CO	

Professional Experience

Years	Position	Duties
1993-	Hydrologic	Completion of hydrogeology studies and testimony focusing on mine
Pr.	Consultant	dewatering, groundwater modeling, natural gas development, contaminant
		transport, NEPA review, and water rights for nonprofit groups and
		government agencies.
1999-	Great Basin	Responsible for reviewing and commenting on mining projects with a focus
2004	Mine Watch,	on groundwater and surface water resources, preparing appeals and litigation,
	Exec Director	organizational development and personnel management.
1992-	Univ of NV,	Research on riparian area and watershed management including stream
1997	Reno,	morphology, aquatic habitat, cattle grazing and low-flow and flood hydrology.
	Res. Assoc.	
1990-	U of AZ,	Research on rainfall/runoff processes and climate models. Taught lab
1992	Res. and Teach.	sections for sophomore level "Principles of Hydrology". Received 1992
	Assistant	Outstanding Graduate Teaching Assistant Award in the College of
		Engineering
1988-	U of NV, Reno	Research on aquatic habitat, stream morphology and livestock management.
1990	Res. Asst	
1983-	US Bureau of	Performed hydrology planning studies on topics including floodplains, water
1988	Reclamation	supply, flood control, salt balance, irrigation efficiencies, sediment transport,
	Hydraulic Eng.	rainfall-runoff modeling and groundwater balances.

Peer-Reviewed Publications

- Myers, T., 2016. A modeling approach to siting mine facilities in northern Minnesota USA. *J Hydrology* 533: 277-290. Doi: 10.1016/j.jhydrol.2015.12.020
- Myers, T., 2013. Remediation scenarios for selenium contamination, Blackfoot Watershed, southeast Idaho, USA. *Hydrogeology J.* DOI 10.1007/s10040-013-0953-8
- Myers, T., 2013. Reservoir loss rates from Lake Powell and their impact on management of the Colorado River. *Journal of the American Water Resources Association*. DOI: 10.1111/jawr.12081.
- Myers, T., 2012. Potential contaminant pathways from hydraulically fractured shale to aquifers. *Ground Water* 50(6): 872-882. doi: 10.1111/j.1745-6584.2012.00933.x
- Myers, T., 2009. Groundwater management and coal-bed methane development in the Powder River Basin of Montana. *J Hydrology* 368:178-193.
- Myers, T.J. and S. Swanson, 1997. Variation of pool properties with stream type and ungulate damage in central Nevada, USA. *Journal of Hydrology* 201-62-81
- Myers, T.J. and S. Swanson, 1997. Precision of channel width and pool area measurements. *Journal of the American Water Resources Association* 33:647-659.
- Myers, T.J. and S. Swanson, 1997. Stochastic modeling of pool-to-pool structure in small Nevada rangeland streams. *Water Resources Research* 33(4):877-889.
- Myers, T.J. and S. Swanson, 1997. Stochastic modeling of transect-to-transect properties of Great Basin rangeland streams. *Water Resources Research* 33(4):853-864.
- Myers, T.J. and S. Swanson, 1996. Long-term aquatic habitat restoration: Mahogany Creek, NV as a case study. *Water Resources Bulletin* 32:241-252
- Myers, T.J. and S. Swanson, 1996. Temporal and geomorphic variations of stream stability and morphology: Mahogany Creek, NV. *Water Resources Bulletin* 32:253-265.
- Myers, T.J. and S. Swanson, 1996. Stream morphologic impact of and recovery from major flooding in north-central Nevada. *Physical Geography* 17:431-445.
- Myers, T.J. and S. Swanson, 1995. Impact of deferred rotation grazing on stream characteristics in Central Nevada: A case study. *North American Journal of Fisheries Management* 15:428-439.
- Myers, T.J. and S. Swanson, 1992. Variation of stream stability with stream type and livestock bank damage in northern Nevada. *Water Resources Bulletin* 28:743-754.
- Myers, T.J. and S. Swanson, 1992. Aquatic habitat condition index, stream type, and livestock bank damage in northern Nevada. *Water Resources Bulletin* 27:667-677.
- Zonge, K.L., S. Swanson, and T. Myers, 1996. Drought year changes in streambank profiles on incised streams in the Sierra Nevada Mountains. *Geomorphology* 15:47-56.

