

RECOGNITION AND AWARDS

- 2014: Commencement Address – Dept. of Civil and Environmental Engineering, University of Washington, June 15, 2014 *“Welcome to the Profession - An Engineering Educator’s Journey”*.
- 2013: Fellow, Environmental & Water Resources Institute, American Society of Civil Engineers (2013)
- 2011: Puget Sound Engineering Council, 2011 Academic Engineer of the Year, February 26, 2011.
- 2008: American Society of Civil Engineers Ven Te Chow Award, (for lifetime achievement in hydrologic engineering) May 2008, Citation “For an exceptional career in education and research in engineering hydrology and water resources management, outstanding service to the profession, and mentoring of young hydrologic engineers.”
- 2007: Department of Civil and Environmental Engineering, University of Washington, 2007 Henry Roy Berg Lecture “Fundamental Hydrological Modeling Related to Natural Disasters – Three Decades of Personal Enquiry”, February 14, 2007.
- 2003: Ray K. Linsley Award, American Institute of Hydrology, October 2003, Citation: “for major contributions to engineering hydrology”.
- 2001: Langbein Lecture, American Geophysical Union, Spring Annual Meeting, Boston, Massachusetts, May 30, 2001 "Hydrologic Variability and its Societal Importance".
- 1997: Kiesel Memorial Lecture, The University of Arizona March 7, 1997, "Managing Water Resources in Variable Climates -- Examples from the US and the South West of Western Australia".
- 1996: Fellow, American Association for the Advancement of Science (1996)
- 1996: Faculty Honor Member, University of Washington Chapter of Chi Epsilon, Civil Engineering Honor Society (1996)
- 1995: Outstanding Practice Paper Award (1995), American Society of Civil Engineers, Water Resources Planning and Management Division, for the paper “Relationships Between n-Day Flood Volumes for Infrequent Large Floods”.
- 1990: Fellow, American Geophysical Union (1990) -- Citation: "For contributions to an extraordinary range of hydrologic enquiry, particularly to predictions and their uncertainties."
- 1988: Fellow, American Society of Civil Engineers (1988)
- 1967: Fulbright-Hayes Travel Grant 1967

AUTHORSHIP

- Author/co-author of more than 100 publications in refereed journals.
- Author of six book chapters and editor of one book.
- Author/co-author of more than 35 technical reports.

FIFTY YEARS OBSERVING ISSUES IN HYDROLOGY AND WATER RESOURCES ENGINEERING

HYDROLOGY DAYS AWARD LECTURE
COLORADO STATE UNIVERSITY
MARCH 20, 2018

STEPHEN J. BURGES

Department of Civil and Environmental Engineering
University of Washington

In recognition of outstanding contributions to
hydrologic science and water resources engineering



HYDROLOGY DAYS AWARD LECTURE
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FIFTY YEARS OBSERVING ISSUES IN HYDROLOGY AND WATER RESOURCES ENGINEERING

STEPHEN J. BURGES

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Abstract. The work we do in hydrology and water resources engineering is influenced by the needs of society and the available tools. I place this presentation in the context of the world geo-political setting starting in 1944. I follow with landmark technological developments during the past sixty years and the resulting follow up technology that has influenced, and will continue to influence, our work. I draw examples from the early- and mid-20th century that should influence much of our modern activity, highlight key parts of the 1991 NRC Eagleson Committee Report and the 2001 NRC BROES Committee Report that set the course of much modern hydrologic research. Of all the issues in hydrology, solving the water balance for any catchment accurately remains a formidable challenge. I provide an example that shows the importance of using accurate precipitation input to determine the water balance and illustrate some of the shortcomings of existing liquid precipitation measuring networks.

EDUCATION

- B.Sc., Newcastle University, Australia (Physics & Mathematics), 1966
- B.E., Newcastle University, Australia (Hons. I) (Civil Engineering), 1966
- M.S., Stanford University (Civil Engineering), 1968
- Ph.D., Stanford University (Civil Engineering), 1970

POSITIONS HELD

- June 16, 2010-: Professor Emeritus Department of Civil and Environmental Engineering, University of Washington
- 1998-2010: Professor, Department of Civil and Environmental Engineering, University of Washington
- 1979-1998: Professor of Civil Engineering, University of Washington
- 1975-1979: Associate Professor of Civil Engineering, University of Washington
- 1970-1975: Assistant Professor of Civil Engineering, University of Washington
- 1967-1970: Research Assistant, Civil Engineering Department, Stanford University
- 1966-1967: Assistant Construction Engineer, The Hunter District Water Board, Newcastle, Australia

COMMITTEE MEMBERSHIP AND SERVICE

- Fellow, American Association for the Advancement of Science
- Life Member and Fellow, American Society of Civil Engineers
- Life Fellow, American Geophysical Union
- ASCE Water Resources Planning and Management Division, Committee on Water Resource Systems, (1975-1981, Chairman 1978-1979)
- ASCE Hydraulics Division, Committee on Research (1987-1992 chairman 1989-1990)
- Faculty Advisor, University of Washington Student Chapter ASCE (Oct. 1987 -Sept. 1990)
- Hydrology Program General Chairman Fall Annual Meetings, AGU, (1977-79)
- Editor, Water Resources Research, AGU, (Oct. 1980-Jan. 1985);
- Chairman, Water Resources Monograph Board, AGU, 1985-1987;
- Chairman, Horton Award Committee, AGU, 1988-1991;
- Chairman, Horton Research Grant Committee, AGU, 1990-1991,
- Chairman, Horton Medal Committee, AGU, 1990-1992;
- Member, Committee on Fellows, AGU, 1990-1992;
- Member Information Technology Committee, AGU, 1992-1994;
- President Elect, Hydrology Section, AGU, 1992-1994;
- President, Hydrology Section, AGU, 1994-1996,
- Member Publications Committee, AGU, 1996-1998,
- Chairman, Board of Journal Editors, AGU, 1996-1998.
- Member, Development Planning Committee, AGU, 1998-2000.
- Member, American Institute of Hydrology
- Chair, Linsley Award Committee 1995-2002, 2004-2005.
- Sigma Xi
- Member, American Meteorological Society
- Member, American Water Resources Association
- Member, International Association for Hydraulic Research
- Member, International Association of Hydrological Sciences
- Member, American Meteorological Society