

Professional Biography – Dr. Tamim Younos

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Citizenship: United States

Most Recent Academic Position (July 1 2006 – June 30 2010)

Research Professor of Water Resources, Geography Department

Associate Director for Research and Program Development, Virginia Water Resources Research Center, Virginia Polytechnic Institute and State University (Feb 1996 – present) (Interim Director 2002-2006).

Responsibilities included providing on-campus and off-campus leadership in support of the Water Center's programs consistent with its mission in research, graduate and undergraduate education, and outreach. Major activities include research administration, developing collaborative programs and team building, grant writing, conducting research, and advising graduate and undergraduate students.

Research Interests

Watershed assessment and management; water quality management; water monitoring systems; surface and subsurface nonpoint source pollution control; water and environmental management of karst-water systems; water supplies and pollution control in rural environments; decentralized water infrastructure; nexus between water and energy; sustainable development.

Education

Doctor of Engineering, Division of Urban Engineering, Major in Environmental Engineering, the University of Tokyo (1976).

Master of Science in Engineering, Division of Urban Engineering, Major in Environmental Engineering, the University of Tokyo (1973).

Bachelor of Engineering, Civil Engineering, Tohoku University (1971).

Professional Experience

Research Professor of Water Resources, Geography Department (2006 – 2010)

Interim Director, Virginia Water Resources Research Center (2002 – 2006)

Senior Research Scientist and Associate Director, Virginia Water Resources Research Center, Virginia Tech (1996-2002).

Research Scientist, Biological Systems Engineering Department, Virginia Tech (1990-1996).

Research Affiliate, Virginia Water Resources Research Center, Virginia Tech (1987-89).

Assistant Professor, Agricultural Engineering Department, Virginia Tech (1980-87).

Research Associate, Agricultural Engineering Department, Virginia Tech (1979-80).

Postdoctoral Associate, Agricultural Engineering Department, Cornell University (1977-79).

Postdoctoral Research Assistant, Institute of Geosciences, Tsukuba University, Tsukuba, Japan (1976-77).

Honors and Awards

Drop of Water Award – Southeast Rural Community Assistance Project (2006)
Friend of UCOWR – Universities Council on Water Resources (2003)
Japan Society for Promotion of Science (JSPS) – Fellowship (2001)
Elected to the Board of Directors, American Water Resources Association (2004)
Elected to the Board of Directors, Universities Council on Water Resources (UCOWR) (1999).
Reelected (2002); UCOWR President-Elect (2004-2005); UCOWR President (2005-2006).
Board of Directors, Renewable Natural Resources Foundation (RNRF) (2004 – present).
Service Appreciation Award, American Society of Agricultural Engineers (1992).
Service Appreciation Award, Environ. Engineering Division, American Society of Civil Engineers (1988).
Commendation Award, Virginia Chapter of the Soil and Water Conservation Society of America (1986).
Japanese Government Fellowship for Graduate Studies (1973-76)
International Rotary Fellowship for Graduate Studies (1972-73)

Professional Societies and Boards

Water Environment Federation
American Water Resources Association
Soil and Water Conservation Society of America
Universities Council on Water Resources

Teaching Experience

College of Natural Resources, Virginia Tech

Water, Energy, Environment and Society (graduate course developed by T. Younos)
Watershed Assessment, Management and Policy

College of Engineering, Virginia Tech

Environmental Hydrology- CEE (course developed by T. Younos & P. Diplas)
Groundwater Resources- CEE (undergraduate level)
Dynamics of Groundwater Flow- CE (graduate level)
Watershed Engineering- AgE (graduate level)
Soil and Water Conservation Engineering- AgE (undergraduate level)
Agricultural Waste Management- AgE (course developed by T. Younos)
Independent Study: Subsurface water quality modeling, Soil-moisture measurement, Groundwater monitoring (graduate and undergraduate levels)

College of Agriculture and Life Sciences, Virginia Tech

Watershed Assessment, Management and Policy (ALS4614, 2003, 2005, 2006, 2007) [cross-listed with CNR4614 in Spring Semester 2007]
Land and Water Resources Management
Sprinkler Irrigation
Treatment of Food Processing Wastes
Field Surveying

Student Advising

Major Professor-Ph.D. (2), M.S. (8); Member Ph.D. Committee (9), Member M.S. Committee (16);
Undergraduate Senior Design Project (12), Undergraduate Researchers (20).

