

QUALIFICATIONS SUMMARY

Mr. Woodcock has been involved in nearly 300 municipal and private water and wastewater rate, financial, and management studies. He is a frequent speaker on various rate design topics, has been the project manager on numerous rate studies, has conducted management and operations studies for utilities, has been involved with the preparation of engineering reports supporting utility revenue bond issues, and has developed computer models to aid agencies in their strategic planning, rate, and capital improvement program decisions.

EXPERIENCE

Mr. Woodcock has participated in over 150 cost of service and water rate determination studies for both public and investor owned water utilities. He has prepared water rate studies for municipal water departments across North America including the cities of Bangor, Brewer, and Waterville, Maine; Lebanon, Rochester, and Manchester, New Hampshire; Boston, Cambridge, Leominster and Springfield, Massachusetts; Waterbury, New Haven, and New London, Connecticut; Detroit, MI; Westminster, Colorado; the Metropolitan Water District of Southern California; the San Diego County Water Authority, Woonsocket and Warwick, Rhode Island; Dayton, OH, Baltimore, MD, and Greenville, North Carolina. He has prepared exhibits and expert testimony in conjunction with water rate cases before the Connecticut Department of Public Utility Control; the Rhode Island Public Utilities Commission; the Maine Public Utilities Commission; the New York Public Service Commission; the Alberta (Canada) Public Utilities Board, and the New Hampshire Public Utilities Commission. Much of Mr. Woodcock's work on water rates has involved the analysis and development of new rate structures that meet specific needs of individual utilities. Included in these studies have been a number of innovative rate structures including summer surcharges, various conservation rate alternatives, increasing block rates, ratchet rates, life-line rates, as well as the more involved development of capacity or demand charges. Mr. Woodcock has also been involved in several overseas assignments including rate and tariff related studies in South Africa, Albania, Bulgaria, Russia, Thailand, Jamaica and Egypt.

Mr. Woodcock has worked on well over 100 wastewater user fee studies for cities, towns and municipal agencies throughout the country. Included

have been studies for large regional agencies and multi-jurisdictional suppliers such as the Boston Water and Sewer Commission; the Detroit Water and Sewerage Department; the Massachusetts Water Resources Authority; Fort Worth, Texas; Allentown, Pennsylvania; and Denver and Westminster, Colorado. These studies have included allocations of operating and capital expenses to wholesale and retail customers, the preparation and analysis of inter-municipal service agreements and reviews of other rate proposals. He has prepared wastewater user charge studies for cities, towns and authorities ranging in size from several hundred customers to one half million customers. Included in these studies were analyses of various capital cost recovery techniques including connection charges, betterment assessments, and the use of tax revenues; innovative rates including increasing block sewer rates; analyses of the impacts on various users and/or customer classes; development of stormwater utility charges; the development of computer rate models; and the preparation of sewer use and rate ordinances.

Mr. Woodcock has also worked on several stormwater utility rate and financial studies during his career. These have included analyses for the City & County of Denver, Wichita KS, and the Boston Water & Sewer Commission.

Mr. Woodcock is the former Chairman and a member of AWWA's Rates and Charges Committee. He has worked on all of AWWA's rates related manuals of practice, including the Water Rates Manual (M1), the Alternative Rates Manual (M34), Water Rates and Related Charges (M26), the Revenue Requirements Manual (M35), and the Developing Rates for Small Systems Manual (M54)-- several of which he was a principal author and a member of the editorial committee. He is a frequent presenter of papers on rates related issues before national and regional audiences, including AWWA's Annual Conferences. Mr. Woodcock also serves on the WEF Committee that prepares the WEF manual Financing and Charges for Wastewater Systems.

Mr. Woodcock has overseen and conducted a number of operations and management audits of water, wastewater, and public works agencies; and has prepared expense, revenue and rate projection documents in support of municipal revenue bond issues. He has also developed a number of computer financial models to assist water and sewer authorities with rate and financial projections.

EDUCATION B.S. - Civil Engineering, Tufts University, 1974
B.A. - Economics, Tufts University, 1974

REGISTRATION Engineer-in-Training: Massachusetts

ASSOCIATIONS & COMMITTEES

- American Water Works Association (former Chairman and current member - Rates and Charges Committee, former Chairman – Financial Management Committee Economics Technical Advisory Work Group, Reviewer for AWWA Journal)
- New England Water Works Association (current Co-chair and member of Financial Management Committee, and Conservation Committee, Assistant Treasurer, Board of Directors)
- Massachusetts Water Works Association
- Rhode Island Water Works Association
- Water Environment Federation (Member, Committee on manual - Wastewater Financing and Rates)
- Massachusetts Association of Planning Directors Impact Fee Legislation Subcommittee, 1991-92
- Commonwealth of Massachusetts: Advisory Committee on Financing Issues Associated with New Septic Tank Regulations ("Title V"), 1993-94
- Rhode Island Department of Health: Advisory Committee on Proposed Regulations for Infrastructure Finance Act, 1994
- AWWA Research Foundation: Project Advisory Committee on: Study of Low Income and Life Line Rates, 1994-97, Socioeconomic Impacts of Conservation, 1998-2000

PUBLICATIONS & PRESENTATIONS

- "Audits Aid Even the Best-Managed Utilities" Water & Sewage Works, September 1978.
- "Responsibilities of a Board Member" Journal of the New England Water Works, September 1980.

