

Parmeshwar (Pravi) L. Shrestha

PhD, PE, BCWRE, BCCE
Senior Managing Consultant



Dr. Pravi Shrestha has over 35 years of experience in the fields of water resources and environmental engineering in the US and abroad. His experience encompasses hydrology, hydraulics, hydrodynamics, sediment transport, assessment of flooding and debris flows, and contaminant fate and transport.

Dr. Shrestha's expertise in hydrology and hydraulics includes delineation and mitigation of flood hazards, analysis of alluvial fan and post-wildfire flooding and erosion, and the design and analysis of open channel flow and hydraulic structures. His experience in the areas of hydrodynamics, sediment transport, and contaminant transport includes the development and application of finite element and finite difference models in surface water systems such as lakes, rivers, bays, and estuaries.

Dr. Shrestha has led workshops on the use of hydrodynamic and sediment transport in both the United States and in China. His teaching experience includes courses in hydraulics, open channel flow, and sediment and pollutant transport.

Dr. Shrestha is an Associate Editor for the ASCE Journal of Hydrologic Engineering, and for the Journal of Coastal Research. He also serves on the ASCE Standards Committee KSTAT, the ASCE Surface Water Hydrology Technical Committee, and the COPRI Navigation Engineering Task Committee. He participated in the Water Environment Federation Watershed and Wet Weather Technical Bulletin Advisory Board, and ASCE Task Committees on Contaminated Sediments and Fluid Mud. He was also a member of the organizing committee for InterCoh 2003, and of the advisory committee for the biennial conference on Estuarine and Coastal Modeling.

Education

PhD, Water Resources Engineering, University of California, Davis, 1991

MS, Water Resources Engineering, University of California, Davis, 1985

BS, Civil Engineering, Jadavpur University, India, First Class Honors, 1979

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Areas of Specialization

- Storm Investigation
- Wildfire Investigations
- Hydrology and hydraulics
- Hydrodynamics
- Sediment transport
- Contaminant transport
- 1-, 2-, and 3-D numerical modeling
- Fate and transport studies
- Flood hazard analysis and mitigation
- Floodplain mapping
- Debris flow evaluation
- Post-wildfire flooding and erosion analysis
- Dam failure investigation
- Dam removal and sediment stability analysis
- Levee accreditation
- Landslide evaluation including numerical modeling
- Hurricanes and storm surge
- Coastal hydraulics and sediment migration
- Wetlands

Licenses & Certifications

- State of California P.E. License 67971
- State of Arizona P.E. (Civil) License 51083
- State of Virginia P.E. License 026710
- Diplomate, Water Resources Engineer, License 00278
- Diplomate, Coastal Engineer, License 65
- Hong Kong Institution of Engineers, License MO0267236 (dormant since 2022)

Languages

- English, Hindi, Bengali, Nepali, Newari

Positions Held

Engineering Systems Inc., Irvine, California

- Senior Managing Consultant, 2018 – Present

Exponent, Inc., Irvine, California

- Managing Engineer to Senior Managing Engineer and Head of Water Resources Engineering, 2003-2018

HydroQual, Inc., Mahwah, New Jersey

- Project Engineer, Project Manager & Senior Project Manager, 1997-2003

Hong Kong University of Science & Technology, Clear Water Bay, Hong Kong

- Visiting Assistant Professor, 1994-1996

Virginia Tech., Blacksburg, Virginia

- Visiting Assistant Professor, 1993-1994

University of California, Davis, California

- Post-doctoral Research Associate, 1992

Department of Irrigation and Drainage, Kathmandu, Nepal

- Assistant Engineer, 1980-1983

Professional Affiliations/Honors

Academy of Coastal Ocean Port & Navigation Engineers — ACOPNE

- Member since 2012

American Academy of Water Resources Engineer — AAWRE

- Member since 2007

American Society of Civil Engineers — ASCE

- Member since 1994

Coastal Education and Research Foundation — CERF

- Member since 2018

American Geophysical Union — AGU

- Member since 1997

Hong Kong Institution of Engineers

- Member since 1995 (dormant since 2022)