Student Awards

Caitlin Grady (2009) – Undergraduate Research Award, Virginia Lakes and Watershed Association; Katie Perkins (2006) – Rachel Parker-Gwin and Loius Gwin Service-Learning Award; Marissa Duff (2006),

Undergraduate Research Presentation (third place), Potential Graduate Student Conference, Virginia Tech; Katie Perkins (2003) – Undergraduate presentation award, Potential Graduate Student Conference, Virginia Tech; Stacy J. Porter (1995) - Outstanding Paper Presentation Award for Minority Summer Interns, College of Agriculture and Life Sciences, Virginia Tech; Daniel Storm (1984), and Sharyl Walker (1988), Agricultural Engineering Department, Virginia Tech - First Place Award, Southeastern ASAE Student Paper Competition; John Owens (1982), Agricultural Engineering Department, Virginia Tech - Second Place Award, Southeastern Student Paper Competition and Fourth Place Award, the National ASAE Student Paper Competition.

University/College/Department Committees

University Multicultural Fellow, Virginia Tech (2005 – present)
Diversity Committee, College of Natural Resources, Virginia Tech (2006 – present)
Stakeholder Committee (Internal Advisory Board), Center for Geospatial Information Technology (CGIT), Virginia Tech (2003-present).
Advisory Committee, Service-Learning Center, Virginia Tech (2002-present).
Virginia Tech-AWRA Student Chapter, Faculty Advisor (1996-present).
Virginia Tech: Academic Standards Committee, College of Engineering (1984-87); Honor System, College of Agriculture and Life Sciences (1982-84); Library (1984-87).
Graduate Committee, (1980-82); Student Recruitment (1982-86); ASAE Student Branch Faculty Advisor (1983-85) Agricultural Engineering Department, VPI & SU;

Professional National, Regional, State Activities

Peer reviewer- Journal of American Water Resources Association (JAWRA); Journal of Environmental Engineering (ASCE); Transactions of the ASAE; Applied Engineering in Agriculture; Journal of Soil and Water Conservation; Water Environment Federation Publications; Proceedings of the International Association on Water Pollution Control; Book reviewer, Van Nostrand Reinhold, USDA-ARS, USGS National Grants Competition, the Powell River Grants Competition.

Member, National Water Quality Monitoring Council (2006 – present).

Invited Speaker, Renewable Natural Resources Foundation. Topic: Imperatives of Water Research and Education in the 21st Century. October 24, 2005. AGU, Washington, D.C.

Chair, National Water Research Symposium: Balancing Water Law and Science, October 10-12, 2005, Virginia Tech, Blacksburg, Virginia.

Member, Working Group for Developing National Inventory of Water Monitoring Programs (2005-2006)

Invited Panelist, National Council on Science and Environment (NCSE) conference. Topic: Control of Nonpoint Source Pollution. January 2004. Washington, D.C.

Program Chair, Water Security for 21st Century, Joint UCOWR/NIWR/EWRI Conference, Washington, D.C. (July 30-August 1, 2003)

Editorial Board, Water Resources Update, Universities Council on Water Resources (UCOWR) (2002-present)

Member, Research Committee, UCOWR (1999- 2004), Awards Committee, UCOWR (2006-2007).

Member, Water Quality Academic Advisory Committee, Virginia Department of Environmental Quality (1997 - present); Committee Chair (2002 – present).

Member, Steering Committee, Virginia Water Monitoring Council (1999 – present).

Member, Planning Committee, Integrated Decision-Making for Watershed Management International Symposium: Processes and Tools, Chevy Chase Maryland (January 2001)

Chair, Steering Committee, National Symposium: Advances in Land and Water Monitoring Technologies and Research for Management of Water Resources, Roanoke, Virginia (Nov. 2000).

Chair, Technical Program, Cross Currents in Water Policy Conference, Universities Council on Water Resources, Hood River, Oregon (August 1998).

Chair, Southwest Virginia Water Symposium'98, Abingdon, Virginia (October 1998).

Chair, Awards Selection Committee, Science, Engr. and Math. Institute (SEAMS), 1997-1998.

Chair, Karst-Water Environment Symposium, Roanoke, Virginia (October 1997).