Representative Projects

Expert Witnessing

- Myers, T., 2017. Expert Report/Testimony. In the Matter of Applications 53987 through 53992, inclusive, and 54003 through 54021, inclusive, filed to appropriate the underground waters of Spring Valley, Cave Valley, Dry Lake Valley, and Delamar Valley (Hydrographic Basins 184, 180, 181, and 182), Lincoln County and White Pine County, Nevada. Nevada Division of Water Resources. Hearing September 25-October 6, 2017.
- Myers, T., 2017. Expert Testimony. In the Matter of Application for Beneficial Water Use Permit No 76LJ-30102978 by Montana Artesian Water Company. Montana Department of Natural Resources. Hearing in Kalispell MT, Sept 19 -22, 2017
- Myers, T., 2016. Expert Report/Testimony: In Re State Land Office Agriculture Lease No. GT-0447, Brininstool XL Ranch, LLC v. Devon Energy Production Company, Contest No. 15-006. Santa Fe, NM
- Myers, T., 2014. Expert Report/Deposition: In the Matter of California Department of Parks and Recreation v. Newmont Mining Corporation, et al. Prepared for the California Department of Justice, February 2014
- Myers, T., 2012. Expert Report/ Testimony at Aquifer Protection Permit Appeal Hearing, Rosemont Mine. Phoenix AZ, August and September, 2012.
- Myers, T., 2011. Deposition: Northeast Natural Energy, LLC and Enroute Properties, LLC v. The City of Morgantown, WV, Civil Action No. 11-C-411, Circuit Couty of Monongalia County, WV.
- Myers, T., 2011 and earlier. Expert Reports (some listed below) and Testimony. Water Rights Protest Hearings before the Nevada State Engineer, Southern Nevada Water Authority Applications for (1) Spring Valley, (2) Cave, Dry Lake, Delamar Valley, (3) Three Lakes/Tikapoo Valley.
- Myers, T. 2006. Affidavit. Diamond Cross Properties, LLC, Northern Plains Resource Council, Tounge River Water Users Assoc v. State of Montana, Dept of Env Quality, Board of Oil and Gas Conservation, Dept of Natural Resources and Conservation, and Pinnacle Gas Resources, Inc, and Fidelity Exploration and Production Co., MT 22nd Judicial District Court Big Horn County, Civil Cause No. DV 05-70.
- Myers, T. 2006. Expert Report/Deposition. Cole et al. v J.M. Huber Corp, and William DeLapp. U.S. Federal District Court Case No. 06-CV-0142J.
- Myers, T., 2005. Nevada State Environmental Commission Appeal Hearing, Water Pollution Control Permit Renewal NEV0087001, Big Springs Mine. Prepared for Great Basin Mine Watch, Reno NV.
- Myers, T. 2004. Nevada State Environmental Commission Appeal Hearing, Water Pollution Control Permit, Lone Tree Mine, Gold Quarry Mine. Prepared for Great Basin Mine Watch, Reno NV.