Water Environment Federation — WEF

- Member since 2000 (currently dormant)

Virginia Tech

- Member since 1993
- Faculty of the Year Award, Department of Civil Engineering, 1994
- Dean's List for Outstanding Instructor, 1993, 1994
- Nominated for Engineering Sporn Award in Teaching Excellence, 1994

University of California, Davis

- Member since 1983
- Fulbright-Hays Scholar, M.S. Program, 1983-1986

Jadavpur University

- Member since 1974
- Colombo Plan Scholar, Bachelor program, 1974-1979
- Graduated with First-class honors

Publications

"Navigation Channel Sedimentation Solutions," Navigation Channel Sedimentation Task Committee, ASCE Press, Reston, VA, October 2023. <https://doi.org/10.1061/9780784485149>

"Estimation of Aquifer Hydraulic Properties by Inverse Numerical Model of Aquifer Pumping Tests," H.A. Loaiciga et al., ANSI/ASCE/EWRI 70-19, ASCE Press, Reston, VA, 2020. <https://doi.org/10.1061/9780784415412>

"Cohesive Sediment Transport," **P.L. Shrestha** and A.F. Blumberg, in Encyclopedia of Coastal Science, C. Finkl and C. Makowski, Eds., Springer, Cham, March 2018. https://doi.org/10.1007/978-3-319-48657-4_95-2

"Standard Guideline for Calculation of the Saturated Hydraulic Conductivity of Fine-Grained Soils," H.A. Loaiciga et al., ASCE/EWRI Standard 65-2017, ASCE Press, Reston, VA, 2017. <https://doi.org/10.1061/9780784414347>

"Nautical Depth for U.S. Navigable Waterways: A Review," W.H. McAnally, R. Kirby, S.H. Hodge, T.L. Welp, N. Greiser, **P. Shrestha**, D. McGowan, and P. Turnipseed, Journal of Waterway, Port, Coastal, and Ocean Engineering, vol. 142, no. 2, September 2015. [https://doi.org/10.1061/\(ASCE\)WW.1943-5460.0000301](https://doi.org/10.1061/(ASCE)WW.1943-5460.0000301)

"Conceptual Site Model for Newark Bay — Hydrodynamics and Sediment Transport," **P.L. Shrestha**, S.H. Su, S.C. James, P.J. Shaller, M. Doroudian, C.E. Firstenberg, and C.T. Thompson, Journal of Marine Science and Engineering, vol. 2, no. 1, pp. 123–139, 2014. <https://doi.org/10.3390/jmse2010123>

"Estimating the Storm Surge Recurrence Interval for Hurricane Sandy," **P.L. Shrestha**, S.C. James, P.J. Shaller, M. Doroudian, D.B. Peraza, and T.A. Morgan, Proceedings of the World Environmental and Water Resources Congress 2014: Water without Borders, Environmental Water Resources Institute of the American Society of Civil Engineers, Portland, OR, June 1–5, 2014, pp. 1906–1915. <https://ascelibrary.org/doi/10.1061/9780784413548.191>

"Numerical Modeling of the 2005 La Conchita Landslide, Ventura County, California," P.J. Shaller, **P.L. Shrestha**, M. Doroudian, D. Sykora, and D. Hamilton, in Flood Hazard Identification and Mitigation in Semi- and Arid Environments, R.H. French and J.J. Miller, Eds., World Scientific Publishing Co., Inc., Hackensack, NJ, October 2011. <https://doi.org/10.1142/8175>

"Needs and Benefits of Co-operation," R.H. French, J.E. Fuller, P.J. Shaller, and **P.L. Shrestha**, in Flood Hazard Identification and Mitigation in Semi- and Arid Environments, R.H. French and J.J. Miller, Eds., World Scientific Publishing Co., Inc., Hackensack, NJ, October 2011. <https://doi.org/10.1142/8175>