Chair, Southwest Virginia Water Symposium'96, Abingdon, Virginia (October 1996).

Chair, International Symposium: Land Reclamation- Advances in Research and Technology, American Society of Agricultural Engineers, Nashville, Tennessee (December, 1992).

Chair, Sustainable Agriculture Symposium, the International Dimension, Virginia Tech, Blacksburg, Virginia (March 1991); Chair, Pesticide Research Conference, Richmond, Virginia (May 1989)

Chair, National Pesticide Symposium, Richmond, Virginia (June 1988)

Chair, Chesapeake Bay Research Conference, Williamsburg, Virginia (March 1986).

Chair, Task Committee on Land Application of Wastewater Sludge, Water Pollution Management Committee, Environmental Engineering Division, American Society of Civil Engineers (1984-87).

Chair, Student Activities Committee, Virginia Water Pollution Control Association (1986-87).

Chair, Water Resources Division of the VA Chapter, Soil and Water Conserv. Soc. of America (1983-84).

Program Committee, National Conference- Landuse Management and Geographic Information Systems, Blacksburg, Virginia (October 1991)

Member, Task Force for Successful Land Application of Sludge, Water Environment Fed. (1993-95).

Member, Task Force for the Review of EPA Sludge Regulations, Water Pollution Control Fed. (1988-89).

Member, Research Committee, Water Pollution Control Federation (1982-87).

Member, Nonpoint Source Pollution Committee, Water Pollution Control Federation (1984-87).

American Society of Agricultural Engineers: Land Application of Wastes Committee (SW-263) (1985-present)- Vice Chair (1992-93), Chair (1993-94);

Reclamation of Disturbed Lands Committee (Sw-264) (1985-present)- Secretary (1986-87), Vice Chair (1987-90), Chair (1990-92), Vice Chair (1994-95).

Professional International Activities

Virginia Tech Study Abroad Program – Teaching Sustainable Management of Water Resources, Dominican Republic (summer 2008, summer 2009).

Visited the University of Guyana to initiate collaboration with Virginia Tech (May 2003).

Invited Seminar “Total Maximum Daily Load (TMDL): Application to benthic impairments. In *Water Pollution VII Modeling, Measuring and Prediction*”. International Water Pollution Conference, Cadiz, Spain (June 2003).

Presented lectures and seminars at the University of Tokyo and Foundation of River & Watershed Environment Management (Tokyo) (September 22 – October 12, 2001).

Invited Seminar “Quality Assurance/Quality Control Protocols for Nonpoint Point Source Research”. Warsaw Agricultural University, Warsaw, Poland (September 2, 1998).

Invited Seminar “Alternative Agricultural Waste Management Practices” Godolo Agricultural University, Hungary (September 6, 1996)/

Member, International Committee; Asia/Pacific Rim Steering Committee, Water Environment Federation (1994-1999).

Faculty Chaperon, Engineering Students, Study Abroad Program in Japan, Virginia Polytechnic Institute and State University (May 1992).

Research Affiliate, Office of International Research and Development, Virginia Polytechnic Institute and State University (January 1 - June 30, 1991).

Lecturer "Methods of Water Pollution Control in Agriculture", Zhejiang Agricultural University, Honju, People's Republic of China (August 26 - September 10, 1985).

Invited Speaker "Hydrologic and Environmental Consequences of Land Application of Sludge", Shanghai Academy of Agricultural Sciences, Shanghai, People's Republic of China (September 11, 1985).

Invited Speaker "Rainfall Simulation as a Research Tool for Water Pollution Control", Civil Engineering Department, Tohoku University, Japan (September 20, 1985).

Member, Editorial Board for Foreign Literature, Journal of Japan Water Works Association (1974-76).

Off-Campus Teaching

Groundwater Resource Evaluation (Nov. 1983, Dec. 1985, Dec. 1986); Land Application of Sludge for Land Reclamation (Dec. 1982, Nov. 1983); College of Engineering/Office of Continuing Education, University of Kentucky, Lexington, KY.

Professional Development

Advanced Water Monitoring Workshop, Ann Arbor, Michigan (June 21-22, 2006)

Stream Habitat Workshop, Virginia Tech (December 14, 2001).

Stochastic Design of Water Quality Monitoring Systems, College of Engineering, Colorado State University, Fort Collins, Colorado (June 13-17, 1983).