Reports, Reviews and Activities

- Myers, T. 2017. Technical Memorandum: Impact of Developing Dixie Meadows Geothermal Utilization Project on Springs and Surface Water. Prepared for Center for Biological Diversity. July 24, 2017.
- Myers, T. 2017. Technical Memorandum: Review of Bishop Tube Superfund Site and an Assessment of the Site's Proposed Residential Development. Prepared for Delaware Riverkeeper Network. March 20, 2017.
- Myers, T. 2017. Technical Memorandum: Review of Dinwoody Enhanced and Production Covers. Prepared for EarthWorks and Crow Creek Conservation Alliance. Decmeber 5, 2017.
- Myers, T. 2017. Technical Memorandum: Review of Final Responsiveness Summary for Aquifer Project Permit Application, Gunnison Copper Project. Prepared for Amerind Foundation, Dragoon, AZ
- Myers, T. 2016. Effect of Open-Pit Mine Dewatering and Cessation on Semi-Arid River Flows. Prepared for the Progressive Leadership Alliance of Nevada.
- Myers, T. 2016. International Technology Exchange, Mongolia. Working with Mongolian and Russian NGOs regarding Mining and Energy Development.
- Myers, T. 2016. Technical Memorandum: Completeness Review of the Mine Operating Permit Application, Black Butte Copper Project, Meagher County MT. Prepared for Montana Chapter, Trout Unlimited.
- Myers, T. 2016. Technical Memorandum. Response to the US Fish and Wildlife Service Hydrologic Reasoning in its Response to the Center for Biological Diversity's Notice of Intent to Sue to Reopen Consultation on Various Memorandums of Agreement Regarding the Muddy River Springs. Prepared for the Center for Biological Diversity, September 10, 2016.
- Myers, T., 2016. Technical Memorandum, Review of the Draft Environmental Impact Statement, Copper Flat, Sierra County, NM. Prepared for Ladder Ranch, Inc. and New Mexico Environmental Law Center
- Myers, T., 2016. Technical Memorandum, Review of the Draft Supplemental Environmental Impact Statement for the Donlin Gold Project. Prepared for the Northern Alaska Environmental Center.
- Myers, T., 2016. Technical Memorandum, Review of the Draft Supplemental Environmental Impact Statement for the Rock Creek Project, Sanders County, MT. Prepared for the Rock Creek Alliance.
- Myers, T. 2016. Technical Memorandum, Twin Metals Mine and the Peter Mitchell Pit, Simulation of the Development of the Peter Mitchell Pit and Its Effects on the Proposed Twin Metals Tailings Impoundment. Prepared for Northeastern Minnesotans for Wilderness.
- Myers, T., 2015. Conceptual Flow and Transport Model, Uranium Plume near the Homestake Millsite, Milan, NM. Prepared for Bluewater Valley Downstream Alliance. Marcy 16, 2015.
- Myers, T., 2015. Hydrogeology of the Humboldt River Basin, Impacts of Open-pit Mine Dewatering and Pit Lake Formation. Prepared for the Progressive Leadership Alliance of Nevada and Great Basin Resource Watch, Revised June 2015.

- Myers, T., 2015. Letter Report: Comments on the Draft Supplemental Environmental Impact Review for the Panoche Valley Solar Project. Prepared for Adams Broadwell Joseph and Cardozo, San Francisco CA
- Myers, T., 2015. Technical Memorandum: Review of the Final Environmental Impact Statement, NorthMet Mining Project and Land Exchange. Prepared for Minnesota Center for Environmental Advocacy.
- Myers, T., 2015. Technical Memorandum Review of Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources. Prepared for Delaware Riverkeeper Network. August 24, 2015.
- Myers, T., 2015. Technical Memorandum Review of Finger Lakes LPG Storage, LLC, Proposed LPG Storage Facility. Prepared for Earthjustice, New York. January 13, 2015
- Myers, T., 2015. Technical Memorandum Review of Pennsylvania Governor's Executive Order Concerning Hydraulic Fracturing in Pennsylvania State Parks and Forest. Prepared for Delaware River Keeper, January 9, 2015.
- Myers, T., 2015. Technical Memorandum Review of Water Supply Assessment, Village at Squaw Valley. Prepared for Sierra Watch, July 13, 2015.
- Myers, T., 2014. Groundwater Flow and Transport Modeling, NorthMet Mine and Plant Site. Prepared for the Minnesota Center for Environmental Advocacy.
- Myers, T., 2014. Letter Report: Comments on the Environmental Assessment for the Proposed Photovoltaic Array Proposed for Ft Irwin CA. Prepared for Adams Broadwell Joseph and Cardozo, San Francisco CA, October 13, 2014
- Myers, T., 2014. Review of the Water Quality Modeling, NorthMet Mine and Plant Site, Minnesota. Prepared for Minnesota Center for Environmental Advocacy.
- Myers, T. 2014. Technical Memorandum: Review of Performance Standards, Center for Sustainable Shale Development. Prepared for Delaware River Keeper. May 8, 2014.
- Myers, T. 2014. Technical Memorandum: Review of the Hydrogeologic Aspects of the Draft Environmental Impact Statement, Haile Gold Mine, Lancaster County, South Carolina. Prepared for Southern Environmental Law Center, May 8 2014.
- Myers, T., 2014. Technical Memorandum: Review of the Supplemental Draft Environmental Impact Statement, NorthMet Mining Project and Land Exchange. Prepared for Minnesota Center for Environmental Advocacy. March 10, 2014
- Myers, T. 2014. Technical Memorandum: Twin Metals and the Boundary Waters Canoe Area Wilderness, Risk Assessment for Underground Metals Mining. Prepared for Northeastern Minnesotans for Wilderness. August 8 2014
- Myers, T. 2012-3. Participation in EPA Potential Impacts of Hydraulic Fracturing on Drinking Water Resources Study. US Environmental Protection Agency, Washington DC.
- Myers, T., 2013. DRAFT: Chapter 5.1: Water Quality. Initiative for Responsible Mining.
- Myers, T., 2013. DRAFT: Chapter 5.2: Water Quantity. Initiative for Responsible Mining.