"The 2005 La Conchita Landslide, California: Part 1 - Geology," P.J. Shaller, **P.L. Shrestha**, M. Doroudian, D. Sykora, and D. Hamilton, in Proceedings of the 5th International Conference on Debris-Flow Hazards Mitigation: Mechanics, Prediction and Assessment, Padua, Italy, June 14–17, 2011, Italian Journal of Engineering Geology and Environment, R. Genevois, D. Hamilton, and A. Prestininzi, Eds., GeneCasa Editrice Università La Sapienza, Rome, Italy, 2011, pp. 745–750. <http://dx.doi.org/10.4408/IJEGE.2011-03.B-081>

"The 2005 La Conchita Landslide, California: Part 2 - Modeling," **P.L. Shrestha**, P.J. Shaller, M. Doroudian, D. Sykora, and D. Hamilton, in Proceedings of the 5th International Conference on Debris-Flow Hazards Mitigation: Mechanics, Prediction and Assessment, Padua, Italy, June 14–17, 2011, Italian Journal of Engineering Geology and Environment, R. Genevois, D. Hamilton, and A. Prestininzi, Eds., GeneCasa Editrice Università La Sapienza, Rome, Italy, 2011, pp. 751–758. <http://dx.doi.org/10.4408/IJEGE.2011-03.B-082>

"Standard Guideline for Geostatistical Estimation and Block-Averaging of Homogeneous and Isotropic Saturated Hydraulic Conductivity," H.A. Loaiciga et al., ASCE/EWRI Standard 54-2010(R2016), ASCE Press, Reston, VA, 2010. <https://doi.org/10.1061/9780784410929>

"Flood Hazard Analysis and Mitigation," **P.L. Shrestha**, D.L. Hamilton, K. Cydzik, S. Wardak, N. Jordan, P.J. Shaller, and M. Doroudian, Proceedings of the International Conference on Water, Environment, Energy and Society (WEES-2009), pp. 699–706, New Delhi, India, January 12–16, 2009.

"Sedimentation Analysis for Existing and Proposed Development Conditions," B. Murillo, S. Wardak, D.L. Hamilton, **P.L. Shrestha**, K. Cydzik, and M. Doroudian, Proceedings of the International Conference on Water, Environment, Energy and Society (WEES-2009), pp. 1636–1641, New Delhi, India, January 12–16, 2009.

"Standard Guideline for Fitting Saturated Hydraulic Conductivity Using Probability Density Function and Standard Guideline for Calculating the Effective Saturated Hydraulic Conductivity," H.A. Loaiciga et al., ASCE/EWRI Standard 50-08(R2016) and 51-08(R2016), ASCE Press, Reston, VA, 2008. <https://doi.org/10.1061/9780784409930>

"Management of Fluid Mud in Estuaries, Bays, and Lakes. I: Present State of Understanding on Character and Behavior," W.H. McAnally, C. Friedrichs, D. Hamilton, E. Hayter, **P. Shrestha**, H. Rodriguez, A. Sheremet, and A. Teeter, ASCE Journal of Hydraulic Engineering, vol. 133, no. 1, pp. 9–22, 2007. [https://doi.org/10.1061/\(ASCE\)0733-9429\(2007\)133:1\(9\)](https://doi.org/10.1061/(ASCE)0733-9429(2007)133:1(9))

"Management of Fluid Mud in Estuaries, Bays, and Lakes. II: Measurement, Modeling, and Management," W.H. McAnally, A. Teeter, D. Schoellhamer, C. Friedrichs, D. Hamilton, E. Hayter, **P. Shrestha**, H. Rodriguez, A. Sheremet, and R. Kirby, ASCE Journal of Hydraulic Engineering, vol. 133, no. 1, pp. 23–38, 2007. [https://doi.org/10.1061/\(ASCE\)0733-9429\(2007\)133:1\(23\)](https://doi.org/10.1061/(ASCE)0733-9429(2007)133:1(23))

"Modeling Noncohesive Sediment Transport Using Multiple Sediment Size Classes," S. James, **P. Shrestha**, and J. Roberts, Journal of Coastal Research, vol. 22, no. 5, pp. 1125–1132, 2006. <https://doi.org/10.2112/05-0479.1>