Faculty Writing Workshop, Virginia Polytechnic Institute and State University, Blacksburg, Virginia (June 20 - July 22, 1983).

Publications

Books

Younos, T. (Editor). 2005. Total Maximum Daily Load: Approaches and Challenges. PennWell Books, Tulsa, Oklahoma. 373 pp. (ISBN 1-59370-046-6).

Younos, T. (Editor) 2002. Advances in Water Monitoring Research. Water Resources Publications, LLC. Littleton, Colorado. 230 pp. (ISBN 1-887201-33-5).

Special Journal Issues and Publications

Younos, T. (Issue Editor) 2006. Desalination – A Primer. Journal of Contemporary Water Research & Education. Issue No. 132, Universities Council on Water Resources (UCOWR), Southern Illinois University. 52 pp.

Younos, T. (Issue Editor) 2002. Universities' Contribution to TMDL Program Development. Water Resources Update No. 122, Universities Council on Water Resources (UCOWR), Southern Illinois University. 70 pp.

Lewicki, C. and T. Younos (Issue Editors) 2001. Integrating Universities' Knowledge and Student Service-Learning into Community-Based Watershed Management Programs. Water Resources Update No. 119, Universities Council on Water Resources (UCOWR), Southern Illinois University. 71 pp.

Younos, T.M. (Editor). 1987. Land Application of Wastewater Sludge. Environmental Engineering Division, American Society of Civil Engineers, New York, NY, 89 pp. (ISBN 0-87262-622-9).

Edited Conference Proceedings

Younos, T. (Editor) 2005. Proceedings Water Research Symposium: Balancing Water Law and Sciences, VWRRC P11-2005. Virginia Water Resources Research Center, Virginia Tech, Blacksburg, VA, 126 pp.

Younos, T. (Editor) 2000. Proceedings (CD-Rom) of the National Symposium: Advances in Land and Water Monitoring Technologies and Research for Management of Water Resources, VWRRC P6-2000, Virginia Water Resources Research Center, Virginia Tech, Blacksburg, VA, 308 pp.

Younos, T. and T. Sponenberg (Editors), 1998. Proceedings of the UCOWR'98 Conference Cross Currents in Water Policy (Hood River Oregon), Universities Council on Water Resources (UCOWR), Southern Illinois University, 193 pp.

Younos, T. and J. Poff (Editors), 1998. Proceedings of Southwest Virginia Water Symposium'98. Virginia Water Resources Research Center, Virginia Tech, Blacksburg, VA, 89 pp.

Younos, T., T. Burbey, E.H. Kastning, J. A. Poff. 1997 (Editors). Proceedings of the National Karst-Water Environment Symposium. Virginia Water Resources Research Center, Virginia Tech, Blacksburg, VA, 154 pp.

Younos, T. and J. Poff (Editors). 1997. Proceedings of Southwest Virginia Water Symposium'96. Virginia Water Resources Research Center, Blacksburg, VA, 68 pp.

Younos, T.M., P. Diplas, and S. Mostaghimi (Editors). 1992. Proceedings of the International Symposium: Land Reclamation - Advances in Research and Technology. American Society of Agricultural Engineers (ISBN 0-929355-37-7), St. Joseph, MI, 381 pp.

Weigmann, D.L. and T.M. Younos (Editors). 1988. Pesticides: Risks, Management, Alternatives. Proceedings of the National Pesticide Symposium. Virginia Water Resources Research Center, Blacksburg, Virginia, 102 pp.

Kuo, C.Y. and T.M. Younos (Editors). 1987. Proceedings of the Chesapeake Bay Research Conference. Virginia Polytechnic Institute and State University, Blacksburg, Virginia, 317 pp.

Chapter in Books

Younos, T. and J. Walker. 2003. Total Maximum Daily Load (TMDL): Application to benthic impairments. In *Water Pollution VII Modeling, Measuring and Prediction*. C.A. Brebbia, D. Almorza, and D. Sales (eds.). WIT Press. Southampton, UK. pp. 413-322.

Younos, T. and J. L. Walker. 2002. Evaluation of Biological Assessment Data and Protocols for TMDL Reports. In: Universities' Contribution to TMDL Program Development. *Water Resources Update* (Peer Reviewed Issue) No. 122, The Universities Council on Water Resources, Southern Illinois University, Carbondale, IL. pp. 47-54.

