

SCOTT A. WELLS
Department of Civil and Environmental Engineering
Portland State University
P. O. Box 751
Portland, Oregon 97207-0751
(503) 725-4282 or (503) 725-4276 FAX (503) 725-5950
e-mail: wellss@pdx.edu *web page:* <http://www.cee.pdx.edu/~scott>

Biographical sketch

Ph.D. from Cornell University in Civil and Environmental Engineering, Master's degree in Civil Engineering at Massachusetts Institute of Technology, BS in Civil Engineering at Tennessee Technological University. Since 1987 he has been at Portland State University and is currently Professor of Civil and Environmental Engineering and is an Institute for Sustainable Solutions Fellow. His research areas are in modeling of environmental fluid mechanics: surface water quality and hydrodynamics and solid-liquid separation processes. He has written over 100 technical publications and is a co-developer of the latest version of the CE-QUAL-W2 water quality and hydrodynamic model. He has been called in for expert peer review by the USEPA, the State of California, the State Department, and many other organizations and has been used by EPA to conduct webinars in water quality modeling.

He has been involved in almost 200 water body studies. In **Oregon**, he has been involved in hydrodynamic/water quality modeling on the Tualatin River, Hagg Lake, Barney Reservoir, the Columbia Slough system (Lower Columbia Slough, Upper Columbia Slough, Smith and Bybee Lakes, Peninsula Canal), Klamath River, Russel Creek (near Eugene), Coast Fork of the Willamette River, Bull Run Reservoir #2, Bull Run Reservoir #1, Bull Run Reservoir #3, Bull Run Lake, Upper and Lower Bull Run River, Dexter Reservoir, Lake Billy Chinook, Lake Simtustus, Pelton Reregulation Reservoir, Willamette River (Oregon City Falls to Columbia River, including Multnomah Channel, Willamette River basin), Johnson Creek, Ashland Creek, Cooper Creek Reservoir, Skipanon River, Schooner Creek, Siletz Bay, South Santiam River, Middle Fork Willamette River, Bear Creek, Stone Creek below Timothy Lake, Laurance Lake, Waldo Lake, South Slough off Coos Bay, Yaquina Bay and Yaquina River, the Clackamas River Basin (Clackamas River, Timothy Lake, Lake Harriet, Frog Lake, North Fork Reservoir, Faraday Lake, Estacada Lake) and areas of Tillamook Bay and the Columbia River (Bonneville Dam to St. Helens). His experience also includes water quality and hydrodynamic studies in **Hawaii** (Wahiawa Reservoir), **Virginia** (N. Anna Reservoir), **Tennessee** (Center Hill Lake), **Kentucky** (Laurel River Reservoir), **Idaho** (Boise River, Lower Snake River from Brownlee Reservoir to C. J. Strike Reservoir, Brownlee Reservoir, C. J. Strike Reservoir, Spokane River, Oxbow Reservoir, Hells Canyon Reservoir, Coeur D'Alene Lake, Pend Oreille River and Lake, Cascade Reservoir), **California** (Klamath River, Philbrook Reservoir, DeSabra Reservoir, Butte Creek, Millerton Lake, Lake Spaulding, Bowman Lake, Rollins Reservoir, Fordyce Reservoir, Jackson Meadows Reservoir, Oroville Thermalito diversion pool, Oroville Reservoir, Thermalito Afterbay, Feather River, Folsom Reservoir, Lake Curry, Whiskeytown Reservoir), **Illinois** (Illinois River), **Washington** (Columbia River, Clear Lake, Spirit Lake, Spokane River, Long Lake, White and Puyallup Rivers, Snohomish River and Estuary, Green River, Lake Roosevelt, Chelan River, Pend Oreille River, Tolt Reservoir, Lake Chaplain, Budd Inlet/Capitol Lake/Deschutes River, Chester Morse Reservoir, Cedar River, Banks Lake, Kachess Reservoir, Keechelus Reservoir, Ross Lake, Diablo Lake, Gorge Lake, Skagit River), **Colorado** (Cherry Creek Reservoir, Three Lakes: Shadow Mountain, Granby Lake, Grand Lake), **Wisconsin** (Kinnickinnic River, Lake George), **North Carolina** (Jocassee and Keowee Reservoirs, High Rock Lake), **Oklahoma** (Tenkiller Reservoir on the Illinois River, Eucha Reservoir, Spavinaw Reservoir), **Texas** (Lake Lavon, Lake Travis, Trinity River, Cedar Creek Reservoir), **Montana** (Warm Springs Ponds, Butte, MN, Canyon Ferry Lake), **New York** (Conesus, Hemlock, Cayuga, and Honeoye Lakes), **West Virginia/Pennsylvania/Ohio** (Ohio-Alleghany-Monongahela Rivers), **Arizona** (CAP canal, Lake Pleasant), **Florida** (Tampa Bay Water Supply Reservoir, Reservoir C-44), **Israel** (Lake Kinneret or Sea of Galilee, Jordan River, Dead Sea, experimental ponds at Dead Sea Works), **China** (Three Gorges Reservoir, Xiangxi Bay), **Spain, Peru** (Chaglla Reservoir), **Brazil** (Tabajara Reservoir), **Costa Rica** (El Diquis Hydroelectric Project), **Guyana** (Amaila Reservoir), **Canada** (Lake Lagopede, Pit Lakes region lakes, Lac des Manages, Lac du Gras), **Iraq** (Tigris River), and in the **Ukraine** (Dnieper River-reservoir system and Kiev Sea), where he spent the 1993-1994 year as a Fulbright scholar. For the 2007-2008 year, he was selected again as a Fulbright Scholar and taught and did research at the Earth Institute at Hebrew University and at the Israeli Geologic Survey in Jerusalem. During that time, he worked on the environmental impacts of the proposed Peace Conduit between the Gulf of Aqaba and the Dead Sea and was an advisor for the PBS NOVA special on 'Saving the Dead Sea' in 2019.

EDUCATIONAL BACKGROUND:

Ph.D. Cornell University 1990

"Modeling and Analysis of Compressible Cake Filtration"

S.M. Massachusetts Institute of Technology 1982

"Calibration and Verification of the Cooling Lake Model for North Anna Power Station"

M.S.C.E. Tennessee Technological University 1980

"Three-Dimensional Field Evaluation and Analysis of Water Quality in Two Reservoirs"

B.S.C.E. Tennessee Technological University 1979

PROFESSIONAL EXPERIENCE:

Principal Investigator, Collaborative Center for Geo-hazards and Eco-Environment in Three Gorges Area, Hubei Province, Three Gorges University, Yichang, China, 2016-2019.

Chair, Department of Civil and Environmental Engineering, Portland State University
(September 2002 to December 2014)

Professor (September 1995 to present)

Associate Professor (September 1990 to August 1995)

Assistant Professor (September 1987 to August 1990)

Department of Civil Engineering, Portland State University

Graduate Research Assistant (September 1984 to August 1987)

Cornell University

Visiting Assistant Professor (January 1983 to August 1984)

Department of Mechanical and Aerospace Engineering, Boston University

Research Engineer (April 1982 to December 1982) R. M. Parsons Laboratory for

Hydrodynamics, Massachusetts Institute of Technology

Graduate Research Assistant (September 1980 to March 1982)

Massachusetts Institute of Technology

Graduate Research Assistant (March 1979 to August 1980)

Tennessee Technological University

HONOR SOCIETIES, AWARDS, REGISTRATION, MEMBERSHIPS AND PROFESSIONAL SOCIETIES:

Committee and Advisory Board Memberships:

- Member Snake River Mercury TMDL Advisory Committee, May 2023-present.
- Project Advisory Committee (PAC) for American Water Works Association (AWWA) Research Foundation for "Hydrodynamic Distribution of Pathogens in Lakes and Reservoirs," 2000/2001
- Project Advisory Committee (PAC) for American Water Works Association (AWWA) Research Foundation for "Development and Implementation of Random Walk Particle-Tracking Analyses of Water Supply Intakes on Detroit Rivers and Lakes: A Case Study of the St. Clair-Detroit River Waterway." 2001-2004.
- ASCE Energy Engineering Division (EY) Environmental Effects Committee Task Committee on Effects of Energy Production on Reservoir Water Quality, 2001-2004
- Member, Bronson Creek Water Quality Technical Advisory Committee, Unified Sewerage Agency, 1995-1998
- Member, Tualatin Basin Water Quality Technical Advisory Committee, Department of Environmental Quality, 1995-1998
- Member, Winchester Tidelands Restoration Project Advisory Group, South Slough National Estuary Reserve, Charleston, Oregon, 1993-1997
- Member, Mt. Hood Community College Hazardous Materials Management Program Advisory Board, Portland, Oregon, 1992-2000
- Member, Technical Advisory Committee, Columbia Slough Water Quality Implementation Plan, 1993-1999
- Member, Columbia River System Operation Review Team, Water Quality Work Group, 1991-1993
- Member, METRO Wetlands Technical Advisory Committee for Smith and Bybee Lakes, 1991-1993
- Member, METRO St. John's Landfill Technical Advisory Committee, 1990-1993
- Member, Portland Water Bureau Technical Advisory Committee, 1989-1990
- Member, Water Treatment Residuals Committee, AWWA, 1988-1990
- Member, ASCE Student Affairs Committee, Oregon Section, 1991-1993

- Member Task Force for PORT of Portland's NPDES Permit for Deicing Chemicals, 1997-1998
- Portland State University Committees (Academic Requirements Committee, CE and EAS Scholarship Committees, Honors Program advisor, ASCE advisor, Tau Beta Pi advisor, Departmental Promotion and Tenure Committee [chair], University Planning Council [chair 98/99], SEAS Technical Advisory Committee, Curriculum Committee [chair], University Budget Committee, Research Development)

Reviewer:

- Reviewer for National Science Foundation Research Proposals
- Reviewer for USGS Water Resource Research Institute Proposals
- Reviewer for Journal of Freshwater Ecology
- Reviewer for Fluid/Particle Separation Journal
- Reviewer for Powder Technology
- Reviewer for Separations Technology
- Reviewer for Separation Science and Technology
- Reviewer for Journal of Environmental Engineering, ASCE
- Reviewer for Journal of Geotechnical Engineering, ASCE
- Reviewer for Journal of Hydrologic Engineering, ASCE
- Reviewer for Journal of Hydraulic Engineering, ASCE
- Reviewer for Journal of Irrigation and Drainage, ASCE
- Reviewer for Environmental Science and Technology
- Reviewer for Water Resources Research
- Reviewer for International Journal of Heat and Mass Transfer
- Reviewer for Estuarine, Coastal and Shelf Science
- Reviewer for AFS Book: Introduction to Filtration
- Reviewer for Journal of Hydroinformatics
- Reviewer for Water
- Reviewer for Water Research
- Reviewer for Journal of Sediment Transport
- Reviewer for Science of the Total Environment
- Reviewer for American Society of Agricultural and Biological Engineers
- Reviewer for CRDF (U.S. Civilian Research and Development Foundation for the Independent States of the Former Soviet Union) Proposals for Armenian-US Bilateral Grants Program III and the BRHE Program
- Judge Intel Northwest Science Expo 2002

Expert Peer Review (other than those mentioned in University and private contracts)

- Fulbright Peer Review Committee for Middle East and Israel: 2012-2014, CIES, Washington, D.C.
- Cayuga Lake, New York, TMDL, EPA Technical Review Panel, 2014-2016
- State of California, California Water Boards, Water Resources Control Board, Water recycling criteria for indirect potable reuse through surface water augmentation, 2016
- Fulbright Research and Development Program, 2019, Ukraine engineering research proposals

Professional Societies:

- Water Environment Federation
- Past affiliation: American Society of Civil Engineers; American Filtration and Separations Society (Member, Board of Directors 95-96, 97-99; Chair, Education Committee 96-2000)

Honor Societies:

Phi Kappa Phi, Tau Beta Pi, Kappa Mu Epsilon, Chi Epsilon, Sigma Xi

Fellow

Institute for Sustainable Solutions at Portland State University

Awards:

- Fulbright Scholar Award 1993-1994 Academic Year to Kiev, Ukraine
- Fulbright Scholar Award 2007-2008 Academic Year to Jerusalem, Israel
- PSU CECS Faculty Research Award, 2001
- Pathfinder Award of Excellence – HDR Engineering, Boise ID, 2002
- PSU Branford Price Millar Award, 2019, for demonstrated excellence in the areas of scholarship, instruction, university service, and public service, and whose performance in the area of scholarship and research is judged to be exceptional.

Registration:

Professional Engineer: P.E. (Oregon #15050) (Civil Engineer, Environmental Engineer)

Conference Moderator: American Filtration Society, Cake Filtration Session, St. Louis, Mo., 1998; American Filtration Society, Fundamentals of Cake Filtration Session, Boston, MA, 1999; American Filtration Society, Fundamentals of Cake Filtration, Myrtle Beach, SC, 2000; AGU Conference 2004 Session co-chair; Yearly CE-QUAL-W2 Seminar

Science Advisor for PBS Nova Special on Dead Sea: Served as reviewer for narrator script and animations for PBS special “Saving the Dead Sea” [<https://www.pbs.org/wgbh/nova/video/saving-the-dead-sea/>] which premiered in the US on April 24, 2019.

Guest Editor "Water Quality Monitoring and Modeling Research": Guest Editor(s): Harsha Ratnaweera, Scott A. Wells. https://www.mdpi.com/journal/water/special_issues/Monitoring_Modeling

COURSES DEVELOPED:

Boston University, Department of Mechanical and Aerospace Engineering:

- EK 390,391,392 Calculus and Differential Equations, Fluid Mechanics and Thermodynamics, Solid Mechanics
- EK 401,402,403,404 Fourier Series and Partial Differential Equations, Linear Algebra for Engineers, Vector Field Theory for Engineers, Approximation Methods for Engineers
- AM 513 Compressible Fluid Dynamics
- AM 519 Heat Transfer
- AM 701 Advanced Fluid Mechanics

Portland State University, Department of Civil and Environmental Engineering:

- CE 112 Computations in Civil and Environmental Engineering
- CE 315 The Civil and Environmental Engineering Profession
- CE 361 Fluid Mechanics
- CE 364 Water Resources Engineering
- CE 371 Environmental Engineering
- CE 410/510 Water Quality Modeling: Sediment Dynamics
- CE 474 Unit Operations of Environmental Engineering
- CE 510 Near-Field Mixing Modeling
- CE 569 Groundwater Hydraulics and Contaminant Transport
- CE 572 Environmental Fluid Mechanics I
- CE 573 Numerical Methods in Environmental and Water Resources Engineering
- CE 574 Advanced Physical/Chemical Environmental Engineering Processes
- CE 576 Environmental Fluid Mechanics II
- CE 578 Water Quality Modeling

Technion University, Department of Water Resources, Faculty of Civil Engineering, Haifa, Israel: “Water Quality and Hydrodynamic Modeling”, Spring 2001

Hebrew University, Jerusalem, Earth Institute, "Hydrodynamic and Water Quality Modeling", Fall/Winter 2007/2008.

Instructor for yearly CE-QUAL-W2 Workshop, Portland, Oregon, 1997-2006 with Tom Cole, Corps of Engineers, Waterways Experiments Station, 2007-present.

Instructor for Environmental Engineering Professional Engineering Review Course, Oregon, 1996-1999, 2018-2019

Instructor for Civil Engineering Professional Engineering Review Course, Oregon, 2006-2007.

Multi-media Course Development for Solid-Liquid Separation Processes, 1996-1997

EPA Sponsored Webinar, May 2013, "Impacts of sediment dynamics on water quality" [117 registered on-line].

EPA Region 6 Water Quality Modeling Conference and Workshop, November 2013, Dallas, TX, invited workshop session on CE-QUAL-W2 and 2 presentations.

EPA Water Quality Modeling Webinar, November 15, 2018, "CE-QUAL-W2" [244 registered on-line].