"Cohesive Sediment Transport," **P. Shrestha** and A. Blumberg, in Encyclopedia of Coastal Science, M. Schwartz, Ed., Springer, The Netherlands, pp. 327–330, 2005. https://doi.org/10.1007/1-4020-3880-1_95

"Mixing and Transport," L.C. Roig, **P. Shrestha**, and S.R. Ramireddygar, Water Environment Research, vol. 72, no. 5, pp. 1–50, 2000. <https://doi.org/10.2175/106143000X144204>

"Mixing and Transport," L.C. Roig and **P. Shrestha**, Water Environment Research, vol. 71, no. 5, pp. 931–948, 1999. <https://doi.org/10.2175/106143099X133910>

"Continuum Bed Model for Estuarine Sediments Based on Nonlinear Consolidation Theory," R.S. Govindaraju, S.R. Ramireddygar, **P. Shrestha**, and L.C. Roig, ASCE Journal of Hydraulic Engineering, vol. 125, no. 3, pp. 300–304, 1999. [https://doi.org/10.1061/\(ASCE\)0733-9429\(1999\)125:3\(300\)](https://doi.org/10.1061/(ASCE)0733-9429(1999)125:3(300))

"Comparison of 1-D and 2-D Models for Simulation of Hydrodynamics and Water Quality in Shallow Bays," **P. Shrestha**, G.T. Orlob, and I.P. King, Journal of Environmental Science and Health, vol. A32, no. 4, pp. 979–999, 1997. <https://doi.org/10.1080/10934529709376591>

"An Integrated Model Suite for Sediment and Pollutant Transport in Shallow Lakes," **P. Shrestha**, Advances in Engineering Software, vol. 27, no. 3, pp. 201–212, 1996. [https://doi.org/10.1016/S0965-9978\(96\)00032-4](https://doi.org/10.1016/S0965-9978(96)00032-4)

"Aggregation of Cohesive Sediments Induced by Internal Shear Rates with Application to Sedimentation," **P. Shrestha**, Environment International, vol. 22, no. 6, pp. 717–727, 1996. [https://doi.org/10.1016/S0160-4120\(96\)00063-3](https://doi.org/10.1016/S0160-4120(96)00063-3)

"Multiphase Distribution of Cohesive Sediments and Heavy Metals in Estuarine Systems," **P. Shrestha** and G.T. Orlob, ASCE Journal of Environmental Engineering, vol. 122, no. 8, pp. 730–740, 1996. [https://doi.org/10.1061/\(ASCE\)0733-9372\(1996\)122:8\(730\)](https://doi.org/10.1061/(ASCE)0733-9372(1996)122:8(730))

"Comparison of Single Mechanism and Multi Mechanism-Based Approaches for Kinetics of Sediment Removal," R.S. Govindaraju, **P. Shrestha**, and G.T. Orlob, Environmental Technology, vol. 15, pp. 1101–1120, 1994. <https://doi.org/10.1080/09593339409385521>

"Design of Inverted Siphons — Program Documentation," **P. Shrestha** and J.J. DeVries, Advances in Engineering Software, vol. 14, no. 3, pp. 205–212, 1992. [https://doi.org/10.1016/0965-9978\(92\)90023-9](https://doi.org/10.1016/0965-9978(92)90023-9)

"Interactive Computer-Aided Design of Inverted Siphons," **P. Shrestha** and J.J. DeVries, ASCE Journal of Irrigation and Drainage Engineering, vol. 117, no. 2, pp. 233–254, 1991. [https://doi.org/10.1061/\(ASCE\)0733-9437\(1991\)117:2\(233\)](https://doi.org/10.1061/(ASCE)0733-9437(1991)117:2(233))

"Erosion Rate of Dispersive and Non-Dispersive Clays," **P. Shrestha** and K. Arulanandan, Discussion, Journal of Geotechnical Engineering, vol. 114, no. 5, pp. 22433; ASCE Journal of Geologic Engineering, pp. 1824–1826, 1989. [https://doi.org/10.1061/\(ASCE\)0733-9410\(1989\)115:12\(1824\)](https://doi.org/10.1061/(ASCE)0733-9410(1989)115:12(1824))

Presentations

"Evaluating Sediment Dynamics in Waterways," **P.L. Shrestha**, P.J. Shaller, M. Doroudian, and K. Cydzik, Proceedings of the 10th International Conference on Scour and Erosion (ICSE-10), pp. 237–250, October 18–21, 2021.