- *"Utility Management - How Do You Evaluate It?"*, Panel Discussion at Joint Meeting of NEWWA and MWWA, May 1980.
- *"Much More to Rates Than Tradition"*, Water Engineering & Management, October 1982.
- *"The Water Rate Tug of War: Social vs. Structural Needs"*, Public Works, February 1985.
- *"Consultants Role in Management Advice for Water Utilities"*, Journal of the New England Water Works, March 1985.
- *"Coping with Increased Costs of Water"*, Journal of the New England Water Works, June 1986.
- *"A New Approach: Source Development Charge"*, Journal of the Maine Water Utilities Association, April 1987.
- *"Role of Rate Structures"*, Water Conservation and Drought Management Workshop, New England Water Works Association, April 6, 1989.
- *"Charges for System Growth - Impact Fees"* New England Water Works Seminar - Alternative Revenue Source Development for Water Utilities, December 6, 1989.
- *"Impact Fees, Are They For You"*, New Hampshire Water Works Association, September 6, 1990.
- *"Rate Development for Water Utilities"*, Joint Seminar - New England Water Works Association and Maine Water Works Association, February 11, 1991.
- *"Pricing Strategies and Capital Funding Options"*, Panel Discussion at Solid Waste Association of North America - Massachusetts Chapter Meeting, March 1, 1991
- *"Allocating Costs and Alternative Rate Structures"*, Small Systems Rates and Revenue Seminar, New England Water Association, March 7, 1991
- *"Introduction to AWWA Alternative Water Rates Manual"*, AWWA Convention, Philadelphia, PA, June 23, 1991
- *"Life-line Rates and Inclining Block Rates"*, AWWA Annual Convention, Philadelphia, PA, June 23, 1991
- *"Alternative Water Rate Structures"*, CT Section AWWA Annual Meeting, May 22, 1992

- "*Conservation Rates and Revenue Impacts*", Conserv '92 Workshop - New England Water Works Assoc., June 2, 1992
- "*Alternative Conservation Rates*", AWWA Annual Convention, Vancouver, B.C. June 21, 1992
- "*What Will Water Rates Be Like in the 1990's?*", AWWA Convention, June 23, 1991 with David Russell; *Journal AWWA*, September 1992
- "*Conservation Pricing*", Roundtable Discussion, *Journal AWWA*, October, 1992
- "*Emerging Trends in Water Rates*", Presentation to AWWA Rocky Mountain Section, November 4, 1992.
- "*National Trends in Water Pricing*", AWWA Annual Convention, San Antonio, TX, June 6, 1993.
- Presentation on Rate Structure Alternatives, AWWA National Convention, New York, NY, June 19, 1994
- Presentation on Fire Protection Charges for new M26 Manual, AWWA National Convention, Anaheim, CA, June 18, 1995.
- "*Social Rate Making: Has The Time Come?*", New England Water Works Association Annual Convention, Bretton Woods, NH, September 18, 1995, published *Journal of the New England Water Works Association*, March 1997
- "*Fire Protection Rates Refined in Maine*", with Normand R. Lamie, *Journal American Water Works Association*, October, 1996
- "Conservation Rate Structures", New England Water Works Association Seminar - Conservation Committee, October 30, 1996
- "Rate Design Alternatives and Innovations", New England Water Works Association Seminar - Water Rates Committee, December 4, 1996, October 30, 1997, and April 29, 1998
- "Affordability Considerations in Water & Sewer Rates", AWWA / WEF Joint Management Conference, San Francisco, CA, February 1997
- "Calculation of Fire Protection Service Charges", Maine Water Utilities Association Meeting, Brewer, ME, Oct. 9, 1997
- "Should Higher Rates be used to Fight Overuse of Water?", New England Water Works Association Meeting, December 17, 1997

- Considerations in Water & Wastewater Tariff Design, presented to conference in Johannesburg, South Africa, May 18-22, 1998.
- “Developing Rate Structures, Maine Water Utility Association, February 1999.
- “New Challenges in Water Utility Rate Making”, New England Water Works Association Meeting, May 11, 1999
- Presentation of AWWA Manual on Alternative Rate Design, AWWA National Convention, Chicago, IL, June 1999
- “Panning for Gold in Your System”, NEWWA Water Supply Leadership Institute Conference, Brewster, MA, November 1999
- “Water Rates that Encourage Conservation”, NEWWA Spring 2000 Joint Regional Operations Conference, Worcester, MA, April 11, 2000
- “Setting New Rates”, Maine Water Utility Symposium, Portland, Maine, May 10, 2000
- AWWA’s New Super Manual on Rate Setting, AWWA National Convention, Denver, CO, June 2000
- “Rates & Charges in the Legal Environment”, AWWA National Convention, New Orleans, June 2002
- “Conservation Rates & Revenue Mitigation Measures”, NEWWA Seminar, March, 2003
- Water Rates for Small Systems, Seminar at AWWA National Convention, Anaheim, CA, June 2003
- “Water Rates, Fees and The Legal Environment”, contributing author, April 2005, American Water Works Association, Denver CO
- Teacher/Seminar Presenter, New England Water Works Association:
 - *Water Utility Ratemaking*, 1997 - present
 - *Seminar on Fire Protection Charges*, 2004-present.
- "New Concepts in Utility Rate Adjustments", Atlantic States Rural Water & Wastewater Association, Warwick RI, March 29, 2006
- "New Concepts in Utility Rate Adjustments", Atlantic States Rural Water & Wastewater Association, Burrville RI, April 26, 2006