FUNDED UNIVERSITY RESEARCH PROJECTS:

- "Environmental Engineering Laboratory Development and Demonstration Project," Portland State University, Faculty Development Grant, 1988, \$3000.
- "Sedimentation and Deep-Bed Filtration Pilot Plant," City of Portland, Water Works Bureau, 1989, \$1800.
- "Field Study of Density Currents in Sedimentation Basins," Portland State University, Faculty Development Grant, 1988-1989, \$2000.
- "Modeling of Sludge Dewatering Processes," Fundamental Research in Emerging and Critical Engineering Systems, Environmental Engineering Program, U. S. National Science Foundation, 1988-1992, \$132,000.
- "Management of the Hydraulic Regime of Diked Tidal Wetlands in South Slough, Oregon," Marine and Estuary Management Division, National Oceanic and Atmospheric Administration, U. S. Department of Commerce, 1989-1990, \$30,000.
- "Management of Diked Tidal Wetlands in South Slough, Oregon," Marine and Estuary Management Division, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, 1990-1991, \$32,000.
- "Modeling and Monitoring of the Water Quality in the Columbia Slough," City of Portland, Bureau of Environmental Services, 1990-1992, \$86,000.
- "Analysis and Monitoring of Leachate from the St. John's Landfill into the Columbia Slough," METRO, Portland, Oregon, 1990-1994, \$55,000.
- "Water Quality and Hydrodynamic Modeling of the Tualatin River System," Department of Environmental Quality, Portland, Oregon, 1992-1993, \$154,000.
- "Field Study and Analysis of Water Level Management in the Upper Columbia Slough," City of Portland, Oregon, 1993-1995, \$80,000.
- "Analysis of the Impact of Leachate from the St. John's Landfill and Flow from Smith and Bybee Lakes into the Columbia Slough," METRO, Portland, Oregon, 1994-1995, \$35,000.
- "Oregon Joint Graduate Schools in Engineering," Equipment and Administration of Joint Graduate Program in Environmental Engineering, State Board of Higher Education, Oregon, 1992-1995, \$60,000.
- "Water Quality and Hydrodynamic Modeling of Smith and Bybee Lake Open to the Columbia Slough," METRO, Portland, Oregon, 1995-1996, \$10,400.
- "Monitoring and Water Quality and Hydrodynamic Modeling of the Columbia Slough System," City of Portland, Bureau of Environmental Services, 1995-1998, \$135,000.
- "Evaluation of Groundwater Contamination for Fairview Lake Community," Friends of Blue and Fairview Lakes/ U.S. Environmental Protection Agency, 1996-1997, \$20,000.
- "Columbia River Water Quality and Hydraulic Monitoring," Montgomery Watson Americas, Inc., 1996, \$15,500.
- "Oregon Joint Graduate Schools in Engineering," Equipment and Administration of Joint Graduate Program in Environmental Engineering, State Board of Higher Education, Oregon, 1995-1996, \$76,000.
- "Columbia Slough Model Development," Limno-Tech. Inc. Ann Arbor Michigan, 1997, \$3,600.

- "Evaluation of Groundwater Contamination for the East Multnomah County Site," Friends of Blue and Fairview Lakes/ U.S. Environmental Protection Agency, 1997-1998, \$19,500.
- "Modeling of Sludge Dewatering Processes," Research Institute of Science and Technology, POSCO, Korea, 1997-1998, \$33,000.
- "Hydrodynamic Modeling of Culvert Improvements in the Columbia Slough System," City of Portland, Bureau of Environmental Services, 1997, \$6,764.
- "CE-QUAL-W2 Model Development," Waterways Experiments Station, Vicksburg, MS, 1997, \$12,000.
- "CE-QUAL-W2 Modeling of River Basins," Corps of Engineers, Waterways Experiments Station, Vicksburg, MS, 1997-1999, \$64,800.
- "Habitat Restoration in the Columbia Slough," Corps of Engineers, Portland District, Portland, Oregon, 1997-1998, \$24,840.
- "Experimental Study of Particle Capture Using a Vortex Separation Filter for Storm Water," CDS Technologies, Australia, 1998, \$31,400.
- "CEQUALW2 Model Development," Corps of Engineers, Waterways Experiments Station, Vicksburg, MS, 1998, \$17,000.
- "Habitat Restoration in the Columbia Slough", City of Portland, Bureau of Environmental Services, 1998-2000, \$68,792.
- "Bull Run Reservoir-River System Model Development," City of Portland, Portland Water Bureau, 1998-2000, \$99,150.
- "Turbulence Modeling and Numerical Solution Technique Improvements in the CE-QUAL-W2 Model," Corps of Engineers, Waterways Experiments Station, Vicksburg, MS, 1999-2000, \$40,000.
- "Hydrodynamic and Water Quality Modeling of the Willamette River", Clackamas County, OR, 2000-2001, \$79,000.
- "CE-QUAL-W2 Model Version 3 Development," Corps of Engineers, Waterways Experiments Station, Vicksburg, MS, 1999-2001, \$127,000.
- "Bull Run Hydrodynamic and Temperature Model Development," City of Portland, Portland Water Bureau through Beak Consultants, Inc., 2001, \$18,000.
- "Continuous Deflection Separation of Particles from Stormwater," CDS Technologies, Inc., 2001, \$42,000.
- "Water Quality and Hydrodynamic Modeling of Spokane River – Lost Lake, Washington", Corps of Engineers, Waterways Experiments Station, Vicksburg, MS, 2001-2002, \$90,000.
- "Water Quality and Hydrodynamic Modeling of the Willamette River Basin", Corps of Engineers, District, and the State of Oregon Department of Environmental Quality, Portland, Oregon, 2001-2003, \$120,000.
- "Bull Run Hydrodynamic and Temperature Model Development," City of Portland, Portland Water Bureau through Beak Consultants, Inc., 2002, \$25,000.
- "Columbia Slough TMDL for Temperature Model Assessment," Department of Environmental Quality, State of Oregon, 2002, \$19,000.
- "Temperature Effects of Streambed Heating," Oregon Water Resources Research Center, USGS, 2002, \$15,000.
- "Long-Lake Spokane River Extension to Lake Coeur D'Alene, Idaho," Environmental Protection Agency, Region X, Seattle, WA, 2002, \$20,000.
- "Water Quality and Hydrodynamic Modeling of Spokane River – Lost Lake, Washington 2001", City of Spokane, WA, 2002, \$48,000.
- Water Quality and Hydraulic Modeling of the Green River Estuary in Washington," King County METRO Seattle, WA, 2002-2003, \$52,000.
- "Columbia Slough TMDL for Temperature Model Assessment," Department of Environmental Quality, State of Oregon, 2003, \$4,400.
- "Laurance Lake Hydrodynamic and Temperature Model," Middle Fork Irrigation District, Oregon, 2003-2004, \$30,000.
- "Continuous Deflection Separation of Particles from Stormwater," CDS Technologies, Inc., 2002-2003, \$30,000.
- "Lake Waldo Environmental Assessment", US Forest Service, 2003-2005, \$80,000 (Total PSU project funding: \$400,000).
- "Lake Roosevelt Hydrodynamic and Water Quality Modeling Study," The Spokane Tribe of Indians, Spokane, WA, 2003-2005, \$97,000.
- CE-QUAL-W2 Model Development, Waterways Experiment Station, Corps of Engineers, Vicksburg, MS, 2003-2004, \$38,500.

- “Bull Run Reservoir Modeling,” City of Portland, Water Bureau, Portland, OR, 2003-2004, \$19,000.
- “Lake Whatcom Water Quality and Hydrodynamic Modeling,” Washington Department of Ecology, Olympia, WA, 2004-2005, \$33,500.
- “Klamath Basin Peer Review – Lost River Model”, Oregon Department of Environmental Quality, Bend, OR, 2004-2005, \$15,500.
- “Pend Oreille Lake and River Model – Idaho”, Idaho Department of Environmental Quality, Coeur d’Alene, ID, 2005-2007, \$73,701.
- “Columbia Slough CE-QUAL-W2 Model Development,” City of Portland, Bureau of Environmental Services, Portland, OR, 2005, \$21,979.
- “Laurance Lake Hydrodynamic and Temperature Model,” Middle Fork Irrigation District, Oregon, 2005, \$8,000.
- “Columbia Slough CE-QUAL-W2 Model Development,” City of Portland, Bureau of Environmental Services, Oregon, 2005, \$21,700.
- “Pend Oreille Model Review, Lake Whatcom Management Strategies, Spokane River Idaho Calibration,” Washington Department of Ecology, Olympia, WA, 2005, \$22,000.
- “Clackamas River Model: Impact of Increased Drinking Water Usage on Water Quality,” Clackamas River Water Management Group, Sunrise, OR, 2005-2007, \$47,000.
- “Pend Oreille Temperature Model Development,” Washington Department of Ecology, Olympia, WA, 2005-2007, \$40,000.
- “Lake Whatcom Water Quality Management Alternatives,” Washington Department of Ecology, Olympia, WA, 2005-2008, \$20,000.
- “Spokane River TMDL Model Refinements”, Washington Department of Ecology, Olympia, WA, 2005-2006, \$24,500.
- “Impact on Channel Braiding on Stream Temperatures,” Center for Water and Environmental Sustainability/OSU/USGS, 2006, \$20,200.
- “Tolt Reservoir Temperature and Turbidity Modeling Study,” City of Seattle, Washington, 2006-2007, \$95,000.
- “Modeling the Impact of Increased Water Use in the Clackamas River,” Clackamas River Water Management Group, Sunrise, OR, 2007-2008, \$55,000.
- “Waldo Lake Water Quality Model,” US Forest Service, 2007-2008, \$13,000.
- “Barney Reservoir Water Quality Study,” Washington County Department of Water Resources, 2007-2008, \$50,000.
- “Lake Champlain Reservoir Modeling Study,” City of Everett, WA, 2007-2008, \$25,000.
- “CE-QUAL-W2 and RESSIM Integration,” Corps of Engineers, Waterways Experiments Station, 2008, \$82,000.
- “CE-QUAL-W2 and RESSIM Integration Phase II,” Corps of Engineers, Waterways Experiments Station, 2009, \$75,000.
- “Cedar System Water Supply for the City of Seattle,” City of Seattle, 2009-2011, \$168,000
- “Banks Lake Water Quality Model,” Washington Department of Ecology and Wildlife, 2009-2010, \$115,000
- “Snake River Temperature Study,” Columbia River Intertribal Fish Commission, 2009, \$45,000
- “Spokane River water quality and hydrodynamic modeling for TMDL development,” EPA Region IX, 2009, \$80,000
- “Clackamas River Model: Impact of Increased Drinking Water Usage on Water Quality – Model Updates,” Clackamas River Water Management Group, Sunrise, OR, 2009, \$12,000.
- “CE-QUAL-W2 and RESSIM Integration Phase III,” Corps of Engineers, Waterways Experiments Station, 2010-2011, \$90,000.
- “Spokane TMDL Modeling,” EPA Region IX, 2010-2012, \$33,276.
- “Collaborative Research WSC Category 2: Anticipating water scarcity and informing integrative water system response in the Pacific Northwest,” National Science Foundation, 2010-2015, \$325,309.
- “Drift Creek Reservoir Oregon Modeling,” Oregon Water Resources Department, 2010-2012, \$51,380.
- “Lake Roosevelt Modeling Study,” US Bureau of Reclamation, 2011-2013, \$83,000.
- “Pend Oreille Temperature Modeling Study,” Kalispell Indian Tribe, Idaho, 2011-2012, \$32,000.
- “Snake River system model support”, Idaho Power, Boise, ID, 2012-2013, \$19,800.
- “Priest River, Idaho Temperature Modeling Study,” Kalispell Indian Tribe, 2013-2014, \$36,000.
- “Cherry Creek Reservoir Model Peer Review,” Cherry Creek Management Association, Aurora, CO, 2014-2015, \$27,000
- “CE-QUAL-W2 Integration into FEWS system model,” Idaho Power, Boise, ID, 2014-2015, \$35,000

- “CE-QUAL-W2 Integration into HEC WAT for Columbia River System Model,” Corps of Engineers, HEC, Davis, CA, 2015, \$64,000
- “Lake Roosevelt CE-QUAL-W2 Model Development,” US Bureau of Reclamation, Boise, ID, 2015, \$49,950
- “Development of Quagga and Zebra Mussel Model for CE-QUAL-W2,” BPA, 2014-2015, approximately \$85,000.
- “Incorporation of CE-QUAL-W2 models in FEWS in the Snake River system”, Idaho Power, Boise, ID, 2014-2015, \$35,000.
- “Dexter Reservoir Water Quality Studies Phase 1,” Corps of Engineers, 2015-2016, \$28,000.
- “Chehalis River Water Quality and Hydrodynamic Model Development,” Washington Department of Ecology, 2015-2017, \$115,000.
- “Yakima Reservoir Model Development with Fish Bioenergetics,” Washington Department of Ecology, 2015-2016, \$147,000.
- “Habitat Enhancement in Pend Oreille River Basin,” Kalispell Tribe of Indians, Idaho, 2016, \$65,000.
- “Chehalis Reservoir Stream Footprint Modeling,” Anchor QEA Inc. and State of Washington, 2016, \$43,000.
- “Dexter Reservoir Water Quality Studies Phase 2,” Corps of Engineers, 2016-2017, \$60,000.
- “Spokane River Modeling Review”, Washington Department of Ecology, 2016, \$13,500.
- “Prineville Reservoir Model Development,” Deschutes Water Control Board, 2016, \$39,000.
- “Tualatin River Model Development,” Clean Water Services, 2016-2018, \$180,000.
- “Lake Roosevelt CE-QUAL-W2 Model Development,” US Bureau of Reclamation, Boise, ID, 2017-2019, \$130,000
- “Dexter Reservoir Water Quality Studies Phase 3,” Corps of Engineers, 2017-2018, \$92,000.
- “Columbia River System Operation Review”, Corps of Engineers, 2017-2019, \$160,000.
- “Three Lakes System Model Peer Review,” US Bureau of Reclamation, Colorado, 2017-2018, \$99,000.
- “Chehalis River Model Development Phase 2,” Anchor QEA Inc. and State of Washington, 2017-2019, \$110,000.
- “Dexter Reservoir Water Quality Studies Phase 4,” Corps of Engineers, 2018-2019, \$65,000.
- “Chester Morse Lake and Cedar River Modeling Development,” Seattle Public Utilities, 2018-2019, \$85,000.
- “Crooked River Water Quality Model Development,” Deschutes Water Control Board, 2018-2019, \$55,000.
- “Tualatin River and Hagg Lake Model Development,” Clean Water Services, 2019-2022, \$450,000.
- “Mercury Modeling in the Hells Canyon Reservoir Complex,” Idaho Power, 2019-2022, \$550,000.
- “Willamette River Model Update,” Water Environment Services, Clackamas County, Oregon, 2019-2020, \$55,000.
- “Dexter Reservoir Water Quality Studies Phase 5,” Corps of Engineers, 2018-2019, \$57,000.
- “Chehalis River Flood Retention Structure Shading Modeling,” State of Washington, 2021, \$39,000.
- “Spokane River – Long Lake Peer Review,” State of Washington, 2021, \$13,500.
- “Chehalis Climate Change Scenarios,” State of Washington, Anchor Inc, 2022, \$45,000.
- “Cascade Reservoir Water Quality Model Development,” USBR, 2022-2023, \$120,000.

CONSULTANT TO:

- Portland Water Bureau, Portland, Oregon (Waybo landfill effect on groundwater pollution for Portland wellfield, 1988)
- Metropolitan Portland District Commission, Portland, Oregon (Effect of St. John's landfill on water quality in Columbia River Slough, 1989)
- Rhone-Poulenc Chemical Company, Shelton, Connecticut (Conditioning aids for sludge dewatering processes, 1988-1989)
- State of Oregon, Division of State Lands, South Slough, Oregon (Design and construction of stream gaging sites, 1989)
- Scientific Resources, Inc., Lake Oswego, Oregon (Water quality modeling of wastewater plumes in Tillamook Bay Estuary, 1989)
- Linda K. Williams, Attorney, Portland, Oregon (Near field and far field analysis of Boise Cascade/City of St. Helens discharge into the Columbia River, 1989)
- OBEC Consulting Engineers, Eugene, Oregon (Design of modifications for the Leaburg Power Canal Fish Screens, 1989)
- AMTRAK, Washington, D.C. (Effect of passenger trains dumping wastewater on railroad tracks in State of Oregon, 1989)
- EWEB (Eugene Water and Electric Board), Eugene, Oregon (Hydraulic impacts of baffles after placement behind the Leaburg Power Canal Fish Screens, 1990)
- Woodward-Clyde Consulting Engineers, Portland, Oregon (Evaluation of storm water master plan for the City of Portland, 1990)
- John Harrison, Wastewater Network, West Linn, Oregon (Review of biological nitrification processes, 1990)

- Fishman Environmental Services, Portland, Oregon (Johnson Creek Water Resources management program including water quality, flood, natural resource, and human environmental issues in the watershed, 1990)
- Black/Veatch and Scientific Resources, Inc., Lake Oswego, Oregon (Water quality modeling of the effect of the Ramsey Lake wetlands treatment system on the Columbia Slough, 1991)
- Cornforth Consultants, Inc., Portland, Oregon (Finite element modeling of the groundwater levels associated with pumping to fill a reservoir for a pumped storage project, 1991)
- HDR Engineering, Inc., Lake Oswego, Oregon (Water quality assessment of the TMDL process for the Lower and Upper Columbia Slough; water quality modeling of the Upper Columbia Slough, 1991-1992)
- Unified Sewerage Agency, Hillsboro, Oregon (Assessment of groundwater contamination from a temporary wastewater sludge storage facility; modeling the unsteady leachate plume, 1992)
- Cascade Environmental Services, Bellingham, Washington (Dissolved oxygen modeling of the discharge of Timothy Lake to Stone Creek near Mt. Hood, Oregon, 1993)
- CH2MHill, Portland, Oregon (Water quality modeling of the Klamath River system in Southern Oregon, 1995-1996)
- Carollo Engineers, Portland, Oregon (Water quality modeling of the Wahiawa Reservoir in Oahu, Hawaii, 1995-1996)
- Carollo Engineers, Portland, Oregon (Water quality modeling of the near-field mixing of the Caldwell treatment plant discharge into the Boise River, Idaho, 1996)
- SECOR International, Portland, Oregon (Water quality modeling of the effect of log rafts on water quality in the Klamath River, Oregon, 1996, 1997)
- Carollo Engineers, Portland, Oregon (Water quality and hydraulic assessment of Bear Creek and Ashland Creek, in Ashland, Oregon, 1996, 1997)
- R. M. Towill Corporation, Honolulu, Hawaii (Water quality modeling of Wahiawa Reservoir, Oahu, Hawaii, 1997)
- SECOR International, Portland, Oregon (Water quality modeling of near-field mixing in the Willamette River, Oregon, 1997)
- Seifer, Yeats, and Mills, LLP, Portland, Oregon (Stormwater and hydraulic modeling of the February 1996 flood in Lake Oswego, Oregon, 1997)
- METRO, Portland, Oregon (Water quality monitoring plan for Smith and Bybee Lakes, Portland, 1997)
- HDR Engineering, Inc., Boise, Idaho (Water quality and hydrodynamic modeling of the Lower Snake River between C. J. Strike Reservoir and Brownlee Reservoir, Idaho, 1997-1999)
- Carollo Engineers, Portland, Oregon (Water quality assessment of Ashland Creek, in Ashland, Oregon, 1998)
- Crawford Engineering, Portland, Oregon (Assessment of City of Astoria, Oregon, near-field mixing problems, 1998)
- LimnoTech, Inc. Ann Arbor, Michigan (Water quality and hydrodynamic modeling of the Spokane River, Idaho, 1998)
- R. M. Martin, Inc., Lake Oswego, Oregon (Hydraulic modeling of 100-year flood events for sub-basin in Lake Oswego, Oregon, 1998)
- R. M. Towill Corporation, Honolulu, Hawaii (Water quality and hydrodynamic modeling of Wahiawa Reservoir, Hawaii, 1998/1999)
- Abiqua Engineering, Salem, Oregon (Water quality modeling of Russel Creek and Coast Fork of Willamette River, Oregon, 1998/1999)
- City of Bremerton, Bremerton, Washington (Evaluation of sediment contamination in Sinclair Inlet, Puget Sound, 1998)
- Ogden-Beeman Engineers, Portland, Oregon (Evaluation of velocities and water levels around St. John's Landfill, 1998/1999)
- HDR Engineering, Inc., Boise, Idaho (Water quality and hydrodynamic modeling of Snake River, Brownlee Reservoir, Hells Canyon Reservoir, and Oxbow Reservoir, Idaho/Oregon, 1999-2001)
- U.S. Environmental Protection Agency, Seattle, Washington (technical review of temperature modeling of the Columbia River system, 1999)
- HDR Engineering, Inc., Boise, Idaho (Tampa, Florida Water supply reservoir modeling, 1999-2001)
- City of Sutherlin, OR (Water quality modeling of hypolimnetic aeration for Cooper creek Reservoir, OR, 2000)
- Lincoln City, OR (Far field water quality modeling of the Lincoln City discharge into Schooner Creek and Siletz Bay, OR, 2000)
- Duke Engineering, Bellingham, WA (Water quality modeling of the Clackamas River-Reservoir systems, OR, 2000-2001)
- SECOR, Inc., Portland, OR (Water quality analysis of the tidal river Skipanon River near Astoria, OR, 2000)
- Parsons Brinckerhoff, Quade & Douglas, Portland, Oregon (Evaluation of new discharge structure at the entrance between N. Slough and Smith/Bybee Lakes around St. John's Landfill, 2001)
- Lincoln City, Oregon (Near field mixing modeling of the WWTP outfall into Schooner Creek), 2001.
- HDR Engineering, Inc., Boise, Idaho (Washington, Hydrodynamic modeling of the White and Puyallup Rivers), 2001.

- Tulalip Indian Tribes, Tulalip, Washington (Snohomish River system model review), 2001-2002.
- Portland General Electric, Portland, Oregon (Water quality modeling of the Willamette River in the vicinity of the Willamette Falls), 2002, 2005, 2006.
- City of Portland, Water Bureau, Portland, Oregon (Boeing-Cascade groundwater pollution study), 2002.
- Washington Department of Ecology, Olympia, Washington (Water quality modeling of Moses Lake, WA), 2002.
- Duke Engineering through Loginetics, Inc., TN (Temperature and hydrodynamic modeling of the Keowee Reservoir for the Oconee Nuclear Plant), 2003.
- Israeli Geologic Survey, Jerusalem, Israel (Hydrodynamic and Water Quality Modeling of the Dead Sea), 2003-2005.
- Idaho Power Company, Boise, ID (Snake River system – Hells Canyon, Brownlee, Oxbow, CJ Strike Reservoirs and Snake River water quality and hydrodynamic modeling), 2003-2005.
- Idaho Department of Environmental Quality, Boise, ID (CE-QUAL-W2 training), 2003
- AVISTA Corporation, Spokane, WA through Golder Associates and HDR (Water quality and hydrodynamic issues with reservoirs along the Spokane River for relicensing, peer-review of Coeur d'Alene temperature and dissolved oxygen CE-QUAL-W2 model, evaluation of the no-dam scenario for Spokane river system), 2003-2004, 2006.
- Bonestroo, Rosene, Anderlik, and Associates, St. Paul, MN (Water quality and hydrodynamic modeling of the Kinnickinnic River and Lake George, Wisconsin), 2003.
- EPA Region IX, CA (Water quality and hydrodynamic modeling of the Klamath River system workshop), 2003.
- US Bureau of Land Management, Portland, OR (Water quality and hydrodynamic model review of the Klamath River system), 2003-2004.
- US Bureau of Reclamation, Sacramento, CA (CE-QUAL-W2 training), 2004
- Columbia River Intertribal Fish Commission, Portland, OR (Review of Lake Chelan and Chelan River model in WA), 2004.
- PacifiCorp, Portland, OR (Review of the Klamath River Hydrodynamic and Water Quality Model), 2004.
- Chelan Public Utility District, Wenatchee, WA (Review of temperature modeling in the Columbia River - Rocky Reach Reservoir), 2004, 2005.
- City of Kansas City, Kansas City, MI through Kennedy-Jenks Consulting Engineers (Temperature modeling of biological activity in a trickling filter), 2004.
- Pacific, Gas and Electric Company, San Ramon, CA, (Butte Creek hydrodynamic, temperature, and water quality model), 2005-2006.
- Stormwater Management, Portland, OR (Patent law infringement suit regarding hydraulic design of stormwater filters), 2005.
- City of Toledo, OR (Mixing zone study for WWTP outfall in the Yaquina River), 2005.
- EPA, Region IX (Review of Klamath TMDL model), 2005.
- Idaho DEQ, Boise, ID (Review of Coeur d'Alene USGS model), 2006-2007.
- MWH Engineering, Sacramento, CA (Technical model assistance for modeling hydrodynamics and temperature for Millerton Reservoir, CA), 2006, 2007.
- HyQual Engineering, Boise, ID (Technical modeling assistance for modeling hydraulics and water quality in the Boise River), 2006.
- Quantitative Environmental Analysis, LLC, Austin, TX (Technical assistance with water quality modeling of Lake Travis, Texas), 2007.
- ConTech Stormwater Solutions, Portland, OR (Technical assistance with stormwater treatment efficiency tests), 2007-2008.
- State of Oklahoma, Tulsa, OK (Water quality and hydrodynamic modeling of Tenkiller Lake, OK), 2007-2009.
- EPA, Region IX (Water quality modeling of Lake Roosevelt for 2006), 2008-2009.
- AVISTA, Corporation, Spokane, WA (Water quality impacts of operation of Long Lake on the Spokane River, WA), 2008.
- EPA, Region IX (Peer review of Budd Inlet, Capitol Lake, and Deschutes River modeling), 2008-2009.
- Alan Plummer Associates, Ft. Worth, TX (Water quality and hydrodynamic modeling of Lake Lavon, TX and Trinity River, TX), 2009.
- HDR, Inc. (Temperature and hydrodynamic modeling of 5 reservoirs in Nevada County, CA: Spaulding, Rollins, Jackson Meadows, Bowman, and Fordyce), 2009-2010.
- SAIC, Inc. (Temperature and water quality modeling of the Eucha and Spavinaw Reservoir system, OK), 2009-2010.
- MWH, Inc. (Temperature modeling of the Oroville Thermalito diversion pool below the Oroville dam, CA), 2010.
- Exponent, Inc. (Water quality modeling of Amalia Reservoir, Guyana), 2010.

- Brown and Caldwell (Hydrodynamic modeling of the Clackamas River and peer review of watershed modeling in Bull Run reservoir basin), 2010.
- Idaho Power Company, Boise, ID (Modeling support for the Snake river complex of Brownlee, Hells Canyon and Oxbow Reservoirs), 2010-2011
- ARCO/BP (Modeling the Warm Springs Ponds, Butte Montana), 2010-2012.
- Alan Plummer Associates, Ft. Worth, TX (Water quality and hydrodynamic modeling of Lake Lavon, TX and Trinity River, TX), 2011.
- Odebrecht Perú (Water quality and hydrodynamic modeling of the Chaglla hydropower project in Peru), 2011
- Environnement Illimité inc, Montreal, Canada (Water quality and hydrodynamic modeling support for Lake Lagopede, Canada), 2011.
- City of Klamath Falls, OR (TMDL assessment of the Klamath River, OR using CE-QUAL-W2 model), 2011-2012
- Cumulative Environmental Management Association (CEMA), Fort McMurray, Alberta, Canada (Technical review of pit lakes model for sediment diagenesis), 2011
- McMillen, LLC and Idaho Power Company, Boise, ID (Review of Hells Canyon Reservoir water quality model), 2012
- Cardno-Entrix, Sacramento, CA (Hydrodynamic and temperature modeling of Folsom Reservoir, CA), 2012-2016
- Dead Sea Works, Beer Sheva, Israel (Modeling of the Dead Sea ponds), 2012-2014
- CDM Smith, Ft. Worth, TX (Hydrodynamic and surface water quality modeling of the Trinity River, TX), 2013-2014
- CEMA, Alberta, Canada (Greenhouse Gas modeling and sediment diagenesis for Pit Lakes region in Canada), 2013-2014
- CDM Smith, OH (Peer review of the Ohio-Alleghany-Monongahela River model), 2013
- JPG Consultoria, Brazil (Water Quality and Hydrodynamic Modeling of Tabajara Reservoir and tailrace in Brazil), 2014-2015.
- ERM Inc., PA (Peer review of water quality and hydrodynamic modeling of a new reservoir in Panama), 2015
- Cadmus, Inc., MA (Modeling 3 New York reservoirs using CE-QUAL-W2: Conesus, Hemlock, and Honeoye), 2015.
- Waterkeeper Alliance Inc., NY (Expert review of High Rock Lake, NC, water quality and hydrodynamic model), 2015.
- Deltares/TVA, TN, (Model code development for the CE-QUAL-W2 TVA models for integration into FEWS) 2015.
- Waterkeeper Alliance Inc., NY (Expert review of Neuse and Tar/Pamlico water quality studies, NC), 2016.
- ICE (Instituto Costarricense de Electricidad), San Jose, Costa Rica (Modeling the El Diquis hydropower project), 2016-2017.
- ConTech, Inc., Portland, OR (Expert review of Stormwater Treatment laboratory certification), 2016.
- Cooper Environmental, Butte, Montana (Development of Solar Bees in CE-QUAL-W2 model of Warm Springs Pond), 2017
- Stantec, Inc., Sacramento, CA (Development of Feather River, Afterbay, and Oroville Reservoir Model and Update to Thermalito Model, Oroville, CA), 2017-2019
- Deltares/TVA, TN, (Model code development for the CE-QUAL-W2 TVA models for integration into FEWS) 2018.
- ConTech, Inc., Portland, OR (Expert Review of New Jersey Department of Environmental Protection Laboratory Protocol to Assess Total Suspended Solids Removal by a Hydrodynamic Sedimentation Manufactured Treatment Device), 2018-2019.
- John Harrison Consulting, CA (Review of Tillamook Wastewater Treatment Plant Temperature permit regulations), 2018.
- Rune Consultants, CA (Modeling of Lake Curry, CA), 2018-2019.
- Trout Unlimited and American Rivers, OR (Peer review of Deschutes River model development by Portland General Electric), 2019-2020.
- State of Washington, Department of Ecology (Peer review of Budd Inlet Hydrodynamic and Water Quality Model in support of the Budd Inlet TMDL), 2019-2020.
- Brown and Caldwell on behalf of Bellingham County, WA (Water quality and hydrodynamic modeling of Lake Whatcom, WA), 2020-2023.
- Stantec on behalf of California Department of Water Resources, Sacramento, CA (Refinements on the Oroville system model using CE-QUAL-W2, model alternatives simulation, climate change scenarios), 2020-2023.
- Diavik Diamond Mines, Rio Tinto, NW Territories, Canada (Evaluation of 2D and 3D water quality models for restoration of Pit Mines), 2020-2021.
- West Consultants, Tarrant Regional Water District Texas (Peer review of modeling of Cedar Creek Reservoir, TX), 2020-2021.
- Golder, Inc., Denver, CO (Modeling dynamic bathymetry in pit lake, code development), 2021.

- Aqua Strategies, Dallas, TX (Trinity River modeling, Tarrant Regional Water District, Ft. Worth TX), 2021-2022
- Cardno/Stantec with USBR, Sacramento, CA (Development of reservoir systems for USBR in Sacramento basin), 2021-2024.
- KF2 Consulting, MT (Modeling Canyon Ferry Reservoir, MT), 2021-2022
- GeoSyntec, Portland, OR (Peer review for Skagit River reservoir models in WA: Ross Lake, Gorge Lake, Diablo Lake, Skagit River), 2022-2023
- Plumer Associates, Ft. Worth Texas (Modeling Eagle Mountain Reservoir, TX), 2022-2023
- MSG Consultants, Knoxville, TN (Aeration for TVA Reservoir system models), 2022-2023
- Hazen and Sawyer, Nashville, TN (Modeling W. Stone Fork River, TN), 2022-2023
- Central Arizona Project, Phoenix, Arizona (Modeling the CAP canal system from Colorado River to Tucson, AZ, including Lake Pleasant), 2022-2025
- Contech, Inc. Portland, OR (Expert observation of particle removal laboratory tests), 2023

PUBLICATIONS (Journals, Peer-reviewed Proceedings, Articles):

Wells, S. A. and Gordon, J. A. (1980) "A Three-Dimensional Field Evaluation and Analysis of Water Quality-Management and Modeling Implications of the Third Dimension," in Surface Water Impoundments, ed. by H.G. Stefan, A.S.C.E., New York, 644-653.

Wells, S. A. and Gordon, J. A. (1982) "Geometric Variations in Reservoir Water Quality," Water Resources Bulletin, Vol. 18, No. 4, 661-670.

Wells, S. A., Adams, E. E., and Harleman, D. R. F. (1982) "Calibration and Verification of the Cooling Lake Model for North Anna Power Station," Technical Report 272, R.M. Parsons Laboratory, Department of Civil Engineering, M.I.T., 245 pages.

Adams, E. E. and Wells, S. A. (1984) "Field Measurements on Side Arms of Lake Anna, Virginia," Journal of Hydraulic Engineering, ASCE, Vol. 110, No. 6, 773-793.

Adams, E. E., Wells, S. A. and Ho, E. K. (1987) "Vertical Diffusion in a Stratified Cooling Lake," Journal of Hydraulic Engineering, ASCE, Vol. 113, No. 3, 293-307.

Wells, S. A. (1987) "Discussion of 'Model for Winter Heat Loss in Uncovered Clarifiers'," Journal of Environmental Engineering, A.S.C.E., Vol. 113, No. 5, 1178-1180.

Dick, R. I., Wells, S. A. and Bierck, B. R. (1988) "A Note on the Role of Capillary Forces in Compressible Cake Filtration," Fluid/Particle Separation Journal, Vol. 1, No. 1, 32-34.

Wells, S. A. and Dick, R. I. (1988) "Synchrotron Radiation Evaluation of Gravity Sedimentation Effects Prior to Dewatering," Proceedings ASCE-CSCE National Conference on Environmental Engineering, Vancouver, British Columbia, 845-852.

Bierck, B. R., Wells, S. A., and Dick, R. I. (1988) "Compressible Cake Filtration: Monitoring Cake Formations Using X-Rays from a Synchrotron Source," Water Pollution Control Federation Journal, Vol. 60, No. 5, 645-650.

Wells, S. A. (1988) "Discussion of 'Modeling Sediment-Induced Density Currents in Sedimentation Basins,'" Journal of Hydraulic Engineering, A.S.C.E., Vol. 114, 957, 958.