"Construction, Operation, and Failure of Ka Loko Dam, Kauai, Hawaii: Association of Engineering Geologists 2020 Annual Meeting, Dams and Levees Lesson Learned Symposium, Part 1," P.J. Shaller, M. Doroudian, K. Cydzik, and **P. Shrestha**, September 17, 2020.

"Post-fire Planning, Policy, and Natural Hazards Mitigation: Lessons Learned During Recovery from Wildfires in the State of California, USA, 2015–2019," K. Cydzik, P.J. Shaller, **P. Shrestha**, and M. Doroudian, American Geophysical Union 2019 Fall Meeting, San Francisco, CA, December 9–13, 2019.

"Western Wildfires and the Mississippi Delta: Lessons Learned About Ecosystem Management from Attempts to Control Mother Nature," T.L. Deardorff, K. Palmquist, P.J. Shaller, and **P.L. Shrestha**, Proceedings of the World Environmental and Water Resources Congress 2016, West Palm Beach, FL, pp. 372–378, May 22–26, 2016. <https://doi.org/10.1061/9780784479858.038>

"Adverse Hydrologic and Ecologic Impacts of Wildfires in Western Watersheds," P.J. Shaller, **P.L. Shrestha**, T.L. Deardorff, and J. Wren, Proceedings of the World Environmental and Water Resources Congress 2015, Austin, TX, pp. 2501–2509, May 17–21, 2015. <https://doi.org/10.1061/9780784479162.245>

"Post-wildfire Consequences on Watershed Hydrology and the Environment," P.J. Shaller, **P.L. Shrestha**, T.L. Deardorff, and J. Wren, Poster, SETAC North America 36th Annual Meeting, Salt Lake City, UT, November 1–5, 2015.

"Nautical Depth for U.S. Navigable Waterways: A Review," W.H. McAnally and **P.L. Shrestha**, Presentation, World Environmental and Water Resources Congress 2015: Floods, Droughts, and Ecosystems, Environmental Water Resources Institute of the American Society of Civil Engineers, Austin, TX, May 15–21, 2015.

"Risk Factors and Ecological Disturbances That Contribute to the Occurrence of Catastrophic Wildfires in California," T.L. Deardorff, S. Semenova, P.J. Shaller, and **P.L. Shrestha**, Presentation, World Environmental and Water Resources Congress 2015: Floods, Droughts, and Ecosystems, Environmental Water Resources Institute of the American Society of Civil Engineers, Austin, TX, May 15–21, 2015.

"Analysis of Maximum Probable Storm Surge at the South Texas Project Site," J.R. Bailey, **P.L. Shrestha**, C. Dawson, and S. Head, Proceedings of the World Environmental and Water Resources Congress 2014: Water without Borders, Environmental Water Resources Institute of the American Society of Civil Engineers, Portland, OR, June 1–5, 2014, pp. 1412–1421. <https://ascelibrary.org/doi/abs/10.1061/9780784413548.142>

"Simulating Flow Changes Due to Current Energy Capture: SNL-EFDC Model Verification," S.C. James, J.D. Roberts, and **P.L. Shrestha**, Proceedings of the World Environmental Water Resources Congress 2014: Water without Borders, Environmental and Water Resources Institute of the American Society of Civil Engineers, Portland, OR, June 1–5, 2014, pp. 816–825. <https://doi.org/10.1061/9780784413548.085>

"An Evaluation of Post-wildfire Mitigation Measures on Flood Hazard Potential in Southern California," P.J. Shaller, J. Wren, **P.L. Shrestha**, M. Sama, and M. Doroudian, Poster, World Environmental and Water Resources Congress 2014: Water without Borders, Environmental Water Resources Institute of the American Society of Civil Engineers, Portland, OR, 2014.

"Conceptual Site Model for Newark Bay - Hydrodynamics and Sediment Transport," **P.L. