Hugo B. Fischer Award

California Water and Environmental Modeling Forum
February 24, 2009
Hugo B. Fischer Award

• In Honor of Dr. Fischer’s Pioneering Work on SF Bay-Delta WQ Modeling

• Conceived & Endowed by Lyle Hoag
  – Retired Executive Director of CUWA
  – Co-Founder of the Modeling Forum
Hugo B. Fischer

- Professor of Civil Engineering at U.C. Berkeley until 1983
- World-Renown Authority
  - Salt-Water Intrusion
  - Water Pollution
  - Heat Dispersion in Waterways
  - Mixing of Rivers & Oceans
Hugo B. Fischer Award

- The innovative development, refinement or application of a computer model, or

- Significant furtherance of the effective use of models in open forums for planning or regulatory functions
Past Fischer Award Winners

- 1995-Dr. Alan Jassby (UCD)/Dr. Richard Denton (CCWD)
- 1996-Dr. Ralph Cheng (USGS)
- 1997-Dr. Greg Gartrell (CCWD)/Dr. Francis Chung (DWR)
- 1998-No Award
- 1999-Walter Bourez III (SWRI)/Jack Rowell (USBR)
- 2000-Dwight Russell (DWR)/Kamyar Guivetchi (DWR)
- 2001-Armin Munevar (DWR)
- 2002-Dr. Gerald Orlob (UCD)
- 2003-Dr. Emin Dogrul (DWR)
- 2004-Tom Heinzer (USBR)
- 2005-No Award
- 2006-Dr. Carl Chen (Systech Engr)/Dr. Paul Hutton (MWDSC)
- 2007-Dr. John DeGeorge (RMA)
- 2008-Dr. Jay Lund (UCD)/Dr. Richard Howitt (UCD)
2009
Hugo B. Fischer Award Winner

Dr. Pete Smith
U.S. Geological Survey—Retired
Dr. Pete Smith

Significant Contributions

- Development/Application of:
  - Si3D (Semi-Implicit 3D): Public Domain, 3D Hydrodynamics Model
  - Suite of interactive visualization tools for pre- and post-processing of hydrodynamic modeling and field data (w/ John Donovan)
Dr. Pete Smith

- B.S. Civil Engr: Villanova Univ. in 1974
- M.S. Civil Engr: Colorado State U. in 1976
- Ph.D. Civil & Environ. Engr: UCD in 1997
- Since 1983, USGS Research Hydrologist
  - Hydrodynamics of Estuaries
  - 3-D Numerical Modeling
  - Mixing in Coastal and Inland Waters
- Scientist Emeritus with USGS
Dr. Pete Smith

- Recent Applications of Si3D:
  - San Francisco Bay: Circulation and Salt Transport
  - Delta Cross Channel: Hydrodynamics
  - Clear Lake: Temp Structure w/ Wind- and Density-Driven Circulation
  - Lake Tahoe: Temp Structure w/ Wind- and Density-Driven Circulation
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- **Visualization Tools**
  - Improve Bathymetric Grid Development
  - Ease of Comparing Model and Measure Data
  - Ease of Presenting Results to Diverse Audiences
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Promoting Excellence and Consensus in Water and Environmental Modeling