Wells, S. A. and Dick, R. I. (1989) "Mathematical Modeling of Compressible Cake Filtration," Proceedings ASCE National Environmental Engineering Conference, Austin, Tx., 788-795.

Wells, S. A. and Dick, R. I. (1989) "Determination of Sludge Characteristics for Modeling Compressible Cake Filtration," Proceedings 5th International Conference on Solid Wastes, Sludges and Residual Materials, Rome, Italy.

Wells, S. A. (1990) "Effect of Winter Heat Loss on Treatment Plant Efficiency," Research Journal of the Water Pollution Control Federation, Vol. 62, No. 1, 34-39.

Wells, S. A. (1990) "Determination of Sludge Properties for Modeling Compressible Cake Filtration from Specific Resistance Tests," Proceedings A.S.C.E. National Environmental Engineering Conference, Washington, D.C., 125-131.

Wells, S. A. and Sivakumaran, K. (1990) "Two-Dimensional Modeling of Dewatering in a Belt-Filter Press," Proceedings A.S.C.E. National Environmental Engineering Conference, Washington, D. C., 132-139.

Wells, S. A. (1990) "Modeling of Sludge Dewatering Processes," Fluid/Particle Separation Journal, Vol. 3, No. 3, September, 143-144.

Wells, S. A. (1991) "Two-Dimensional, Steady-State Modeling of Cake Filtration in a Laterally Unconfined Domain," Fluid/Particle Separation Journal, Vol. 4, No. 2, June, 107-116.

Wells, S. A. and Plaskett, J. H. (1992) "Modeling Compressible Cake Filtration with Uncertainty," in Advances in Filtration and Separation Technology : Separation Problems and the Environment, Volume 5, ed. by B. Scheiner, American Filtration Society, pp. 351-354.

- Wells, S. A. and Dick, R. I. (1992) "Synchrotron Radiation Measurements of Degree of Saturation in Porous Matrix," A.S.C.E., Journal of Engineering Mechanics, Vol. 118, No. 8, 1738-1744.
- Wells, S. A. (1993) "Fluid/Particle Separation Modeling," Proceedings American Filtration Society Education Conference, Reno, Nevada, January 6-10.
- Wells, S. A. and Dick, R. I. (1993) "Permeability, Solid and Liquid Velocity, and Effective Stress Variations in Compressible Cake Filtration," in Advances in Filtration and Separation, Vol. 7, ed. by W. Leung, American Filtration and Separations Society, pp. 9-12.
- Karl, J. and Wells, S. A. (1995) "Modeling of Gravity Sedimentation in One Dimension," in Advances in Filtration and Separation, Vol. 9, ed. by K. Choi, American Filtration and Separations Society, pp. 400-410.
- Berger, C. and Wells, S. A. (1995) "Effects of Management Strategies to Improve Water Quality in the Tualatin River, Oregon," in Water Resources Engineering, Vol. 2, ed. by W. Espey Jr. and P. Combs, ASCE, 1360-1364.
- Wells, S. A. and Berger, C. J. (1995) "Management Strategies to Improve Water Quality in the Tualatin River, Oregon," Proceedings NCASI Conference, September 27-28, 1995, Portland, Oregon.
- Wells, S. A. (1995) "Management of the Water Quality of the North Slough Adjacent to the St. John's Landfill," Proceedings First Annual Pacific Northwest Water Issues and 1995 Pacific Northwest/Oceania Conference, Portland, Oregon.
- Wells, S. A. and Berger, C. (1995) "Management of the Water Quality of the Upper and Lower Columbia Slough System," Proceedings First Annual Pacific Northwest Water Issues and 1995 Pacific Northwest/Oceania Conference, Portland, Oregon.
- Wells, S. A. (1996) "Mathematical Modeling of a Plate-and-Frame-Press," in Advances in Filtration and Separation Technology, Volume 10, ed. by B. Scheiner, American Filtrations and Separations Society, pp. 376-381.
- Wells, S. A. (1996) "Research Partnerships in Solid-Liquid Separation Processes in a Civil Engineering Department," in Advances in Filtration and Separation Technology, Volume 10, ed. by B. Scheiner, American Filtrations and Separations Society, pp. 539-545.
- Wells, S. A. (1996) "Discussion of 'Dynamic temperature changes in wastewater treatment plants'," Water Environment Research, Vol 68, pp. 143, 144.
- Wells, S. A.; Berger, C. J., Abrams, M. (1996) "Winter Storm Event Impacts on Dissolved Oxygen Levels in the Columbia Slough System," The Pacific Northwest Floods of February 6-11, 1996, Proceedings of the Pacific Northwest Water Issues Conference, ed. by A. Laenen, American Institute of Hydrology, pp.107-126.
- Wells, S., LaLiberte, D., Whelan, M. (1997) "Density Currents in Sedimentation Tanks," in Advances in Filtration and Separation Technology, Volume 11, ed. by E. Baumann and L. Weisert, American Filtrations and Separations Society, pp. 507-512.
- Wells, S. and Savage, G. (1998) "Gravity Drainage During and Prior to Cake Filtration," Advances in Filtration and Separation Technology, Volume 12, ed. by G. Chase, R. Herrera, and K. Rubow, pp. 646-653.
- Wells, S. and LaLiberte, D. (1998) "Modeling Density Currents in Circular Clarifiers," Fluid/Particle Separation Journal, 11(1), 48-54.
- Makinia, J., Wells, S. A., Crawford, D., and Kulbik, M. (1998) "Application of Mathematical Modeling and Computer Simulation for Solving Water Quality Problems," Proceedings of the Fourth International Symposium and Exhibition on Environmental Contamination in Central and Eastern Europe Warsaw '98, Warsaw, Poland, September 15-17, #233 CD-ROM.
- Wells, S. (1998) "Filtration Modeling of a Plate-and-Frame-Press," Fluid/Particle Separation Journal, 11(2), 152-165.
- Wells, S. and Berger, C. (1998) "Water Quality Impacts of Urban Stormwater Runoff from the Portland International Airport on the Columbia Slough," [in Polish], Proceedings Gdanska Fundacja Wody, Podczyszczenie Wod Opadowych Wymagania Formalnopravne I Mozliwosci Technicne, Gdansk, Poland.
- Wells, S. and LaLiberte, D. (1998) "Winter Temperature Gradients in Circular Clarifiers," Water Environment Research, Vol. 70, No. 7, 1274-1279.
- Makinia, J., Wells, S. A. (1999). "Improvements in Modelling Dissolved Oxygen in Activated Sludge Systems." Proceedings of the 8th IAWQ Conference on Design, Operation and Economics of Large Wastewater Treatment Plants, 6-9 September 1999, 518-525.
- Wells, S. (1999) "Analytical Cake Filtration Modeling," in Advances in Filtration and Separation Technology, Volume 12, ed. by W. Leung, American Filtrations and Separations Society, pp.158-165.
- Schwarz, T. and Wells, S. (1999) "Storm Water Particle Removal using Cross-Flow Filtration and Sedimentation," in Advances in Filtration and Separation Technology, Volume 12, ed. by W. Leung, American Filtrations and Separations Society, pp.219-226.
- Karl, J. and Wells, S. (1999) "One-Dimensional Gravity Thickening/Sedimentation with Inertial Effects," Journal of Environmental Engineering, ASCE, Vol 125, No. 9, 792-806.

Wells, S. A. (1999) "River Basin Modeling Using CE-QUAL-W2," Proceedings International Water Resources Engineering Conference, ASCE, Seattle, Wa, Aug.8-11.

Berger, C. and Wells, S. (1999) "Macrophyte Modeling in the Columbia Slough," Proceedings International Water Resources Engineering Conference, ASCE, Seattle, Wa, Aug.8-11.

Schwarz, T. and Wells, S. (1999) "Storm Water Particle Removal using a Cross-Flow Filtration and Sedimentation Device," Fluid/Particle Separation Journal, Vol 12, No. 3, 213-220.

Makinia, J. and Wells, S. (2000) "A General Model of the Activated Sludge Reactor with Dispersive Flow: Model Development and Parameter Estimation", Water Research, 34(16), 3987-3996.

Makinia, J. and Wells, S. (2000) "A General Model of the Activated Sludge Reactor with Dispersive Flow: Model Verification and Application," Water Research, 34(16), 3997-4006.

Wells, S. A. (2000) "Variation of Constitutive Model Formulation on Analytical Cake Filtration Models," in Advances in Filtration and Separation Technology, Volume 13, American Filtrations and Separations Society.

Wells, S. A. (2000) "Hydrodynamic and Water Quality River Basin Modeling Using CE-QUAL-W2 Version 3," Development and Application of Computer Techniques to Environmental Studies VIII, ed. G. Ibarra-Berastegi, C. Brebbia, P. Zannetti, WIT Press, Boston, 195-204.

Wells, S. A. (2000) "CE-QUAL-W2 Version 3: Hydrodynamic and Water Quality River Basin Modeling," Proceedings, HydroInformatics 2000, IAHR, CDROM EW4.

Annear, R. and Wells, S. (2002) "The Bull Run Reservoir River System Model," Research and Extension Regional Water Quality Conference 2002 Proceedings on CD, Vancouver, Washington.

Wells, S. (2002) "Validation of the CE-QUAL-W2 Version 3 River Basin Hydrodynamic and Water Quality Model," Proceedings, HydroInformatics 2002, IAHR, Cardiff, England.

Wells, S. (2002) "Basis of the CE-QUAL-W2 Version 3 River Basin Hydrodynamic and Water Quality Model," Proceedings, 2nd Federal InterAgency Hydrologic Modeling Conference, Las Vegas, July 28-Aug 1, 2002.

Annear, R. and Wells, S. (2002) "The Bull Run River – Reservoir System Model," Proceedings, 2nd Federal InterAgency Hydrologic Modeling Conference, Las Vegas, July 28-Aug 1, 2002.

Berger, C.; Annear, R. and Wells, S. (2002) "Willamette River and Columbia River Waste Load Allocation Model," Proceedings, 2nd Federal InterAgency Hydrologic Modeling Conference, Las Vegas, July 28-Aug 1, 2002.

Wells, S. A. and Annear, R. A. (2002) "River Basin Modeling Using CE-QUAL-W2 Version 3: The Bull Run River-Reservoir System Model," Proceedings 4th International Conference on Reservoir Limnology and Water Quality, Ceske Budejovice, Czech Republic, August 12-16, 2002.

Wells, S. A. and Cole, T. M. (2002) "TMDLs: Statistical Correlations or Mechanistic Modeling?", Proceedings National TMDL Science and Policy Conference, Phoenix, AR, November 13-16, 2002.

Wells, S. A., Berger, C. J., Annear, R. L., McKillip, M. and Jamal, S. (2003) "Willamette River Basin Temperature TMDL Modeling Study," Proceedings National TMDL Science and Policy Conference, Chicago, IL, November 16-19, 2003.

Wells, S. A., Berger, C. J., Annear, R. L., McKillip, M. and Jamal, S. (2004) "Willamette River Basin Temperature Modeling Study," Proceedings Watershed 2004, Dearborn, MI, July 11-14, 2004.

Buzzone, J. and Wells, S. (2004) "Impact of Stream Channel Complexity on Stream Temperatures," Proceedings 5th International Symposium on Ecohydraulics, Madrid, Spain, September 12-17, 2004.

Harrison, J. R.; Wells, S. A.; Rychert, R. C.; Naymik, J. (2005) "Searching for A Practical Approach To Partition Biomass And Detritus For Ecological Models Applied To The Snake River And Its Reservoirs," Proceedings ASLO Conference, Salt Lake City, UT, February 24-25, 2005.

Makinia, J. and Wells, S. (2005) "Evaluation of empirical formulae for estimation of the longitudinal dispersion in activated sludge reactors", Water Research, Vol 39, No. 8, 1533-1542.

Wells, S. A. (2005) "Use and Misuse of Computer Models in Water Disputes," Proceedings American Bar Association 23rd Annual Water Law Conference, San Diego, CA, 2005.

Wells, S., Bashkatov, D., and Makinia, J. (2005) "Modeling and evaluating temperature dynamics in wastewater treatment plants," Proceedings, World Water & Environmental Resources Congress 2005 ASCE, Anchorage, AK.

Makinia, J., Wells, S., and Zima, P. (2005) "Temperature Modeling in Activated Sludge Systems: A Case Study", Water Environment Research, Vol 77, No. 5, 525-532.

McKillip, M. and Wells, S. (2006) "Hydrodynamic, water quality and fish bioenergetics modeling in Lake Roosevelt Washington USA using CE-QUAL-W2," Proceedings, 5th International Conference on Reservoir Limnology and Water Quality, Brno, Czech Republic, August 27-September 2, 2006, pp. 145-148.

Berger, C. and Wells, S. A. (2007) "Modeling Effects of Channel Complexity and Hyporheic Flow on Stream Temperatures," Proceedings, National TMDL 2007 Conference, Water Environment Federation, Bellevue, WA, June 24-27.

Berger, C. and Wells, S. A. (2007) "Development and Calibration of Lake Whatcom Water Quality Model," Proceedings, National TMDL 2007 Conference, Water Environment Federation, Bellevue, WA, June 24-27.

Wells, S. A., J. R. Manson, and J. L. Martin (2007) "Numerical Hydrodynamic and Transport Models for Reservoirs," Chapter 4 in Energy Production and Reservoir Water Quality, ed by J. Martin, J. Higgins, J. Edinger, and J. Gordon, ASCE, Reston, VA.

Annear, R. L., and S. A. Wells (2007), A comparison of five models for estimating clear-sky solar radiation, Water Resources Research, 43, W10415, doi:10.1029/2006WR005055.

Wells, S. A. and Ervin, D. E. (2007) "Academia embraces Green," Campus Facility Maintenance, Fall 2007, pp. 28, 29.

Berger, C. and Wells, S. A. (2008) "A Macrophyte Water Quality and Hydrodynamic Model," ASCE, Journal of Environmental Engineering, Volume 134, Issue 9, pp. 778-788 (September 2008).

Cheslak, E; Berger, C; Annear, R., and Wells, S. (2009) "Protecting Spring-Run Chinook Salmon: The Use of a Two-dimensional Water Temperature Model to Evaluate Alternative Hydroelectric Operations," WaterPower XVI Proceedings, Spokane, WA, July 27-30, 2009

Wells, S. (2009) "Hydrodynamic Compressible and Incompressible Modeling of the Density Structure and Hydrodynamics of Hypersaline Systems," Proceedings IAHR 33rd Congress, Vancouver, BC, August 9-14, pp. 4345-4352.

Berger, C.; McKillip, M.; Annear, R.; Wells, V., and Wells, S. (2009) "Modeling the Spokane River-Lake Roosevelt System," Proceedings IAHR 33rd Congress, Vancouver, BC, August 9-14, pp. 6223-6230.

Mooij WM, Trolle D, Jeppesen E, Arhonditsis G, Belolipetsky PV, Chitamwebwa DBR, Degermendzhy AG, DeAngelis DL, De Senerpont Domis LN, Downing AS, Elliott JA, Fragoso Jr CR, Gaedke U, Genova SN, Gulati RD, Håkanson L, Hamilton DP, Hipsey MR, 't Hoen J, Hülsmann S, Los FJ, Makler-Pick V, Petzoldt T, Prokopkin IG, Rinke K, Schep SA, Tominaga K, Van Dam AA, Van Nes EH, Wells SA and Janse JH (2010) "Challenges and opportunities for integrating lake ecosystem modelling approaches," Aquatic Ecology: DOI:10.1007/s10452-010-9339-3, 44(3): 633-667.

Wells, S. A., Wells, V. I., and Berger, C. (2012) "Impact of Phosphorus Loading from the Watershed on Water Quality Dynamics in Lake Tenkiller, Oklahoma, USA," Proceedings World Environmental and Water Resources Congress, EWRI, ASCE, Albuquerque, NM, pp. 888-899.

Berger, C., Wells, S. A., and Wells, V. I. (2012) "Modeling of Water Quality and Greenhouse Emissions of Proposed South American Reservoirs," Proceedings World Environmental and Water Resources Congress, EWRI, ASCE, Albuquerque, NM, pp. 911-923.

Wells, V. I. and Wells, S. A. (2012) "CE-QUAL-W2 Water Quality and Fish-bioenergetics Model of Chester Morse Lake and the Cedar River," Proceedings World Environmental and Water Resources Congress, EWRI, ASCE, Albuquerque, NM, pp. 2756-2767.

Berger, C. J., Bigham, G., and Wells, S. A. (2014) "Prediction of GHG Emissions from a New Reservoir," Proceedings World Environmental and Water Resources Congress, EWRI, ASCE, Portland, OR, pp. 1010-1019.

Martinez, V. I., Wells, S. A. and R. C. Addley (2014) "Meeting Temperature Requirements for Fisheries Downstream of Folsom Reservoir, California," Proceedings World Environmental and Water Resources Congress, EWRI, ASCE, Portland, OR, pp. 1081-1092.