Walker, J., T. Younos, and A. Raflo. 2001. A Service-Learning Program and Its Role in Watershed Management. *Water Resources Update* No. 119, The Universities Council on Water Resources, Southern Illinois University, Carbondale, IL pp. 42-46.

Younos, T., C. Frago and T. Brown. 1998. Determination of Contamination Sources and Restoration Method for a Polluted Stream Using Monitoring Data. In: Rural Environmental Management, Polish Academy of Science, Publication No. 458. Warsaw, Poland. P. 517-524.

Younos, T.M. and D.L. Weigmann. 1997. Approaches for Protecting Ground Water from Agricultural Threats. In: Ground Water - Protection Alternatives and Strategies in the U.S.A. Water

Resources Engineering Division, American Society of Civil Engineers (ISBN 0-7844-0231-0), New York, N.Y., p. 125-151.

Younos, T.M., E.R. Collins, B.B. Ross, J.M. Swisher, R.F. Shank, and K.G. Wooden. 1995. Dairy Loafing Lot Rotational Management System for Nonpoint Source Pollution Control. In: Animal Waste and the Land-Water Interface (Ed. K. Steele). Lewis Publishers (ISBN 1-56670-189-9), p. 377-382.

Younos, T.M. 1987. Hydrologic Effects of Soil-Sludge Interaction. In: Land Application of Wastewater Sludge. Environmental Engineering Division, American Society of Civil Engineers (ISBN 0-87262-622-9), New York, N.Y., p. 40-43.

Journal Articles

Young, K.D. T. Younos, R. L. Dymond, D. F. Kibler and D. H. Lee. 2010. Application of the Analytic Hierarchy Process for selecting and modeling stormwater Best Management Practices. Journal of Contemporary Water Research & Education. Universities Council on Water Resources, Carbondale, Ill (*accepted for publication*).

Kaurish, F.W. and T. Younos. 2007. Developing a “Standardized” Water Quality Index for Evaluating Surface Water Quality. Jour. AWRA Vol. 43, No. 2: 533-545.

Younso, T. 2005. Emerging Threats to Drinking Water Quality. Renewable Resources Journal, Vol. 25, No. 2: 1-5.

Younos, T. R. De Leon, and C. Lewicki. 2003. Integrating Service-Learning into Watershed Management Programs: Opportunities and Challenges. Jour. AWRA Vol. 39, No. 1: 1-5.

Younos, T., F. W. Kaurish, T. Brown, R. DeLeon. 2001. Determining the Source of Stream Contamination in a Karst-Water System, Southwest Virginia, USA. Jour. AWRA Vol. 37, No. 2: 327-334.

Burbey, T.J., T. Younos, E. T. Anderson. 2000. Hydrologic Analysis of Discharge Sustainability from an Abandoned Underground Coal Mine. Jour. AWRA Vol. 36, No. 5: 1161-1172.

Younos, T.M., A. Mendez, E.R. Collins, and B.B. Ross. 1998. Effects of a Dairy Loafing Lot-Buffer Strip on Stream Water Quality. Jour. Amer. Water Resources Assoc. Vol. 34 (5): 1061-1070.

Thomson, S.J., T.M. Younos, and K. Wood. 1996. Evaluation of Calibration Equations and Application Methods for the Watermark Granular Matrix Soil Moisture Sensor. Applied Engineering in Agriculture Vol. 12(1): 99-103.

Younos, T.M., V.O. Shanholtz, C. Desai, and S.J. Thomson. 1995. GIS Linkage for a Soil Water Balance Model. Applied Engineering in Agriculture 11(1):107-109.

Tiyamani, C., V.O. Shanholtz, T.M. Younos, and S.J. Thomson. 1994. A Modeling Approach for Optimum Sediment Detention Pond Design. Water Resources Bulletin 30(2):335-341.

Shanholtz, V.O. and T.M. Younos. 1994. A Soil Water Balance Model for No-tillage and Conventional Tillage Systems. Jour. Agricultural Water Management 26(3):155-168.

Younos, T.M., E.R. Yagow, C. Zipper, and P. Diplas. 1993. Modeling Land Reclamation Strategies in a GIS Environment. Applied Engineering in Agriculture 9(1):61-68.

- Mostaghimi, S., T.M. Younos, and U. Tim. 1992. Effects of Sludge and Chemical Fertilizer Application on Runoff Water Quality. *Water Resources Bulletin* 28(3):545-552.
- Mostaghimi, S., T. Younos, and U. Tim. 1992. Crop Residue Effects on Nitrogen Yield in Water and Sediment Runoff from Two Tillage Systems. *Jour. Agric., Ecosystems, and Environment* 39:187-189.
- Mostaghimi, S., T.M Younos, and U. Tim. 1991. The Impact of Fertilizer Application Techniques on Nitrogen Yield from Two Tillage Systems. *Jour. Agric., Ecosystems, and Environment* 36:13-22.
- Younos, T.M. 1990. Manure Management and Pollution Prevention: Challenges for 1990s. Feature Article, *Jour. Water Environment & Technology* 2(3):54-57.
- Younos, T.M. and D.L. Weigmann. 1988. Pesticides in the Environment: A Continuing Dilemma. Feature Article, *Jour. Water Pollution Control Fed.* 60(7):1199-1205.
- Younos, T.M. and C.D. Metz. 1988. Site Selection for Land Application of Sludge Using a Geographic Information System. *Applied Engineering in Agriculture* 4(1):56-60.
- Trapanese, S.M., M.D. Smolen, and T.M. Younos. 1984. A Systems Approach for Agricultural Land Management and Water Quality Control. *Transactions of ASAE* 27(3):817-821.
- Younos, T.M. and M.D. Smolen. 1983. Simulating the Hydraulic Behavior of a Sludge-Amended Mine Soil. *Transactions of ASAE* 25(5):1397-1400.
- Younos, T.M., B.K. Teo, and M.D. Smolen. 1982. Sludge Amendment: A Unique Method of Enriching Mine Spoils. *BioCycle* 23(6):34-36.
- Younos, T.M. 1975. Hydraulics of Recharge Ponds. *Jour. Japan Water Works Assoc.* (text in Japanese with English abstract) 495:21-34.
- Younos, T.M. 1975. Clogging of Artificial Recharge Wells. *Jour. Industrial Water* (in Japanese) 195:34-39.
- Younos, T.M. 1974. Numerical Analysis of Artificial Groundwater Recharge. *Jour. Industrial Water* (in Japanese) 191:19-28.

Special Report (peer reviewed)

- Younos, T. 2004. The Feasibility of Using Desalination to Supplement Drinking Water Supplies in Eastern Virginia. VWRRC Special Report SR25-2004. Virginia Water Resources Research Center, Virginia Tech, Blacksburg, Virginia. 114 pp.

Articles in Conference Proceedings

- Younos, T., C. Grady, T. Chen and T. Parece. 2009. Conventional and Decentralized Water Infrastructure: Energy Consumption and Carbon Footprint. In: *Proceedings of the American Water Resources Association – 2009 Spring Specialty Conference – Managing Water Resources and Development in a Changing Climate* (Ed. H. Toniolo). 10pp. May 4-6, Anchorage, Alaska. ISBN: 1-882132-79-3.
- Lohani, V. K. and T. Younos. 2008. Implementation and Assessment of an Interdisciplinary NSF/REU Site in Watershed Sciences and Engineering. Full paper In: *Proceedings of the American Society of Engineering Education (ASEE) Annual Conference*, Pittsburg, PA, June 23-25, 2008.

Younos, T., C. Zipper, J. L. Walker. 2005. Developing Candidate Nutrient Criteria for Lakes and Reservoirs – The Virginia Experience. In: Proceedings of the UCOWR Annual Conference “River and Lake Restoration”, Portland, Maine.

De Leon, R. and T. Younos. 2002. Integrating Student Service-Learning and University Knowledge into Watershed Management Programs: The Stroubles Creek Watershed Case Study. In: Proceedings (CD) of the 7th National Watershed Conference, Richmond, Virginia. Pp. 93-102.

Walker, J. L., K. R. Porter, and T. Younos. 2002. Monitoring Needs to Meet Benthic TMDL Requirements. *Proceedings of the 2002 National Monitoring Conference*. May 19-23, 2002. Madison, WI.