- Myers, T., 2013. Technical Memorandum: Comments on Encana Oil and Gas Inc.'s Application for the Madison Aquifer to be Exempt Wyoming Oil and Gas Conservation Commission Docket No. 3-2013. Prepared for Natural Resources Defense Council, Powder River Basin Council. June 12, 2013.
- Myers, T. 2013. Technical Memorandum: Impact Analysis: Wishbone Hill Water Right Application. Prepared for Trustees for Alaska
- Myers, T, 2013. Technical Memorandum: Review of Montanore Mine Dewatering Instream Flow Methodology. Prepared for Save our Cabinets, Earthworks. March 26, 2013
- Myers, T. 2012. Technical Memorandum: Chuitna Coal Mine Project, Review of Arcadis DRAFT Hydrogeologic Conceptual Site Model Update and Associated Documents. Prepared for Cook Inletkeeper. May 11, 2012.
- Myers, T., 2012. Technical Memorandum, Review of DRAFT: Investigation of Ground Water Contamination near Pavillion Wyoming Prepared by the Environmental Protection Agency, Ada OK. April 19, 2012.
- Myers, T., 2012. Participation in: Keystone Center Independent Science Panel, Pebble Mine. Anchorage AK, October 1-5, 2012.
- Myers, T., 2012. Technical Memorandum, Review and Analysis, Revised Draft, Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program, Well Permit Issuance for Horizontal Drilling and High-Volume Hydraulic Fracturing to Develop the Marcellus Shale and Other Low-Permeability Gas Reservoirs. Prepared for Natural Resources Defense Council.
- Myers, T., 2012. Technical Memorandum, Review of the Special Use Permit PP2011-035-Camilletti 21-10, Groundwater Monitoring Requirements. Prepared for Routt County Board of Commissioners and the Routt County Planning Department. June 19, 2012.
- Myers, T., 2012. Drawdown at U.S. Forest Service Selected Monitoring Points, Myers Rosemont Groundwater Model Report. Prepared for Pima County, AZ. March 22, 2012.
- Myers, T. 2011. Baseflow Conditions in the Chuitna River and Watersheds 2002, 2003, and 2004 and the Suitability of the Area for Surface Coal Mining. January 14, 2011.
- Myers, T., 2011. Hydrogeology of Cave, Dry Lake and Delamar Valleys, Impacts of pumping underground water right applications #53987 through 53092. Presented to the Office of the Nevada State Engineer On behalf of Great Basin Water Network.
- Myers, T., 2011. Hydrogeology of Spring Valley and Surrounding Areas, Part A: Conceptual Flow Model. Presented to the Nevada State Engineer on behalf of Great Basin Water Network and the Confederated Tribes of the Goshute Reservation.
- Myers, T., 2011. Hydrogeology of Spring Valley and Surrounding Areas, Part B: Groundwater Model of Snake Valley and Surrounding Area. Presented to the Nevada State Engineer on behalf of Great Basin Water Network and the Confederated Tribes of the Goshute Reservation.
- Myers, T., 2011. Hydrogeology of Spring Valley and Surrounding Areas, PART C: IMPACTS OF PUMPING UNDERGROUND WATER RIGHT APPLICATIONS #54003 THROUGH 54021.