Shoajei, N. and Wells, S. A. (2014) "Automatic Calibration of Water Quality Models for Reservoirs and Lakes," Proceedings World Environmental and Water Resources Congress, EWRI, ASCE, Portland, OR, pp. 1020-1029.

Wells, S. A. (2014) "Integrating Fish Bioenergetics and Volitional Movement in Water Quality and Hydrodynamic Models," Proceedings Water Environment Federation Conference, New Orleans, September 2014.

Ma, Jun; Liu, Defu; Wells, Scott A.; Tanga, Hongwu; Jif, Daobin; Yang, Zhengjian (2015) "Modeling density currents in a typical tributary of the Three Gorges Reservoir, China", Ecological Modeling, Volume 296, 24 January 2015, Pages 113–125, doi:10.1016/j.ecolmodel.2014.10.030

Annette B.G. Janssen, George B. Arhonditsis, Arthur Beusen, Karsten Bolding, Louise Bruce, Jorn Bruggeman, Raoul-Marie Couture, Andrea S. Downing, J. Alex Elliott, Marieke A. Frassl, Gideon Gal, Daan J. Gerla, Matthew R. Hipsey, Fenjuan Hu, Stephen C. Ives, Jan H. Janse, Erik Jeppesen, Klaus D. Jöhnk, David Kneis, Xiangzhen Kong, Jan J. Kuiper, Moritz K. Lehmann, Carsten Lemmen, Deniz Özkundak, Thomas Petzoldt, Karsten Rinke, Barbara J. Robson, René Sachs, Sebastiaan A. Schep, Martin Schmid, Huub Scholten, Sven Teurlincx, Dennis Trolle, Tineke A. Troost, Anne A. Van Dam, Luuk P.A. Van Gerven, Mariska Weijerman, Scott A. Wells, Wolf M. Mooij (2015) Exploring, exploiting and evolving diversity of aquatic ecosystem models: a community perspective, Aquatic Ecology, Volume 49, Issue 4, Pages 513-548, DOI 10.1007/s10452-015-9544-1.

Wells, S. and Berger, C. (2016) "Modeling the Response of Dissolved Oxygen to Phosphorus Loading in Spokane Lake," Lake and Reservoir Management, 32:3, 270-279 (DOI:10.1080/10402381.2016.1211910).

Al-Murib, M. and Wells, S. A. (2016) "Application of CE-QUAL-W2 on the Tigris River in Iraq," Proceedings ASCE World Environmental and Water Congress, <http://dx.doi.org/10.1061/9780784479858.052#sthash.TVasrBU0.dpuf>.

Daobin, J., Wells, S. A., Yang, Z., Liu, Defu, Huang, Y., Ma, J. and Berger, C. (2017) "Impacts of water level rise on algal bloom prevention in the tributary of Three Gorges Reservoir, China," Ecological Engineering, Volume 98, January 2017, Pages 70-81.

Berger, C. and Wells, S. (2017) "Modeling the Impact of Water Quality and Food Web Structure on Bull Trout in Two Washington Reservoirs," Proceedings ASCE EWRI Congress, Sacramento, May 21-25, DOI: <http://dx.doi.org/10.1061/9780784480601.020#sthash.Gyqe8lxf.dpuf>

Van Glubt, S., Wells, S., and Berger, C. (2017) "Hydrodynamic and Water Quality Modeling of the Chehalis River in Washington," Proceedings ASCE EWRI Congress, Sacramento, May 21-25. DOI: <http://dx.doi.org/10.1061/9780784480601.019>.

Al-Murib, M., Wells, S., and Talke, S. (2017) "Estimation of Surface Water Temperature of the Tigris River System in Iraq," Proceedings ASCE EWRI Congress, Sacramento, May 21-25, DOI: <http://dx.doi.org/10.1061/9780784480632.016>.

Al-Zubaidi, H. A. M., and Wells, S. A. (2017) "3D Numerical Temperature Model Development and Calibration for Lakes and Reservoirs: A Case Study," Proceedings ASCE EWRI Congress, Sacramento, May 21-25, DOI: <http://dx.doi.org/10.1061/9780784480601.051>.

Al-Zubaidi, H. A. M., and Wells, S. A. (2018) "Comparison of a 2D and 3D Hydrodynamic and Water Quality Model for Lake Systems," Proceedings World Environmental and Water Resources Congress, ASCE, EWRI, Minneapolis, MN, June, pp. 74-84.

Al-Zubaidi, H. A. M., and Wells, S. A. (2018) "Water Level, Temperature, and Water Quality Numerical Predictions of a 3D Semi-Implicit Scheme for Cooper Creek Reservoir," Proceedings IEMs Conference, Ft. Collins, CO, June.

Jin, Juxiang, Wells, Scott, Liu, De Fu, Yang, Guolu (2018) Thermal stratification and its relationship with water quality in the typical tributary bay of the Three Gorges Reservoir, August 2018, Water Supply, 19(3), DOI: 10.2166/ws.2018.142.

Al Murib, M. D., Wells, S., Talke, S. A. (2019) "Use of Landsat TM/ETM+ to Estimate Water Temperature in the Tigris River in Iraq for Numerical Modeling Using CE-QUAL-W2," Water, 11(5), 892; doi:10.3390/w11050892.

Al Murib, M. D. and Wells, S. (2019) "Hydrodynamics and Total Dissolved Solids Model of the Tigris River Using CE-QUAL-W2," Environmental Processes, 6: 619, DOI: 10.1007/s40710-019-00381-y

Jin, Juxiang, Wells, Scott A., Liu, Defu, Yang, Guolu, Zhu Senlin, Ma Jun, Yang, Zhengjian (2019) "Effects of water level fluctuation on thermal stratification in a typical tributary bay of Three Gorges Reservoir, China", PeerJ, 7:e6925, DOI 10.7717/peerj.6925.

Long, Lianghong; Ji, Daobin; Yang, Zhengjian; Wells, Scott; Liu, Defu; Ma, Jun (2019) "Density-Driven Water Circulation in a typical tributary of the Three Gorges Reservoir, China," River Research and Applications, Wiley, Vol 35, Issue 7, September, 833-845, DOI: 10.1002/rra.3459.

Hussein, A. M. and Wells, S. A. (2019) "A Unique Volume Balance Approach for Verifying the Three-Dimensional Hydrodynamic Numerical Models in Surface Water Body Simulation," Chapter in An Introduction to Direct Numerical Simulations of Turbulent Flows, IntechOpen, DOI: 10.5772/intechopen.89691.

<http://mts.intechopen.com/articles/show/title/a-unique-volume-balance-approach-for-verifying-the-three-dimensional-hydrodynamic-numerical-models-i>

Hussein A. M. Al-Zubaidi and Scott A. Wells (2020) "Analytical and field verification of a 3D hydrodynamic and water quality numerical scheme based on the 2D formulation in CE-QUAL-W2," Journal of Hydraulic Research, 58:1, 152-171, DOI: 10.1080/00221686.2018.1499051.

Wells, Scott A. (2020) "Modeling Thermal Stratification Effects in Lakes and Reservoirs", Chapter in Inland Waters - Dynamics and Ecology, IntechOpen, DOI: 10.5772/intechopen.91754. <https://www.intechopen.com/online-first/modeling-thermal-stratification-effects-in-lakes-and-reservoirs>.

Wells, S. A. (2021) "Modeling of Temperature Mitigation in Cooling Trenches for Stormwater", Water, 13(3), 373; <https://doi.org/10.3390/w13030373>.

Bornstein, Y.; Dayan, B.; Cahn, A.; Wells, S.; Housh, M. (2022) Environmental Decision Support Systems as a Service: Demonstration on CE-QUAL-W2 Model, Water, 14,885, <https://doi.org/10.3390/w14060885>.

Overman, C. and Wells, S. A. (2022) "Modeling vertical migration of cyanobacteria," Water, 2022, 14, 953. <https://doi.org/10.3390/w14060953>.

Garstecki, B.; Wells, S. 2023. Modeling Cyanotoxin Production, Fate, and Transport in Surface Water Bodies Using CE-QUAL-W2. Environments, 2023, 10, 122. <https://doi.org/10.3390/environments10070122>

CE-QUAL-W2 TECHNICAL REPORTS

Wells, S. A., and Cole, T. M. (2000). "CE-QUAL-W2, Version 3," Water Quality Technical Notes Collection (ERDC WQTN-AM-09), USA Engineer Research and Development Center, Vicksburg, MS.

www.wes.army.mil/el/elpubs/wqtncont.html

Cole, T. and Wells, S.A. (2000) "CE-QUAL-W2: A Two-Dimensional, Laterally Averaged, Hydrodynamic and Water Quality Model, Version 3," Instruction Report EL-2000-, USA Engineering and Research Development Center, Waterways Experiment Station, Vicksburg, MS.

Cole, T. and Wells, S.A. (2001) "CE-QUAL-W2: A Two-Dimensional, Laterally Averaged, Hydrodynamic and Water Quality Model, Version 3.1," Instruction Report EL-2001-, USA Engineering and Research Development Center, Waterways Experiment Station, Vicksburg, MS.

Cole, T. and Wells, S.A. (2006) "CE-QUAL-W2: A Two-Dimensional, Laterally Averaged, Hydrodynamic and Water Quality Model, Version 3.5," Instruction Report EL-2006-, USA Engineering and Research Development Center, Waterways Experiment Station, Vicksburg, MS.

Cole, T. and Wells, S.A. (2008) "CE-QUAL-W2: A Two-Dimensional, Laterally Averaged, Hydrodynamic and Water Quality Model, Version 3.6" Department of Civil and Environmental Engineering, Portland State University, Portland, OR.

Cole, T. and Wells, S.A. (2010) "CE-QUAL-W2: A Two-Dimensional, Laterally Averaged, Hydrodynamic and Water Quality Model, Version 3.7" Department of Civil and Environmental Engineering, Portland State University, Portland, OR.

Cole, T. and Wells, S.A. (2014) "CE-QUAL-W2: A Two-Dimensional, Laterally Averaged, Hydrodynamic and Water Quality Model, Version 3.71" Department of Civil and Environmental Engineering, Portland State University, Portland, OR.

Cole, T. and Wells, S.A. (2015) "CE-QUAL-W2: A Two-Dimensional, Laterally Averaged, Hydrodynamic and Water Quality Model, Version 3.72" Department of Civil and Environmental Engineering, Portland State University, Portland, OR.

Cole, T. and Wells, S.A. (2016) "CE-QUAL-W2: A Two-Dimensional, Laterally Averaged, Hydrodynamic and Water Quality Model, Version 4.0" Department of Civil and Environmental Engineering, Portland State University, Portland, OR.

Wells, S. A., editor (2019) "CE-QUAL-W2: A Two-Dimensional, Laterally Averaged, Hydrodynamic and Water Quality Model, Version 4.2: Parts 1-5", Department of Civil and Environmental Engineering, Portland State University, Portland, OR, 987 pages.

Wells, S. A., editor (2020) "CE-QUAL-W2: A Two-Dimensional, Laterally Averaged, Hydrodynamic and Water Quality Model, Version 4.2.1: Parts 1-5", Department of Civil and Environmental Engineering, Portland State University, Portland, OR, 1006 pages.

Wells, S. A., editor (2023) "CE-QUAL-W2: A Two-Dimensional, Laterally Averaged, Hydrodynamic and Water Quality Model, Version 4.5: Parts 1-5", Department of Civil and Environmental Engineering, Portland State University, Portland, OR.

BOOK REVIEWS

Wells, S. A. (1981) Review of Land into Water-Water into Land, Water Resources Bulletin, Vol. 17, No. 5, 907-908.

Wells, S. A. (1981) Review of Potable Water from Wastewater, Water Resources Bulletin, Vol. 17, No. 6, 1095-1096.

Wells, S. A. (1982) Review of Surface Water Impoundments, Water Resources Bulletin, Vol. 18, No. 5, 895-986.

TECHNICAL REPORTS

Wells, S. A. (1979) "Non-Point Source Pollution in Center Hill Lake," in "Water Quality Conditions in Center Hill Lake," ed. by J. A. Gordon, Tennessee Technological University, Cookeville, Tennessee, 37 pages.

Gordon, J. A. and Wells, S. A. (1981) "A Three-Dimensional Field Evaluation and Analysis of Water Quality in Two Reservoirs," Research Report 79, O.W.R.T., Water Resources Center, Knoxville, Tennessee, 148 pages.

Wells, S. A. and Dick, R. I. (1987) "Mechanisms of Compressible Cake Filtration," CHES Progress Report, Proposal No. 308, submitted to Cornell High Energy Synchrotron Source (CHES), Cornell University, Ithaca, New York, 15 pages.

Wells, S. A. (1988) "Comments on CH2M Hill's Technical Memorandum for Project PDX24781.A0.02 Dated June 8, 1988 concerning the Waybo Pit Analysis," submitted to the Portland Water Bureau, Portland, Oregon, 12 pages.

Wells, S. A. and Baird, B. (1989) "Streamflow Gaging Station Report: Part I - Cost Option Summary," submitted to South Slough National Estuarine Reserve, State of Oregon, Division of State Lands, Charleston, Oregon, 19 pages.

Wells, S. A. and Staats, M. (1989) "Analysis of the Use of Aqualenc as a Dewatering Aid for Sludge Conditioning: Part 1," submitted to Rhone-Poulenc (Stauffer) Chemical Company, Portland, Oregon, 29 pages.

Wells, S. A. and Staats, M. (1989) "Analysis of the Use of Aqualenc as a Dewatering Aid for Sludge Conditioning: Part 2," submitted to Rhone-Poulenc (Stauffer) Chemical Company, Portland, Oregon, 16 pages.

Wells, S. A. (1989) "Preliminary Analysis of the Bay City Wastewater Outfall into Tillamook Bay," submitted to Scientific Resources, Inc., Lake Oswego, Oregon, 24 pages.

Laliberte, D. and Wells, S. A. (1989) "Streamflow Gaging Station Report: Part II - Gaging Station Design," submitted to South Slough National Estuarine Reserve, State of Oregon, Division of State Lands, Charleston, Oregon, 92 pages.

Wells, S. A. (1989) "Grading and Drainage Plan for 1N1 33AD, Lots 200, 202 and 300," submitted to Washington County Department of Land Use and Transportation, Hillsboro, Oregon, 33 pages.

Wells, S. A. (1990) "Preliminary Analysis of the St. Helens' Wastewater Discharge into the Columbia River," submitted to Linda Williams, Attorney, Portland, Oregon, 42 pages.

Wells, S. A. and Staats, M. (1990) "Analysis of the Use of Aqualenc as a Dewatering and Thickening Aid for the City of Portland's Wastewater Sludges," Department of Civil Engineering, Portland State University, Final report submitted to Rhone Poulenc (Stauffer) Chemical Company, Portland, Oregon, 133 pages.

Wells, S. A. (1990) "Analysis of Baffles for the Leaburg Power Canal Fish Screens," submitted to OBEC Consulting Engineers, Eugene, Oregon, 28 pages.

Wells, S. A. and Staats, M. E. (1990) "Evaluation of Aqualenc as a Dewatering and Thickening Agent," Department of Civil Engineering, Portland State University, Final report to Rhone-Poulenc Chemical Company, Shelton, Connecticut, 86 pages.

Wells, S. A. and Staats, M. E. (1990) "Preliminary Analysis of Dewatering Properties of Weyerhaeuser Oxidation Lagoon Sludge Using Liquid Polymer and Aqualenc," Technical Report, Department of Civil Engineering, Portland State University, Portland, Oregon, 20 pages.

Laliberte, D. M. and Wells, S. A. (1991) "Effects of Downstream Baffles on Velocities through Fish Screens at the Leaburg Power Canal Facility," submitted to Eugene Water and Electric Board, Eugene, Oregon, 96 pages.

Wells, S. A. (1992) "Assessment of Management Alternatives for Water Quality Improvement in the Columbia Slough System," Volumes 1 and 2, Technical Report EWR-001-92, Department of Civil Engineering, Portland State University, Portland, Oregon, 300 pages.

Wells, S. A. (1992) "Lower Columbia Slough Field Data Summaries - August 1990 through June 1991," Technical Report EWR-002-92, Department of Civil Engineering, Portland State University, Portland, Oregon, 165 pages.

Wells, S. A. (1992) "User's Manual for the Columbia Slough Model Using CE-QUAL-W2," Technical Report EWR-003-92, Department of Civil Engineering, Portland State University, Portland, Oregon, 30 pages.

Collins, D. and Wells, S. (1992) "St. John's Landfill and Columbia Slough System Water Quality Database," Technical Report EWR-006-92, Department of Civil Engineering, Portland State University, Portland, Oregon, 58 pages.

Wells, S. A. and Baird, B. (1992) "Field Survey Data Summaries, South Slough, Oregon, July 1989 through September 1990," Technical Report EWR-007-92, Department of Civil Engineering, Portland State University, NOAA Grant NA89AA-D-CZ047, MEMD Division, 117 pages.