Walker, J. and T. Younos. 2001. TMDL Plans for Stream Segments Benthically Impaired by Trout Farm Effluents. *Proceedings of The Society of Environmental Toxicology and Chemistry 22nd Annual Meeting*. November 11-15, 2001. Baltimore, MD. Abstract.

Walker, J. and T. Younos. 2002. Virginia's Water Monitoring and Needs Assessment Survey. *Proceedings of the 2002 National Monitoring Conference*. May 19-23, 2002. Madison, WI. Abstract.

Walker, J., T. Younos, J. Anderson, and K. Porter. 2001. Challenges in Preparing TMDL Reports for Stream Segments Impaired by Trout Farm Effluent. *Proceedings Virginia Water Research Symposium 2001--Protecting Our Water Resources for the Next Generation: Where Do We Go From Here?* November 14-16, 2001. Charlottesville, VA. Virginia Water Resources Research Center Publication P7-2001. pp 81-83.

Walker, J. L., T. Younos, J. L. Anderson, and K. R. Porter. 2001. TMDL Development for Benthic Impairments from Trout Farm Effluent. *Total Maximum Daily Load Environmental Regulations Proceedings of the March 11-13, 2002 Conference*. ASAE Publication 701P0102. pp 449-453.

Younos, T., M.S. Rosenzweig, J.L. Walker. 2000. Stream Health: Relating Stream Biota to Stream Water Quality. Proceedings, National Monitoring Conference, National Water Quality Monitoring Council, Austin, Texas. pp. 435-446.

Younos, T., T.J. Burbey, D.W. Reaves, E. Anderson, B. Wright. 2000. The Potential of Developing Mine Cavity Water for Water Supplies in the Coalfield Counties of Southwest Virginia. Proceedings, 1999 Virginia Water Research Symposium. Virginia Water Resources Research Center, Virginia Tech, Blacksburg, Virginia. pp. 54-58.

Keuhl, D.A., J. Randolph, T. Younos. 2000. Measurement of Potential Benefits of Public Health Performance Appraisals and Water System Planning. Proceedings, International Symposium, Small Drinking Water and Wastewater Systems. NSF International, Ann Arbor, MI. pp. 394-403.

Keuhl, D.A., J. Randolph, T. Younos. 2000. Assessing the Relationship of Small Water System Knowledge, Management, and Operation Practices with Violations of the Safe Drinking Water Act. Proceedings, International Symposium, Small Drinking Water and Wastewater Systems. NSF International, Ann Arbor, MI. pp. 528-532.

Wetzel, G., B. Grady, C.H. Byrd, T. Younos, L.W. Carstensen, D. Reaves, L. Matheson. 2000. An Integrated GIS/MIS-based Cost Model for Evaluating Effectiveness of Remote Control (Telemetric) Monitoring to Reduce Risk in Rural Small Water Systems. Proceedings, International Symposium, Small Drinking Water and Wastewater Systems. NSF International, Ann Arbor, MI. pp. 484-492.

Walker, J., T. Younos. 2000. Virginia Interactive Technology Assistance Network for Small Water Systems. Proceedings, International Symposium, Small Drinking Water and Wastewater Systems. NSF International, Ann Arbor, MI. pp. 539-545.

Shukla, S., T. Younos, S. Shukla, S. Mostaghimi. 1999. Evaluation of Precipitation Quality Trends in Virginia. Proceedings, AWRA Specialty Conference on Potential Consequences of Climate Variability, May 1999, Atlanta, Georgia, p. 209-212.

Younos, T., S. Mostaghimi, C. Newell, P. McClellan. 1998. Quality Assurance/Quality Control Plan for Agricultural Nonpoint Source Pollution Monitoring Research. Proc. of the National Water Monitoring Conference, The National Water Monitoring Council, U.S. Environmental Protection Agency, Washington, D.C. pp. 341-350.

Lovern, S. B., T. Younos, F. Smith, S. Mostaghimi. 1998. Wetland Restoration and Enhancement for Science Education. 1998. In: Proc. Southwest Virginia Water Symposium'98. Virginia Water Resources Research Center, Blacksburg, Virginia. pp. 51-58.

Younos, T. and D.W. Reaves. 1998. Drinking Water for Isolated Communities. In: Proc. Southwest Virginia Water Symposium'98. Virginia Water Resources Research Center, Blacksburg, Virginia. pp. 14-18.