- Presented to the Nevada State Engineer on behalf of Great Basin Water Network and the Confederated Tribes of the Goshute Reservation.
- Myers, T., 2011. Rebuttal Report: Part 2, Review of Groundwater Model Submitted by Southern Nevada Authority and Comparison with the Myers Model. Presented to the Nevada State Engineer on behalf of Great Basin Water Network and the Confederated Tribes of the Goshute Reservation.
- Myers, T. 2011. Rebuttal Report: Part 3, Prediction of Impacts Caused by Southern Nevada Water Authority Pumping Groundwater From Distributed Pumping Options for Spring Valley, Cave Valley, Dry Lake Valley, and Delamar Valley. Presented to the Nevada State Engineer on behalf of Great Basin Water Network and the Confederated Tribes of the Goshute Reservation.
- Myers, T., 2011. Baseflow Selenium Transport from Phosphate Mines in the Blackfoot River Watershed Through the Wells Formation to the Blackfoot River, Prepared for the Greater Yellowstone Coalition.
- Myers, T., 2011. Blackfoot River Watershed, Groundwater Selenium Loading and Remediation. Prepared for the Greater Yellowstone Coalition.
- Myers, T., 2011. Technical Memorandum Review of the Proposed Montanore Mine Supplemental Draft Environmental Impact Statement and Supporting Groundwater Models
- Myers, T., 2010. Planning the Colorado River in a Changing Climate, Colorado River Simulation System (CRSS) Reservoir Loss Rates in Lakes Powell and Mead and their Use in CRSS. Prepared for Glen Canyon Institute.
- Myers, T., 2010. Technical Memorandum, Updated Groundwater Modeling Report, Proposed Rosemont Open Pit Mining Project. Prepared for Pima County and Pima County Regional Flood Control District
- Myers, T., 2009. Monitoring Groundwater Quality Near Unconventional Methane Gas Development Projects, A Primer for Residents Concerned about Their Water. Prepared for Natural Resources Defense Council. New York, New York.
- Myers, T., 2009. Technical Memorandum, Review and Analysis of the Hydrology and Groundwater and Contaminant Transport Modeling of the Draft Environmental Impact Statement Blackfoot Bridge Mine, July 2009. Prepared for Greater Yellowstone Coalition, Idaho Falls, Idaho.
- Myers, T., 2008. Hydrogeology of the Carbonate Aquifer System, Nevada and Utah With Emphasize on Regional Springs and Impacts of Water Rights Development. Prepared for: Defenders of Wildlife, Washington, D.C. June 1, 2008.
- Myers, T., 2008. Hydrogeology of the Muddy River Springs Area, Impacts of Water Rights Development. Prepared for: Defenders of Wildlife, Washington, D.C. May 1, 2008
- Myers, T., 2008. Hydrogeology of the Santa Rita Rosemont Project Site, Numerical Groundwater Modeling of the Conceptual Flow Model and Effects of the Construction of the Proposed Open Pit, April 2008. Prepared for: Pima County Regional Flood Control District, Tucson AZ.
- Myers, T., 2008. Technical Memorandum, Review, Record of Decision, Environmental Impact Statement Smoky Canyon Mine, Panels F&G, U.S. Department of the Interior, Bureau of Land Management.