Wells, S. A. (1992) "Modeling Groundwater Levels for the Lorella Pumped Storage Project," submitted to Cornforth Consultants, Inc., Portland, Oregon, 20 pages.

Wells, S. A. (1992) "Modeling the Effects of the Discharge from the Ramsey Lake Wetland Treatment System on the Lower Columbia Slough," submitted to Scientific Resources, Inc., Lake Oswego, Oregon, 42 pages.

Wells, S. A. (1992) "Preliminary Analysis of Leachate Migration from the USA Temporary Sludge Storage Facility," submitted to Unified Sewerage Agency of Washington County, Hillsboro, Oregon, 25 pages.

Wells, S. A. (1992) "Assessment of Management Alternatives for Improving Water Quality in North Slough Adjacent to the St. John's Landfill," Technical Report EWR-008-92, Department of Civil Engineering, Portland State University, Portland, Oregon, 77 pages.

Wells, S. A., Berger, C., and Knutson, M. (1992) "Modeling the Tualatin River System including Scoggins Creek and Hagg Lake: Model Description, Geometry, and Forcing Data," Technical Report EWR-012-92, Department of Civil Engineering, Portland State University, Portland, Oregon, 90 pages.

Wells, S. A. (1993) "Upper and Lower Columbia Slough Field Data Summaries from July 1992 through December 1992: Continuous and Synoptic Hydrolab and Continuous Gaging Station Data," prepared for HDR Engineering and City of Portland, Portland, Oregon, 60 pages.

Wells, S. A., Berger, C., and Staats, M. E. (1993) "Hydraulic and Water Quality Modeling of the Upper Columbia Slough: Model Description, Geometry, and Forcing Data," prepared for HDR Engineering and City of Portland, Portland, Oregon, 119 pages.

Wells, S. A., Berger, C. (1993) "Hydraulic and Water Quality Modeling of the Upper Columbia Slough: Model Calibration, Verification, and Management Alternatives Report," prepared for HDR Engineering and City of Portland, Portland, Oregon, 202 pages.

Whitaker, D. K. and Wells, S. A. (1993) "Evaluation of Temperature and Conductivity Trends in Wells D1B, D2B, E2D, D6A, D6C, D7A, and D8A at the St. John's Landfill," Technical Report, Department of Civil Engineering, Portland State University, Portland, Oregon, 57 pages.

Wells, S. A. (1994) "Water Quality Modeling of the Dnieper River, Ukraine," Technical Report, Department of Civil Engineering, Portland State University and Ukrainian State University of Food Technology, Kiev, Ukraine, 46 pages.

Wells, S. A. (1994) "Plate and Frame Filter Press Dewatering Modeling," Technical Report, Department of Civil Engineering, Portland State University and Ukrainian State University of Food Technology, Kiev, Ukraine, 31 pages.

Wells, S. A. and Berger, C. (1994) "Upper and Lower Columbia Slough Water Level Test: September 1 through October 29, 1993," Technical Report EWR-2-94, Department of Civil Engineering, Portland State University, Portland, Oregon, 69 pages.

Wells, S. A. (1995) "Analysis of Flow Augmentation from Smith and Bybee Lakes on North Slough Dissolved Oxygen Conditions," Technical Report EWR-1-95, Department of Civil Engineering, Portland State University, Portland, Oregon, 57 pages.

Wells, S. A. and Berger, C. J. (1995) "Hydraulic and Water Quality Modeling of the Upper and Lower Columbia Slough: Model Calibration, Verification, and Management Alternatives Report for 1992-1995," Technical Report EWR-2-95, Department of Civil Engineering, Portland State University, Portland, Oregon, 258 pages.

Wells, S. A. and Berger, C. J. (1995) "Upper and Lower Columbia Slough Water Level Test and Winter Sampling Results for June 1994 through March 1995," Technical Report EWR-3-95, Department of Civil Engineering, Portland State University, Portland, Oregon, 82 pages.

Juza, H. K. and Wells, S. A. (1995) "Water Quality Model of South Slough, Coos Bay, Oregon," Technical Report EWR-5-95, Department of Civil Engineering, Portland State University, NOAA Grant NA90AA-H-CZ183, MEMD Division, 128 pages.

Wells, S. A. (1995) "Modeling Opening Smith and Bybee Lake to the Lower Columbia Slough," Technical Report EWR-6-95, Department of Civil Engineering, Portland State University, Portland, Oregon, 58 pages.

Wells, S. A. (1995) "Modeling of Sludge Dewatering," Technical Report EWR-8-95, Department of Civil Engineering, Portland State University, Portland, Oregon, 117 pages.

Baird, B. and Wells, S. A. (1996) "Field Survey Data Summaries, South Slough, Oregon, September 1990 through June 1991," Technical Report EWR-01-96, Department of Civil Engineering, Portland State University, NOAA Grant NA90AA-H-CZ183, MEMD Division.

Wells, S. A., Berger, C., and Eberle, M. (1996) "Modeling and Monitoring the Columbia Slough System: 1995/1996", Technical Report EWR-1-96, Department of Civil Engineering, Portland State University, Portland, Oregon, 74 pages.

Eberle, M. and Wells, S. (1996) "Monitoring the Columbia Slough System," Technical Report EWR-2-96, Department of Civil Engineering, Portland State University, Portland, Oregon, 65 pages.

Wells, S. and Berger, C. (1996) "Hydraulic and Water Quality Modeling of Wahiawa Reservoir Volume 1: Model Description, Geometry, and Forcing Data," prepared for R. M. Towill Corporation, Honolulu, Hawaii, 88 pages.

Wells, S.; Li, S.; Beeson, M.; Cummings, M.; Pratt, R.; Brandt, K., and Annear, R. (1996) "Impact of Groundwater Contamination in East Multnomah County on the Interlachen Community," Technical Report EWR-3-96, Department of Civil Engineering, Portland State University, Portland, Oregon, 52 pages.

Wells, S. A. and Annear, R. (1997) "Flows and Water Quality Loadings for Bear Creek," prepared for Carollo Engineers, Portland, Oregon, 47 pages.

Wells, S. and Berger, C. (1997) "Hydraulic and Water Quality Modeling of Wahiawa Reservoir Volume 2: Model Calibration and Alternatives Analysis," prepared for R. M. Towill Corporation, Honolulu, Hawaii, 155 pages.

Wells, S. A. (1997) "The Columbia Slough," Technical Report EWR-2-97, Department of Civil Engineering, Portland State University, Portland, Oregon, 40 pages.

Berger, C. B. and Wells, S. A. (1997) "User's Manual for the Columbia Slough System Model," Technical Report EWR-3-97, Department of Civil Engineering, Portland State University, Portland, Oregon, 48 pages.

Berger, C. B. and Wells, S. A. (1997) "Culvert Replacements on the Southern Arm of the Upper Columbia Slough," Technical Report EWR-4-97, Department of Civil Engineering, Portland State University, Portland, Oregon, 65 pages.

Annear, R., Wells, S., Li, S.; Beeson, M.; Cummings, M.; Pratt, R.; Brandt, K. (1997) "Review of the US EPA Superfund Technical Assistance Grant," Technical Report EWR-5-97, Department of Civil Engineering, Portland State University, Portland, Oregon, 70 pages.

Wells, S. A. and Annear, R. (1997) "Analysis of the February 1996 Flood Impact on the Foothills Road Area of Lake Oswego," prepared for Seifer, Yeats, and Mills, Portland, Oregon, 52 pages.

Wells, S. A. (1997) "Theoretical Basis for the CE-QUAL-W2 River Basin Model," Technical Report EWR-6-97, Department of Civil Engineering, Portland State University, Portland, Oregon, 62 pages.

Annear, R. and Wells, S. (1997) "Water Quality Evaluation of the Columbia Slough for 1995/1996," Technical Report EWR-7-97, Department of Civil Engineering, Portland State University, Portland, Oregon, 70 pages.

Wells, S., Annear, R. and Berger, C. (1997) "Feasibility of Wetland Benches in the Lower Columbia Slough," Technical Report EWR-8-97, Department of Civil Engineering, Portland State University, Portland, Oregon, 70 pages.

Wells, S. A. and Makinia, J. (1997) "Evaluation of Sludge Dewatering Properties from Steel Manufacturing from the Korean Research Institute of Science and Technology," Technical Report EWR-9-97, Department of Civil Engineering, Portland State University, Portland, Oregon, 55 pages.

Harrison, J.; Wells, S.; Berger, C.; and Kasch, M. (1998) "Lower Snake River Model Development," report prepared for the Idaho Power Company, Boise, Idaho.

Wells, S., Annear, R. and Berger, C. (1998) "Wetland Benches in the Lower Columbia Slough," Technical Report EWR-1-98, Department of Civil Engineering, Portland State University, Portland, Oregon, 187 pages.

Wells, S. A. (1998) "Code Development and Testing of the CE-QUAL-W2 River Basin Model," Technical Report EWR-4-98, Department of Civil Engineering, Portland State University, Portland, Oregon, 62 pages.

Annear, R. and Wells, S. A. (1998) "Columbia Slough Database," Technical Report EWR-3-98, Department of Civil Engineering, Portland State University, Portland, Oregon, 35 pages.

Annear, R. and Wells, S. (1999) "Water Quality Monitoring of the Columbia Slough System: Historical Review of Low Dissolved Oxygen Events and Review of the Summer of 1997," Technical Report EWR-1-99, Department of Civil Engineering, Portland State University, Portland, Oregon, 72 pages.

Berger, C. and Wells, S. (1999) "Hydraulic and Water Quality Modeling of the Columbia Slough, Volume 1," Technical Report EWR-2-99, Department of Civil Engineering, Portland State University, Portland, Oregon, 67 pages.

Schwarz, T. and Wells, S. (1999) "Stormwater Particle Removal Using a Cross-Flow Filtration and Sedimentation Device," Technical Report EWR-5-99, Department of Civil Engineering, Portland State University, Portland, Oregon, 119 pages.

Annear, R., Wells, S., and Evonuk, D. (1999) "Bull Run River - Reservoir System Model: Boundary Conditions and Model Set-Up," Technical Report EWR-6-99, Department of Civil Engineering, Portland State University, Portland, Oregon, 223 pages.

Harrison, J., Wells, S., Myers, R., Parkinson, S., Kasch, M., and Berger, C. (1999) "1999 Status Report on Brownlee Reservoir Water Quality and Model Development," Idaho Power Company, Boise, ID.

Wells, S. (1999) "CE-QUAL-W2: Gas Transfer, Evaporation, and Hydraulic Structure Algorithms for Version 3," Technical Report EWR-7-99, Department of Civil Engineering, Portland State University, Portland, Oregon, 70 pages.

Wells, S. A.; Annear, R.; Berger, C.; and Sytsma, M. (2000) "Modeling and Analysis of Cooper Creek Reservoir Water Quality," prepared for the City of Sutherlin, OR, March 2000, 75 pages.

Annear, R. and Wells, S. (2000) "Bull Run River-Reservoir System Model: Model Calibration," Technical Report EWR-1-00, Department of Civil Engineering, Portland State University, Portland, Oregon.

Annear, R. and Wells, S. (2000) "Bull Run River-Reservoir System Model: Management Strategies to Meet Temperature Guidelines in the Lower Bull Run River," Technical Report EWR-2-00, Department of Civil Engineering, Portland State University, Portland, Oregon.

Wells, S. A. and Annear, R. (2000) "Modeling of Lincoln City Waste Water Treatment Plant Discharge to Siletz Bay," prepared for the Richwine Environmental, Beaverton, OR, August 2000, 90 pages.

Harrison, J., Wells, S., Myers, R., Parkinson, S., Kasch, M., and Berger, C. (2000) "2000 Status Report on Snake River Water Quality and Model Development," Idaho Power Company, Boise, ID.

Harrison, J., Wells, S., Myers, R., Parkinson, S., Kasch, M., and Berger, C. (2000) "2000 Status Report to Oxbow Reservoir Water Quality and Model Status," Idaho Power Company, Boise, ID.

Rodriguez, H. G., Annear, R. L., Wells, S. A., and Berger, C. (2001) "Lower Willamette River Model: Boundary Conditions and Model Setup," Technical Report EWR-1-01, Department of Civil Engineering, Portland State University, Portland, Oregon, 134 pages.

Berger, C., Annear, R. L., and Wells, S. A. (2001) "Lower Willamette River Model: Model Calibration," Technical Report EWR-2-01, Department of Civil Engineering, Portland State University, Portland, Oregon, 100 pages.

Berger, C., Annear, R. L., and Wells, S. A. (2001) "Lower Willamette River Model: Model Alternatives Analysis," Technical Report EWR-3-01, Department of Civil Engineering, Portland State University, Portland, Oregon, 100 pages.

Wells, S. A. (2001) "River Modeling using CE-QUAL-W2 Version 3 Guidance Document," Technical Report EWR-X-01, Department of Civil Engineering, Portland State University, Portland, Oregon, 15 pages.

Wells, S. A. (2001) "Simultaneous Solution of Water Surface in CE-QUAL-W2 Version 3," Technical Report EWR-X-01, Department of Civil Engineering, Portland State University, Portland, Oregon, 50 pages.

Wells, S. A. (2001) "Turbulence Closure Modeling in CE-QUAL-W2," Technical Report EWR-X-01, Department of Civil Engineering, Portland State University, Portland, Oregon, 45 pages.

Annear, R., Berger, C., Wells, S., and Cole, T. (2001) "Upper Spokane River Model: Boundary Conditions and Model Setup," Technical Report EWR-4-01, Department of Civil Engineering, Portland State University, Portland, Oregon, 306 pages.

Annear, R., Berger, C., and Wells, S. (2001) "CE-QUAL-W2 Version 3.1 Shading Algorithm," Technical Report EWR-5-01, Department of Civil Engineering, Portland State University, Portland, Oregon, 39 pages.

Berger, C., Annear, R., Wells, S., and Cole, T. (2002) "Upper Spokane River Model: Model Calibration," Technical Report EWR-1-02, Department of Civil Engineering, Portland State University, Portland, Oregon, 206 pages.

Slominski, S., Annear, R.L., Berger, C.J., Wells, S.A. (2002) "Upper Spokane River Model: Boundary Conditions and Model Setup for 2001," Technical Report EWR-02-02, Department of Civil and Environmental Engineering, Portland State University, Portland, OR.

Berger, C., Annear, R., Wells, S., and Cole, T. (2003) "Upper Spokane River Model: Model Calibration 2001," Technical Report EWR-1-03, Department of Civil and Environmental Engineering, Portland State University, Portland, Oregon.

Wells, S., Annear, R., Berger, C. (2003) "Upper Spokane River Model in Idaho: Boundary Conditions and Model Set-Up for 2001," Technical Report EWR-2-03, Department of Civil and Environmental Engineering, Portland State University, Portland, Oregon.

Annear, R.; McKillip, M.; Khan, S. J.; Berger, C.; and Wells, S. (2003) "Willamette Basin Temperature TMDL Model: Boundary Conditions and Model Setup," Technical Report EWR-03-03, Department of Civil and Environmental Engineering, Portland State University, Portland, Oregon.

Berger, C.; McKillip, M.; Khan, S. J.; Annear, R.; and Wells, S. (2003) "Willamette Basin Temperature TMDL Model: Model Calibration," Technical Report EWR-04-03, Department of Civil and Environmental Engineering, Portland State University, Portland, Oregon.

Annear, R.; Berger, C.; McKillip, M.; and Wells, S. (2003) "Willamette Basin Temperature TMDL Model: Model Scenarios," Technical Report EWR-05-03, Department of Civil and Environmental Engineering, Portland State University, Portland, Oregon.

Hauser, G., Parsly, J.; Ruane, R.; Sawyer, A.; Cole, T. and Wells, S. (2003) "Two-Dimensional Keowee Reservoir Model for Oconee Nuclear Plant Thermal Analysis," prepared for Duke Power, pp. 106, June 2003.

Kraft, Tim, Annear, R., Berger, C, and Wells, S. (2003) "Green River Water Quality Model: Boundary Conditions and Model Setup," Department of Civil and Environmental Engineering, Portland State University, Prepared for King County Department of Natural Resources and Parks, June, 2003.

Kraft, Tim, Annear, R., Berger, C, and Wells, S. (2004) "Green River Model Calibration: 1995-1996 and 2001-2002," Department of Civil and Environmental Engineering, Portland State University, Prepared for King County Department of Natural Resources and Parks.

Sytsma M, Rueter J, Petersen R, Koch R, Wells S, Miller R, Annear R, Johnson L (2004) Waldo Lake Research in 2003. Technical Report Center for Lakes and Reservoirs, Portland State University, Portland, Oregon.

Berger, C., Wells, S., and Annear, R. (2004) "Laurance Lake Temperature Model," Technical Report EWR-01-04, Department of Civil and Environmental Engineering, Portland State University, Portland, Oregon.

McKillip, M., Annear, R., and Wells, S. (2005) "Lake Roosevelt Model: Boundary Conditions and Set-Up," Technical Report EWR-01-05, Department of Civil and Environmental Engineering, Portland State University, Portland, Oregon.