Collins, E.R. Swisher, J.M., T.M. Younos, B.B. Ross, R.F. Shank, and K.G. Wooden. 1998. Dairy Loafing Lot Rotational Management Systems for Improving Animal Well-Being and Water Quality. Proc. of fourth International Dairy Housing Conference. 1998. American Society of Agricultural Engineers, St. Joseph, MI. pp. 336-345.

Younos, T.M., E.R. Collins, B.B. Ross. 1996. Seasonal Impact of a Dairy Loafing Lot on Stream Water Quality. In Proceedings Of Conserv '96, American Water Works Association, Denver, Colorado. pp. 177-181.

Ross, B.B., T. Younos, E.R. Collins, J. Hunnings, E. Daniel, D. Reeder, and K. Tweedy. 1995. Virginia Farmstead Assessment System. In: Proceedings Environment Virginia '95. Virginia Military Institute, Lexington, Virginia, p. 5-13.

Ross, B.B., T.M. Younos, E.R. Collins, and T.A. Dillaha. 1995. Land and Water Resources Engineering Programs for Rural Virginia. In: Proceedings Clean Water-Clean Environment-21st Century, American Society of Agricultural Engineers, St. Joseph, MI, p. 227-230

Ross, B.B., T.M. Younos, T.A. Dillaha, R.W. Young, N.M. Herbert, and S. J. Thomson. 1994. Pesticide Contamination of Targeted Household Water Supplies. In: Proceedings Fourth National Research Conference on Pesticides- New Directions in Pesticide Research, Development, Management, and Policy. Virginia Water Resources Research Center, Blacksburg, Virginia, p. 455-469.

Zipper, C.E., T.M. Younos, and E.R. Yagow. 1992. Comparative Effects of Alternative Re-Mining and Reclamation Strategies on Erosion Potential at a Case-Study Abandoned Mined Land Site. In:

Proceedings National Meeting of the American Society for Surface Mining and Reclamation, Duluth, MN., p. 671-680.

Younos, T.M. and D.L. Weigmann. 1989. Innovative Technologies for Controlling Water Pollution in Agriculture. In: Proceedings of the Eleventh International Congress on Agricultural Engineering (V.A. Dodd and P.M. Grace, Eds.), Dublin, Ireland, p. 319-324.

Younos, T.M. and D.L. Weigmann. 1989. Approaches for Controlling Groundwater Pollution from Agricultural Threats. In: Proceedings of the National Water Conference and Symposium, American Society of Civil Engineers, New York, N.Y. p. 342-349.

Younos, T.M. 1985. Research Needs in Land Application of Sludge: Hydrologic Effects of Soil-Sludge Interaction. In: Proceedings of Specialty Conference on Environmental Engineering. Environmental Engineering Division, American Society of Civil Engineers, Northeastern University, Boston, MA, p. 32-35.

Younos, T.M., T.A. Dillaha, and D.C. Martens. 1985. Advances in Land Application of Sludge: Qualitative Effects of Soil-Sludge Interaction. In: Proceedings of International Conference on New Directions and Research in Waste Treatment and Residual Management. The University of British Columbia, Vancouver, Canada, p. 547-556.

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- * Review of Remediation Technologies for Batie-West Spring, Lee County, Virginia. Virginia Department of Conservation and Recreation (March 1997). (\$5,000).
- ** Nitrogen, Phosphorus, and Sediment Loss from Dairy Loafing Lots as Affected by Rotational Vegetated Paddocks. Chesapeake Research Consortium (July 1997) (\$42,000).
- ** Long-Term Water Quality Trends in Virginia's Waterways. Virginia Department of Environmental Quality (January 1997). (\$85,000).
- * Cistern Use and Maintenance in Coalfield Communities of Southwest Virginia - In Coordination with the STEP Program. Service Learning Center, Virginia Tech (October 1996). (\$6,000)
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- * Southwest Virginia Water Symposium'96. Powell River Project, USDA-CREES (July 1996). (\$2000).
- ** Modeling Water and Sediment Movement in Riparian Wetlands. Virginia Water Resources Research Center (April 1995). (\$10,000).

- ** A Dairy Loafing Lot Rotational Management System Nonpoint Source Pollution Assessment and Demonstration. Virginia Department of Conservation and Recreation/EPA Section 319 Program (May 1994). (\$77,000).
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