- Prepared for Natural Resources Defense Council, San Francisco, CA and Greater Yellowstone Coalition, Idaho Falls, ID. Reno NV.
- Myers, T., 2007. Groundwater Flow and Contaminant Transport at the Smoky Canyon Mine, Proposed Panels F and G. Prepared for Natural Resources Defense Council, San Francisco, CA and Greater Yellowstone Coalition, Idaho Falls, ID. Reno NV. December 11, 2007.
- Myers, T., 2007. Hydrogeology, Groundwater Flow and Contaminant Transport at the Smoky Canyon Mine, Documentation of a Groundwater Flow and Contaminant Transport Model. Prepared for Natural Resources Defense Council, San Francisco, CA and Greater Yellowstone Coalition, Idaho Falls, ID. Reno NV, December 7, 2007.
- Myers, T., 2007. Review of Hydrogeology and Water Resources for the Final Environmental Impact Statement, Smoky Canyon Mine, Panels F and G and Supporting Documents. Prepared for Natural Resources Defense Council, San Francisco, CA and Greater Yellowstone Coalition, Idaho Falls, ID. Reno, NV. December 12, 2007.
- Myers, T., 2007. Hydrogeology of the Powder River Basin of Southeast Montana Development of a Three-Dimensional Groundwater Flow Model. Prepared for Northern Plains Resource Council. February 12 2007.
- Myers, T., 2007. Hydrogeology of the Santa Rita Rosemont Project Site, Conceptual Flow Model and Water Balance, Prepared for: Pima County Flood Control District, Tucson AZ
- Myers, T., 2006. Review of Mine Dewatering on the Carlin Trend, Predictions and Reality. Prepared for Great Basin Mine Watch, Reno, NV
- Myers, T., 2006. Hydrogeology of Spring Valley and Effects of Groundwater Development Proposed by the Southern Nevada Water Authority, White Pine and Lincoln County, Nevada. Prepared for Western Environmental Law Center for Water Rights Protest Hearing.
- Myers, T., 2006. Potential Effects of Coal Bed Methane Development on Water Levels, Wells and Springs of the Pinnacle Gas Resource, Dietz Project In the Powder River Basin of Southeast Montana. Affidavit prepared for Northern Plains Resource Council, April 4 2006.
- Myers, T., 2006. Review of Hydrogeology and Water Resources for the Draft Environmental Impact Statement, Smoky Canyon Mine, Panels F and G, Technical Report 2006-01-Smoky Canyon. Prepared for Natural Resources Defense Council.
- Myers, T., 2006. Review of Nestle Waters North America Inc. Water Bottling Project Draft Environmental Impact Report / Environmental Assessment. Prepared for McCloud Watershed Council, McCloud CA.
- Myers, T., 2005. Hydrology Report Regarding Potential Effects of Southern Nevada Water Authority's Proposed Change in the Point of Diversion of Water Rights from Tikapoo Valley South and Three Lakes Valley North to Three Lakes Valley South. Prepared for Western Environmental Law Center for Water Rights Protest Hearing
- Myers, T., 2005. Review of Draft Supplemental Environmental Impact Statement, Ruby Hill Mine Expansion: East Archimedes Project NV063-EIS04-34, Technical Report 2005-05-GBMW. Prepared for Great Basin Mine Watch.

- Myers, T., 2005. Hydrogeology of the Powder River Basin of Southeast Montana, Development of a Three-Dimensional Groundwater Flow Model. Prepared for Northern Plains Resource Council, Billings, MT in support of pending litigation.
- Myers, T., 2005. Potential Effects of Coal Bed Methane Development on Water Levels, Wells and Springs In the Powder River Basin of Southeast Montana. Prepared for Northern Plains Resource Council, Billings, MT.
- Myers, T., 2004. An Assessment of Contaminant Transport, Sunset Hills Subdivision and the Anaconda Yerington Copper Mine, Technical Report 2004-01-GBMW. Prepared for Great Basin Mine Watch.
- Myers, T., 2004. Technical Memorandum: Pipeline Infiltration Project Groundwater Contamination. Prepared for Great Basin Mine Watch.
- Myers, T., 2004. Technical Report Seepage From Waste Rock Dump to Surface Water The Jerritt Canyon Mine, Technical Report 2004-03-GBMW. Prepared for Great Basin Mine Watch.
- Myers, T., 2001. An Assessment of Diversions and Water Rights: Smith and Mason Valleys, NV. Prepared for the Bureau of Land Management, Carson City, NV.
- Myers, T., 2001. Hydrogeology of the Basin Fill Aquifer in Mason Valley, Nevada: Effects of Water Rights Transfers. Prepared for the Bureau of Land Management, Carson City, NV.
- Myers, T., 2001. Hydrology and Water Balance, Smith Valley, NV: Impacts of Water Rights Transfers. Prepared for the Bureau of Land Management, Carson City, NV
- Myers, T., 2000. Alternative Modeling of the Gold Quarry Mine, Documentation of the Model, Comparison of Mitigation Scenarios, and Analysis of Assumptions. Prepared for Great Basin Mine Watch. Center for Science in Public Participation, Bozeman MT.
- Myers, T., 2000. Environmental and Economic Impacts of Mining in Eureka County. Prepared for the Dept. Of Applied Statistics and Economics, University of Nevada, Reno.
- Myers, T., 1999. Water Balance of Lake Powell, An Assessment of Groundwater Seepage and Evaporation. Prepared for the Glen Canyon Institute, Salt Lake City, UT.
- Myers, T., 1998. Hydrogeology of the Humboldt River: Impacts of Open-pit Mine Dewatering and Pit Lake Formation. Prepared for Great Basin Mine Watch, Reno, NV.

Selected Abstracts, Magazine and Proceedings Articles

Myers, T., 2014. Reservoir Loss Rates, Lakes Mead and Powell and Fill Mead First. INVITED PRESENTATION at 2014 Future of the Colorado Plateau Forum – Drought and the Colorado

- River. http://musnaz.org/educational-programs/public-programs/future-of-the-colorado-plateau-forums/
- Myers, T., 2013. Three-dimensional Groundwater and Contaminant Flow around Marcellus Gas Development. INVITED PRESENTATION at 2013 Associated Engineering Geologists Conference, Seattle WA.
- Myers, T., 2012. Mine Dewatering: Humboldt River Update. INVITED PRESENTATION at 2012 Nevada Water Resources Association Annual Conference.
- Myers, T., 2012. Reservoir loss rates from Lake Powell, and long-term management of the Colorado River system. 2012 Nevada Water Resources Association Annual Conference
- Myers, T., 2011. Reservoir loss rates from Lake Powell, and long-term management of the Colorado River system. 2011 Fall Conference, American Geophysical Union.
- Myers, T., 2006. Modeling Coal Bed Methane Well Pumpage with a MODFLOW DRAIN Boundary. In MODFLOW and More 2006 Managing Ground Water Systems, Proceedings. International Groundwater Modeling Center, Golden CO. May 21-24, 2006.
- Myers, T., 2006. Proceed Carefully: Much Remains Unknown, *Southwest Hydrology 5(3)*, May/June 2006, pages 14-16.
- Myers, T., 2004. Monitoring Well Screening and the Determination of Groundwater Degradation, Annual Meeting of the Nevada Water Resources Association, Mesquite, NV. February 27-28, 2004.
- Myers, T., 2001. Impacts of the conceptual model of mine dewatering pumpage on predicted fluxes and drawdown. In MODFLOW 2001 and Other Modeling Odysseys, Proceedings, Volume 1. September 11-14, 2001. International Ground Water Modeling Center, Golden, Colorado.
- Myers, T., 1997. Groundwater management implications of open-pit mine dewatering in northern Nevada. In Kendall, D.R. (ed.), Conjunctive Use of Water Resources: Aquifer Storage and Recovery. AWRA Symposium, Long Beach California. October 19-23, 1997
- Myers, T., 1997. Groundwater management implications of open-pit mine dewatering in northern Nevada. In Life in a Closed Basin, Nevada Water Resources Association, October 8-10, 1997, Elko, NV.
- Myers, T., 1997. Uncertainties in the hydrologic modeling of pit lake refill. American Chemical Society Annual Meeting, Las Vegas, NV, Sept. 8-12, 1997.
- Myers, T., 1997. Use of groundwater modeling and geographic information systems in water marketing. In Warwick, J.J. (ed.), Water Resources Education, Training, and Practice: Opportunities for the Next Century. AWRA Symposium, Keystone, Colo. June 29-July 3, 1997.
- Myers, T., 1995. Decreased surface water flows due to alluvial pumping in the Walker River valley. Annual Meeting of the Nevada Water Resources Association, Reno, NV, March 14-15, 1995.

Special Coursework

Vacare	Carrea	Spangar	
Years	Course	Sponsor	
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2011	Hydraulic Fracturing of the	National Groundwater Association
	Marcellus Shale	
2008	Fractured Rock Analysis	MidWest Geoscience
2005	Groundwater Sampling	Nielson Environmental Field School
	Field Course	
2004	Environmental Forensics	National Groundwater Association
2004	Groundwater and	National Groundwater Association
and -5	Environmental Law	

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EDUCATION

B.S. 1972, University of California, Santa Barbara Ph.D. 1977, University of California, Davis

REPRESENTATIVE PUBLICATIONS

Journals

Neupane, B., Shintani, D., Coronella, C., Lin, H., Miller, G. C. 2016, Grindelia squarrosa: A Potential Arid Lands Biofuel Plant., <u>Journal of Sustainable Chemistry and Engineering</u>, 5(1), 995–1001

Woodrow, J., Lepage, J., Miller, G. C., Hebert, V. 2014, Determination of Methyl Isocyanate in Outdoor Residential Air Near Metam-sodium Soil Fumigations., Journal of Agricultural and Food Chemistry, 62, 8921-8927.