Berger, C., Wells, S. (2005) "Lake Whatcom Water Quality Model," Technical Report EWR-03-05, Department of Civil and Environmental Engineering, Portland State University, Portland, Oregon.

Wells, S. , Annear, R. McKillip, M. and Berger, C. (2005) "Review of the Klamath River Model for the Klamath River TMDL Development," Prepared for U.S. Environmental Protection Agency, Region (9/10), November 5, 2005.

Wells, S. and Annear, R. (2005) "Near-field Modeling of the City of Toledo Wastewater Discharge into the Yaquina River," Prepared for City of Toledo, August 2005.

Annear, R., Berger, C., Wells, S. (2006) "Idaho Pend Oreille River Model Model Development and Calibration," Technical Report EWR-02-06, Department of Civil and Environmental Engineering, Portland State University, Portland, Oregon.

Annear, R., Wells, S. (2006) "Lower Clackamas River Model: Model Development, Revisit of 2001 and 2002 Calibration, and Management Scenarios," Technical Report EWR-01-06, Department of Civil and Environmental Engineering, Portland State University, March, 2006.

McKillip, M. and Wells, S. (2006) "Lake Roosevelt Water Quality and Hydrodynamic Model Calibration with Fish Bioenergetics," Technical Report EWR-03-06, Department of Civil and Environmental Engineering, Portland State University, Portland, Oregon.

Annear, R., Berger, C., Wells, S. (2006) "Pend Oreille River, Box Canyon Model: Model Development and Calibration," Technical Report EWR-04-06, Department of Civil and Environmental Engineering, Portland State University, Portland, Oregon.

Annear, R., Wells, S. and Berger, C. (2007) "South Fork Tolt Reservoir Model: Model Development," Technical Report EWR-02-07, Water Quality Research Group, Department of Civil and Environmental Engineering, Portland State University, prepared for the Seattle Public Utilities, September, 2007

Wells, S. A. (2008) "CE-QUAL-W2 Compressible Model," Technical Report, Department of Civil and Environmental Engineering, Portland State University, Portland, Oregon.

Wells, S. A.; Wells, V. I., and Berger, C. (2008) "Water Quality and Hydrodynamic Modeling of Tenkiller Reservoir," prepared for the State of Oklahoma, 247 pp.

Annear, R., Berger, C., Wells, S (2008) "Lake Chaplain Model: Model Development, Calibration and Management Scenarios," Technical Report EWR-01-08, Water Quality Research Group, Department of Civil and Environmental Engineering, Portland State University, Portland, Oregon 97201-0751.

Annear, R., Berger, C., Wells, S, Sytsma, M., Miller, R. (2008) Barney Reservoir Monitoring Plan: Plan Development, Technical Report EWR-03-08, Department of Civil and Environmental Engineering, Portland State University, Prepared for the Barney Reservoir Joint Water Commission, May 2008.

Berger, C., Annear, R., and Wells, S. (2008) "DeSabra-Centerville System Temperature Model: Model Update," Technical report prepared for Pacific Gas & Electric, January 2008.

Wells, S. and Berger, C. (2009) "Budd Inlet/Capitol Lake/Deschutes River Total Daily Maximum Load Study Model Review," Technical report prepared for: U. S. Environmental Protection Agency Region 10, USEPA Contract Number EP-C-08-002, Cadmus Task Order No. 13, February 3, 2009.

Berger, C., Wells, S. A., Wells, V. (2010) "Water Quality and Hydrodynamic Modeling of Eucha and Spavinaw Lakes," prepared for the Corps of Engineers and City of Tulsa, Tulsa, OK.

Wells, S. A., Lawler, K, Berger, C, and Wells, V. (2010) "Amaila Falls Hydroelectric Project Reservoir Model Development and Scenarios," prepared for Exponent, Inc., Bellevue, WA.

Wells, S., Berger, C., and Wells, V. (2010) "Technical Memorandum Clackamas River Modeling in Vicinity of the Proposed Lake Oswego Intake CE-QUAL-W2 and 2D Horizontal Model Analysis," Prepared for The City of Lake Oswego, April 2010.

Wells, V., Wells, S., and Berger, C. (2010) "CE-QUAL_W2 Reservoir Temperature Modeling Report for the Yuba-Bear Hydroelectric and Drum-Spaulding Projects, Technical Report prepared for HDR Inc., December 2010.

Elias E., Gavrieli I., Buzaglo M., Farber E., Esakov S., Lensky N., Abelson M., Ganor J., Oren A., Brenner S., Lensky I., Shalev E., Yechieli Y., Dvorkin Y., Gertman I., Wells S., Simon E., Rosentraub Z., Reznik I., Bodzin R., Ozer T., Katsenelson B., Hochman L., Nehorai R., Shahar H. (2011) "Red Sea – Dead Sea Water Conveyance Study Program: The Dead Sea Study," GSI Report Number: GSI/10/2011, TAHAL Report Number: IL-201280-R11-218, August 2011.

McCulloch, A., Berger, C., and Wells, S. (2011) "Banks Lake Model: Model Calibration," Technical Report, Civil and Environmental Engineering Department, Portland State University, May, 2011.

Wells, S. and Berger, C. (2011) "Review of Pit Lakes Model," Technical Report prepared for CEMA, Canada, October 2011.

Berger, C. J. and Wells, S. A. (2011) "Pend Oreille River, Box Canyon Model: Model Update and Scenarios," Technical Report EWR-02-11, Department of Civil and Environmental Engineering, Portland State University, Portland, OR.

Wells, S., Berger, C., and Wells, V. (2011) "Chaglla Hydroelectric Project Model Development and Scenarios Phase I," Technical report prepared for Odebrecht Perú Ingeniería y Construcción S.A.C., April 2011.

Wells, S., Berger, C., Wells, V., and Lawler, K. (2011) Thermalito Diversion Pool, Power Canal, and Forebay Model Development and Calibration," Technical report prepared for MWH Americas, Inc., September 2011.

Berger, C., Wells, S. and Wells, V. (2012) "Drift Creek Reservoir Model: Irrigation Flows Discharged to Drift Creek Scenarios," Water Quality Research Group, Department of Civil and Environmental Engineering, Portland State University, November 2012.

Wells, S., Wells, V., and Berger, C. (2013) "Dead Sea Ponds Water Quality and Hydrodynamic Modeling: Background Modeling and Data Report," Prepared for Dead Sea Works, Israel, March 2013.

Berger, C. and Wells, S. (2014) "Updating the CEMA Oil Sands Pit Lake Model," Technical Report prepared for Cumulative Environmental Management Association, Canada, August 2014.

Berger, C., Wells, S. A., Wells, Xu, W. (2015) "AHE Tabajara Model Development and Scenarios," Technical Report prepared for JGP Consultoria e Participações Ltda., Brazil, September, 2015.

Wells, S. A., and Berger C. J. (2015) "Technical Memorandum: High Rock Lake and Watershed Model Reviews," prepared for Waterkeeper.org, November 2015.

Wells, S. and Berger, C. (2015). Technical Memorandum: Conesus Lake, Hemlock Lake, and Honeoye Lake Water Quality Models: Model Development and Calibration. Prepared for Cadmus, Inc., August 2015.

Wells, S. and Berger, C. (2016). Technical Memorandum: Conesus Lake and Honeoye Lake Water Quality Models: Model Calibration. Prepared for Cadmus, Inc., May 2016.

Wells, S., Wells, V., and Berger, C. (2016) "Dead Sea Works Model User Manual," Technical Report prepared for Dead Sea Works, Israel, March 2016.

Van Glubt, S., C. Berger, S. Wells (2017) "Chehalis water quality and hydrodynamic modeling: model setup, calibration, and scenario analysis," Technical Report Department of Civil and Environmental Engineering, Portland State University, prepared for Washington Department of Ecology, April 2017, 262 pp.

Berger, C., Wells, S., and Al-Murib, M. (2018) "Tualatin River Model Development and Calibration 2013-2015," Technical Report prepared for Clean Water Services, Hillsboro, OR, January 2018.

Wells, S., Jensen, T., and Berger, C. (2019) "Chehalis River and Tributary Water Quality and Hydrodynamic Modeling Model Setup, Calibration Analysis for 2013-2015," Technical Report Department of Civil and Environmental Engineering, Portland State University, prepared for Washington Department of Ecology, October 2019, 97 pp.

Cervarich, A., Overman, C., Wells, S. A., Berger, C. 2020. Dexter Reservoir Model Calibration Updates and Management Scenarios. Prepared for ERDC Contracting Office U.S. Army Corps of Engineers Engineer Research and Development Center, Water Quality Research Group, Department of Civil and Environmental Engineering, Portland State University, 109 pp.

Cervarich, A., Wells, S. A. 2020. CE QUAL W2 Hydrodynamic and Water Quality Model of the Cedar River Municipal Watershed Chester Morse Reservoir and Cedar River. Prepared for Seattle Public Utilities, Department of Civil and Environmental Engineering, Portland State University, 272 pp.

Add Major reports: Lake Whatcom, Tualatin, Snake]

TECHNICAL PRESENTATIONS:

Wells, S. A. and Gordon, J. A. (1980) "A Three Dimensional, Field Evaluation of Water Quality-Management and Modeling Implications of the Third-Dimension," Symposium on Surface Water Impoundments, June 2-5, Minneapolis, Minnesota.

Bierck, B. R., Wells, S. A., and Dick, R. I. (1986) "Compressible Cake Filtration: Monitoring Cake Formation Using X-Rays from a Synchrotron Source," 59th Annual Conference of the Water Pollution Control Federation, October 5-9, Los Angeles, California.

Wells, S. A. (1987) "Effect of Winter Heat Losses on Treatment Plant Performance," New York Water Pollution Control Federation Conference, January 12-14, New York, New York.

Wells, S. A. and Dick, R. I. (1987) "Analysis of Changes in the Degree of Saturation of a Dewatering Porous Matrix Using Synchrotron Radiation," A.S.C.E. Engineering Mechanics Division, 6th Specialty Conference, May 20-22, Buffalo, New York.

Wells, S. A. and Dick, R. I. (1987) "Dewatering and Desaturation of Compressible Slurries Using Synchrotron Radiation," First CHESS Users Meeting, June 16, 17, Ithaca, New York.

Wells, S. A. and Dick, R. I. (1988) "Synchrotron Radiation Evaluation of Gravity Sedimentation Effects Prior to Dewatering," Joint A.S.C.E.-C.S.C.E. National Conference on Environmental Engineering, July 13-15, Vancouver, B.C., Canada.

Wells, S. A. (1988) "Two-Phase Flow Modeling in One-Dimension," Computational Fluid Dynamics Group, Portland State University, October 7, Portland, Oregon.

Wells, S. A. (1989) "Validity of Water Quality Models as a Basis for Management," Water Quality Issues Forum, OTAK Inc., March 24, Beaverton, Oregon.

Wells, S. A. and Dick, R. I. (1989) "Mathematical Modeling of Compressible Cake Filtration," A.S.C.E. National Conference on Environmental Engineering, July 10-12, Austin, Texas.

Wells, S. A. (1990) "Winter Cooling Effects on Wastewater Treatment Plant Exposed Units," Environmental Sciences and Resources Ph.D. Program Seminar Series, February 15, Portland, Oregon.

Wells, S. A. (1990) "Determination of Sludge Properties for Modeling Compressible Cake Filtration from Specific Resistance Tests," A.S.C.E. National Environmental Engineering Conference, July 8-11, Washington, D.C.

- Wells, S. A. and Sivakumaran, K. (1990) "Two-Dimensional Modeling of Dewatering in a Belt-Filter Press," A.S.C.E. National Environmental Engineering Conference, July 8-11, Washington, D. C.
- Wells, S. A. (1990) "Surface and Groundwater," St. John's Landfill Closure Workshop, METRO, Solid Waste Department, September 26, Portland, Oregon.
- Wells, S. A. (1991) "Computer Modeling of Hydrodynamics and Water Quality in the Columbia Slough," Western Oregon State College, February 27, Monmouth, Oregon.
- Wells, S. A. (1991) "Hydrology/Environmental Issues in the Smith-Bybee Lakes and Columbia Slough Areas," Portland State University, Urban Natural Resources Discussion Group, April 19, Portland, Oregon.
- Wells, S. A. and Plaskett, J. H. (1991) "Modeling Compressible Cake Filtration with Uncertainty," American Filtration Society, 1991 National Meeting, October 21-23, College Park, Georgia.
- Houck, M., and Wells, S.A. (1991) "Urban Environmental Problems," Portland State University, "Let Knowledge Serve the City," November 1, Portland, Oregon.
- Wells, S. A. (1991) "Analysis of Management Alternatives for Water Quality Improvement in the Columbia Slough/Smith and Bybee Lake System," Pacific Northwest Pollution Control Association 1991 Conference, November 3-5, Portland, Oregon.
- Wells, S. A. (1992) "Two-Dimensional Flow Modeling in Compressible Cake Filtration," American Filtration Society Education Conference, January 11-17, Gainseville, Florida.
- Wells, S. A. (1992) "Management of the Columbia Slough System for Water Quality Control," moderator and speaker, Environment, Technology and Society: Issues in Sustainable Development Conference, Portland State University, May 4-6, Portland, Oregon.
- Wells, S. A. (1992) "Oregon Joint Graduate Schools in Environmental Engineering," Oregon Environmental Technology Association and the Oregon Association of Environmental Professionals Conference on Government Contracting and Marketing Opportunities, June 17, Wilsonville, Oregon.
- Wells, S. A. (1992) "Getting a Professional Education in Hazardous Materials Management," moderator and speaker, Hazardous Waste Materials Management Conference, September 15, 16, Portland, Oregon.
- Wells, S. A. (1992) "Educational Opportunities within the Oregon Joint Graduate Schools of Engineering - Environmental Engineering," moderator and speaker, OJGSE User's Meeting, October 2, Portland State University, Portland, Oregon.
- Wells, S. A. (1993) "Fluid/Particle Separation Dynamics," American Filtration Society Frank Tiller Fluid-Particle Separation Education Meeting, January 6-10, Reno, Nevada.
- Wells, S. A. (1993) "Managing the Columbia Slough System for Water Quality Control," Environmental Sciences and Resources Ph.D. Program Seminar Series, February 25, Portland, Oregon.
- Wells, S. A. (1993) "Using Water Quality Models as a Basis for Managing Water Quality Standards and Guidelines," given to State of Oregon, Department of Environmental Quality, Water Quality Group and EQC Commission, April 20, Portland, Oregon.
- Wells, S. A. and Dick, R. I. (1993) "Permeability, Liquid and Solid Velocity, and Effective Stress Variations in Compressible Cake Filtration," American Filtration Society National Meeting, May 3-6, Chicago, Illinois.
- Koch, R. and Wells, S. A. (1993) "Modeling the Tualatin River," 1993 Jim Vomocil Water Quality Conference "Management of Over Utilized Streams: Lessons from the Tualatin Watershed," Oregon State University, November 3-4, Corvallis, Oregon. [invited paper]
- Berger, C., Knutson, M., and Wells, S. (1993) "Modeling the Tualatin River System for Water Quality Improvement," Pacific Northwest Pollution Control Association Annual Meeting, Sea-Tac, November 15-17, Seattle, Washington.
- Berger, C. and Wells, S. (1994) "Water Quality Modeling of the Lower Columbia Slough," Annual Pacific Estuarine Research Society Meeting, May 5-7, Hatfield Marine Science Center, Newport, Oregon.
- Wells, S. A. (1995) "Hydrologic and Water Quality Modeling of the Columbia Slough," Columbia Slough Watershed Council Meeting, January 18, Portland, Oregon.
- Wells, S. A. (1995) "Management of the Water Quality of the North Slough Adjacent to the St. John's Landfill," First Annual Pacific Northwest Water Issues and 1995 Pacific Northwest/Oceania Conference, February 27,28, Portland, Oregon.
- Wells, S. A. and Berger, C.(1995) "Management of the Water Quality of the Upper and Lower Columbia Slough System," First Annual Pacific Northwest Water Issues and 1995 Pacific Northwest/Oceania Conference, February 27,28, Portland, Oregon.
- Karl, J. and Wells, S. A. (1995) "Modeling Gravity Sedimentation in One Dimension," American Filtration and Separations Society National Conference, April 23-25, Nashville, Tennessee.

Berger, C. and Wells, S. A. (1995) "Water Quality Management of the Tualatin River, Oregon," ASCE Water Resources and Hydraulics Specialty Conference, August 13-15, San Antonio, Texas.

Wells, S. A. and Berger, C. J. (1995) "Management Strategies to Improve Water Quality in the Tualatin River, Oregon," 1995 NCASI West Coast Regional Meeting, September 27-28, 1995, Portland, Oregon.

Wells, S. A. (1995) "Environmental Impact of Chernobyl on Ukraine," PSU Weekend Conference, October 28, Portland, Oregon.

Wells, S. A. (1996) "Modeling Cake Filtration in a Plate-and-Frame Press," National AFS Conference, April 17, Valley Forge, Pa.

Wells, S. A. (1996) "University-Industry Cooperation in Solid-Liquid Separation Process Modeling," National AFS Conference, April 17, Valley Forge, Pa.

Wells, S. A.; Berger, C.; and Abrams, M. (1996) "Winter Storm Event Impacts on Dissolved Oxygen Levels in the Columbia Slough System," Second Annual Pacific Northwest Water Issues Conference: The Flood of 1996, October 7,8, Portland, Oregon.

Wells, S. and Berger, C. (1996) "Modeling Winter Dissolved Oxygen Depletion Incidents in the Columbia Slough," Pacific Northwest Pollution Control Association Conference, November 3-6, Boise, Idaho.

Wells, S. (1997) "Airport Deicing and the Columbia Slough," ESR Seminar Series, Portland State University, January 23, Portland, Oregon.

Nakasone, M. and Wells, S. A. (1997) "Water Quality Modeling of Wahiawa Reservoir and Its Role in the Central Oahu Wastewater Reclamation Plan," 19th Annual Hawaii Water Environment Association Conference, February 14,15, Honolulu, Hawaii.

Wells, S. A. (1997) "Modeling a Plate-and-Frame Press," National AFS Society Conference, April 28-May 1, Minneapolis, Mn.

Berger, C. J. and Wells, S. A. (1997) "Hydrodynamic Modeling of Impact of Culvert Modifications in the Columbia Slough," American Water Resources Association Conference, October 20-22, San Diego, Ca.

Wells, S. A. and Savage, G. (1998) "Gravity Drainage During and Prior to Cake Filtration," National AFS Society Conference, May 4-6, St. Louis, Mo.

Wells, S. A. (1998) "Modeling the Columbia Slough System," invited seminar Waterways Experiments Station, Corps of Engineers, June 8, Vicksburg, MS.

Wells, S. A. (1998) "Modeling the Lower Snake River," invited seminar Idaho Power Company workshop on the Snake River System, August 19, Boise, Id.

Wells, S. A. (1998) "The CE-QUAL-W2 Version 3 River Basin Model," seminar CE-QUAL-W2 workshop, Portland State University, September 11, Portland, Or.

Wells, S. A. (1998) "Modeling the Columbia Slough System," invited seminar Oregon Graduate Institute, October 2, Beaverton, Or.

Wells, S. A. and Berger C. (1998) "River Basin Modeling with CE-QUAL-W2 Version 3," Pacific Northwest Water Pollution Control Federation Conference, October 26,27, Portland, Or.

Makinia, J., Wells, S. A., Crawford, D., and Kulbik, M. (1998) "Application of Mathematical Modeling and Computer Simulation for Solving Water Quality Problems," Fourth International Symposium and Exhibition on Environmental Contamination in Central and Eastern Europe Warsaw '98, September 15-17, Warsaw, Poland.

Wells, S. A. and Berger, C. (1998) "Water Quality Impacts of Urban Stormwater Runoff from the Portland International Airport on the Columbia Slough," invited seminar for the Gdanska Fundacja Wody Conference entitled "Rainwater Management Law and Formal Requirements, Technical Possibilities," Oct 27-29, Gdansk, Poland.

Wells, S. A. (1998) "River Basin Modeling," Gdansk Polytechnic University, Department of Environmental Engineering, invited seminar, October 26, Gdansk, Poland.

Wells, S. A. (1999) "Analytical Cake Filtration Modeling," American Filtrations and Separations Society, National Conference, April 6-9, Boston, MA.

Schwarz, T. and Wells, S. (1999) "Storm Water Particle Removal using Cross-Flow Filtration and Sedimentation," American Filtrations and Separations Society, National Conference, April 6-9, Boston, MA.

Wells, S. A. (1999) "River Basin Modeling Using CE-QUAL-W2," International Water Resources Engineering Conference, ASCE, Aug.8-11, Seattle, Wa.

Berger, C. and Wells, S. (1999) "Macrophyte Modeling in the Columbia Slough," International Water Resources Engineering Conference, ASCE, Aug.8-11, Seattle, Wa.

Makinia, J., Wells, S. A. (1999). "Improvements in Modelling Dissolved Oxygen in Activated Sludge Systems." 8th IAWQ Conference on Design, Operation and Economics of Large Wastewater Treatment Plants, 6-9 September 1999, Budapest, Hungary.

Wells, S. A. (2000) "Historical Modeling and Evaluation of Brownlee Reservoir Water Quality," invited speaker to the Expert Forum for Nutrient and Algal Processes in Reservoirs and Streams Brownlee Reservoir and the Lower Snake River, Boise, ID, January 27, 2000.

Wells, S. A. (2000) "Variation of Constitutive Model Formulation on Analytical Cake Filtration Models," National American Filtrations and Separations Society Conference, Myrtle Beach, SC, March 14-17.

Wells, S. A. (2000) "The Columbia Slough System Environmental Challenges," invited seminar, Linfield College, April 12, McMinnville, OR.

Wells, S. A. (2000) "New Developments in River Basin Modeling," invited seminar, USGS Water Resources Division offices, April 24, Portland, OR.

Wells, S. A. (2000) "Hydrodynamic and Water Quality River Basin Modeling Using CE-QUAL-W2 Version 3," EnviroSoft 2000 Conference, June 27-30, Bilbao, Spain.

Wells, S. A. (2000) "CE-QUAL-W2 Version 3: Hydrodynamic and Water Quality River Basin Modeling," HydroInformatics 2000, July 17-22, Iowa City, IA.

Harrison, J., Myers, R., Wells, S. (2000) "Visualizing Water Quality Processes in Brownlee Reservoir Located on the Snake River between Idaho and Oregon," North American Lakes Management Society National Conference, Nov. 8-10, Miami, FL.

Wells, S. A. (2001) "Hydrodynamic and Water Quality River Basin Modeling Using CE-QUAL-W2 Version 3," invited seminar, Department of Civil and Environmental Engineering, Technion University, January 22, Haifa, Israel.

Wells, S. A. (2001) "Hydrodynamic and Water Quality River Basin Modeling of the Bull Run Watershed," invited seminar, Swiss Federal Institute of Environmental Science and Engineering, February 19, Lucerne, Switzerland.

Wells, S. A. (2001) "Hydrodynamic and Water Quality River Basin Modeling Using CE-QUAL-W2 Version 3," invited seminar, Department of Water Resources, Israel Oceanographic and Limnological Research Institute, March 25, Tiberias, Lake Kinneret, Israel.

Wells, S. A. (2001) "Hydrodynamic and Water Quality Modeling with Application to Estuary-River Systems," invited seminar, Kishon River Water Authority, May 29, Haifa, Israel.

Wells, S. A. (2001) "Hydrodynamic and Water Quality Modeling with Application to the Kishon River-Estuary," invited seminar, Kishon River Water Authority, July 3 Haifa, Israel.

Wells, S. A. (2001) "Hydrodynamic and Water Quality Modeling with Application to the Dead Sea," invited seminar, Israel Geological Survey, July 10, Jerusalem, Israel.

Annear, R. and Wells, S. (2002) "The Bull Run Reservoir River System Model," Research and Extension Regional Water Quality Conference 2002, February 21, Vancouver, Washington.

Wells, S. (2002) "Validation of the CE-QUAL-W2 Version 3 River Basin Hydrodynamic and Water Quality Model," HydroInformatics 2002, IAHR, Cardiff, England.

Wells, S. (2002) "Basis of the CE-QUAL-W2 Version 3 River Basin Hydrodynamic and Water Quality Model," 2nd Federal InterAgency Hydrologic Modeling Conference, Las Vegas, July 28-Aug 1, 2002.

Annear, R. and Wells, S. (2002) "The Bull Run River – Reservoir System Model," 2nd Federal InterAgency Hydrologic Modeling Conference, Las Vegas, July 28-Aug 1, 2002.

Berger, C.; Annear, R. and Wells, S. (2002) "Willamette River and Columbia River Waste Load Allocation Model," 2nd Federal InterAgency Hydrologic Modeling Conference, Las Vegas, July 28-Aug 1, 2002.

Wells, S. A. and Annear, R. A. (2002) "River Basin Modeling Using Ce-Qual-W2 Version 3: The Bull Run River-Reservoir System Model," 4th International Conference on Reservoir Limnology and Water Quality, Ceske Budejovice, Czech Republic, August 12-16, 2002.

Wells, S. A. and Cole, T. M. (2002) "TMDLS: Statistical Correlations or Mechanistic Modeling?" National TMDL Science and Policy Conference, Phoenix, AR, November 13-16, 2002.

Wells, S. A. (2003) "CE-QUAL-W2: State of the Art in River Basin Modeling," Shanghai Environmental Protection Bureau, Shanghai, China, March 21, 2003.

Wells, S. A. (2003) "CE-QUAL-W2: State of the Art in River Basin Modeling; Research Directions; and TMDLs in the USA," Sichuan University, State Key Laboratory in Hydraulics of High-Speed Flows, Chengdu, China, March 24, 2003.

Wells, S. A. (2003) "CE-QUAL-W2: State of the Art in River Basin Modeling for Lake Roosevelt," Lake Roosevelt Forum, Spokane, WA, April 20, 2003.

Annear, R. and Wells, S. (2003) "Modeling Streambed Heating in Shallow Streams," American Institute of Hydrology Annual meeting, Atlanta, GA, October 19-22, 2003.

Annear, R., Berger, C. and Wells, S. (2003) "Willamette River System Temperature Waste Load Allocation Model," Pacific Northwest Regional Water Quality Program, The Role of TMDL Implementation in Watershed Restoration, Stevenson, WA, October 29-30.

Wells, S. A. and McKillip, M. (2004) [invited] "Modeling Lake Roosevelt," Lake Roosevelt Forum 2004, Spokane, WA, Nov. 14,15, 2004.

Wells, S. (2004) [invited] "Modeling the Dead Sea, Israel-Jordan," USGS, Portland, OR, December 7, 2004.

Wells, S. A. (2005) [invited] "Use and Misuse of Computer Models in Water Disputes," American Bar Association 23rd Annual Water Law Conference, San Diego, CA, February 24,25, 2005.

Wells, S. A. and Bashkatov, D. (2005) "Modeling and evaluation of temperature dynamics in a wastewater treatment plant," EWRI 2005 World Water and Environmental Resources Congress, Anchorage Alaska, May 15-19, 2005.

McKillip, M. and Wells, S. A. (2006) [invited] "Modeling Lake Roosevelt," Lake Roosevelt Forum 2006, Spokane, WA, March 2006.

McKillip, M. and Wells, S. (2006) "Hydrodynamic, water quality and fish bioenergetics modeling in Lake Roosevelt Washington USA using CE-QUAL-W2," 5th International Conference on Reservoir Limnology and Water Quality, Brno, Czech Republic, August 27-September 2, 2006.

Wells, S. (2007) [invited] "Revisiting the Columbia Slough – uncovering low dissolved oxygen levels in the winter from airport deicing chemicals," PSU ESR winter seminar series, January 26, 2007.

Wells, S. (2007) [invited] "CE-QUAL-W2: Past, present, and future," Meeting of Northwest Water Quality Modelers (NWMOD), Hood River, Oregon, May 8-9, 2007.

Wells, S. (2007) [invited] "Modeling Fish Dynamics in Lake Roosevelt, WA," Hebrew University, Jerusalem, Israel, December 7, 2007.

Wells, S. (2008) [invited] "River Basin Modeling using CE-QUAL-W2," Geologic Survey of Israel, Jerusalem, March 6, 2008.

Wells, S. (2009) [invited] "Modeling the Spokane River system," Stakeholders meeting on the Spokane River TMDL, Spokane, WA February, 19, 2009.

Wells, S. (2009) [invited] "Updates on Modeling the Spokane River system," Stakeholders meeting on the Spokane River TMDL, Spokane, WA March 25, 2009.

Wells, S. (2009) [invited] "Fish bioenergetics models coupled with water quality and hydrodynamic models of surface water bodies," invited seminar, American Fisheries Society, Albuquerque, NM, May 4, 2009.

Wells, S. (2009) [invited] "Use and abuse of water quality and hydrodynamic models of surface water bodies," invited seminar, American Fisheries Society, Albuquerque, NM, May 4, 2009.

Wells, S. (2010) [invited] "Modeling of biological processes in surface water systems," invited seminar to the Biology Department PSU seminar series, October 6, 2010.

Wells, S. (2010) [invited] "Modeling the Dead Sea – Political and Environmental Issues," invited seminar to PSU class on International Relations, October 8, 2010.

Wells, S. A. (2011) [invited] "Modeling of the Clackamas River Watershed," Clackamas River Watershed Tour, September 24, 2011.

Wells, S. A. (2012) [invited Keynote address] "Mommas Don't Let Your Babies Grow Up to Be Modeling Cowboys," ASCE-EWRG & APWA 2012 Sustainable Stormwater Symposium in Portland, Oregon on September 19.

Wells, S. A. (2013) [invited for Willamette 2100 seminar series at OSU] "Willamette River Temperature Modeling," WW2100 OSU Seminar Series, May 17, 2013.

Wells, S. A. (2013) [invited] "Let's model! Curious about the patterns of flow, water quality and the role of humans on the Willamette River? Learn how we can use models to predict future water scarcity and quality." Presented to Tualatin Watersheds and Invasive Species Education (WISE) Teacher Training "Discovering Science: From knowledge to Action through Water and Invasive Species", Beaverton, October 9, 2013.

Wells, S. A. (2013) [invited] "CE-QUAL-W2 Model and Model Set-Up," "Water Quality Modeling of Tenkiller Reservoir," and "Mommas Don't Let Your Babies Grow Up to Be Modeling Cowboys," EPA Region 6 Water Quality Workshop and Conference, Dallas TX, November 2013.

Wells, S. A. (2014) [invited] "Stream Temperature Modeling in the Columbia Basin," International Climate Basin Climate and Hydrology Assessment Workshop, Portland, Oregon, January 15,16.

Wells, S. A. (2014) [invited] "Temperature Modeling in Lake Roosevelt," Impacts of Climate Change on Stream Temperature in Coldwater Fisheries in the Pacific Northwest, Columbia River Inter-Tribal Fish Commission, Portland, OR, November 17,18.

Wells, S. A. (2015) [invited] "Coupling of Water Quality and Hydrodynamic Models with Fish Bioenergetics and Movement Models," 3rd AEMON Workshop, Utrecht, Netherlands, February 19-21.

Wells, S. A. (2015) [invited] "State of the Art in Reservoir and Lake Hydrodynamic and Water Quality Models," keynote presentation at the 7th Hydraulics and Water Information Science Conference in Yichang China, October 16-17.

Wells, S. A. (2015) [invited] "State of the Art in Reservoir and Lake Hydrodynamic and Water Quality Models," Hubei University of Technology, Wuhan and at Three Gorges University, Yichang, China October 12 and 15.

Wells, S. A. (2016) [invited] "Modeling the Dead Sea Ponds," Dead Sea Works, Sdom, Israel, July 8.

Wells, S. A. (2017) [invited] "Modeling the Dead Sea," Three Gorges University, Yichong, China, April 7.

Wells, S. A. (2019) [invited] "State of Art in Water Quality Modeling," Three Gorges University, Yichong, China, March 23.

Wells, S. A. (2020) [invited] "Saving the Dead Sea," OMSI Science Pub, McMenemy's Kennedy School Theater, February 18 [189 in attendance].

Graduate Student Supervision

I have graduated 6 PhD students (Drs. Makina, Berger, Annear, McKillip, Muhanned Al-Murib, Hussein Al-Zubaidi) and currently have 1 PhD student in-progress. Besides PhD committees at PSU, I have also served on PhD committees at the University of Idaho (Sarah Burnett, Jack Harrison) and the University of Iowa. I have also served on many PhD and MS graduate committees at PSU.

I have graduated over 30 MS and MENG students. Some of these include Juza, Holly; Schwarz, Tracy; Karl, Joanna; LaLiberte, David; Plaskett, Joe; Knutson, Mike; Huang, Qinsheng; Buzzone, John; Bashkitov, Dmitry; Gould, Sam; Kraft, Tim; McCullough, Andrew; Slominski, Spencer; Winter, Verena; Wells, Vanessa; Xu, Wenwei; Al-Murib, Muhanned; Al-Zubaidi, Hussein; Shojai, Nasim; Rivas, Andres; Posovich, Michael; Dickerson, Peter; Whelan, Ela; Khan, Sher-Jamal; Annear, Rob; Berger, Chris; McKillip, Michael; Hanna, Rachel; Lu, Minh; de Wit, Kieth; Van Glubt, Sarah; Overman, Corina; Jensen, Tel; Stevens, Seth; Negherbon, Logon; and Garstecki, Bernadel.

I also have been the advisor to one BS honor's thesis through the PSU honor's program with Michelle Henry who wrote a thesis on wind fetch corrections in numerical hydrodynamic models.