Suzuki N, Miller G, Sejima H, Harper J, Mittler R. 2013, Enhanced seed production under prolonged heat stress conditions in Arabidopsis thaliana plants deficient in cytosolic ascorbate peroxidase 2., Journal of Experimental Botany 64: 253-63

Lin, H., Strull, J., Liu, Y., Karmiol, Z., Plank, K., Miller, G. C., Guo, Z. 2012, High yield production of levulinic acid by catalytic partial oxidation of cellulose in aqueous media., Energy and Environmental Science, 5, 9773-9777.

Woodrow, J., Seiber, J., Miller, G. C. 2010, Correlation to Estimate Emission Rates for Soil-Applied Fumigants., J. Agricultural and Food Chemistry

- **Woodrow, J. E., Seiber, J. N., Miller, G. C.** 2008, Acrylamide release resulting from sunlight irradiation of aqueous polyacrylamide/iron mixtures., Journal of Agriculture and Food Chemistry, 56(8), 2773-2779.
- **Luo, Q., Tsukamoto, T., Zamzow, K., Miller, G. C.** 2008, Arsenic, Selenium, and Sulfate Removal using an Ethanol-enhanced Sulfate-Reducing Bioreactor., International Mine Water Association, 26(2), 1-12.
- Hebert, V.R, C. Hoonhout and G.C. Miller 2000, Reactivity of Certain Organophosphorus Insecticides Toward Hydroxyl Radicals at Elevated Air Temperatures, Journal of Agricultural and Food Chemistry 48:1922-1928
- **Tsukamoto, T.K., and G.C. Miller** 1999, Methanol as a Carbon Source for Bioremediation of Acid Mine Drainage, Water Research, 33:1365-1370
- V. R. Hebert and G.C. Miller 1998, Gas Phase Photolysis of Phorate, Chemosphere 36:2057-2066

Book or Chapter(s) in Books

- **Masaitis, A., Miller, G. C.** 2015, Development of the stakeholders' engagement plan as a mining social responsibility practice., Conflict Resolution in the Mining Industry (pp. 14). American Chemical Society: American Geophysical Union.
- **Masaitis, A., Miller, G. C.** 2013, Reduction of Conflicts in Mining Development Using "Good Neighbor Agreements., In J.L. Drake, Y.Y Kontar and G.S. Rife (Ed.), New Trends in Earth-Science Outreach and Engagement: The Nature of Communication (vol. 38, pp. 73-81). New York: Springer.
- Miller, G.C., C. Hoonhout, W.W. Miller, M.M. Miller 1999, Geochemistry of Closed Heaps: A Rationale for Drainage Water Quality, D. Kosich and G.C. Miller, eds, "Closure, Remediation and Management of Precious Metals Heap Leach Facilities", University of Nevada, (1999)
- **J. Geddes and G. C. Miller** 1998, Photolysis of Organics in the Environment, D.L Macalady, ed. -Perspectives in Environmental Chemistry, Oxford University Press (1998) p 195-209.
- **J. Geddes and G. C. Miller** 1998, Photolysis of Organics in the Environment, D.L Macalady, ed. -Perspectives in Environmental Chemistry, Oxford University Press (1998) p 195-209.

Presentations

Miller, G. C. 2011, A Grand Challenge: sustainable Natural Resources Development on a Small Planet, Non-Academic, Long Term Management Challenges at Hard Rock Mining Sites, National Academy of Science

Bulletin/Reports

Lu, Z., Miller, G. C., Hebert, V. 2017, Laboratory Measured Emission Losses of Methyl Isothiocyanate at Paciic Northwest Soil Surface Fumigation Temperatures., Bulletin of Environmental Contamination and Toxicology, 5.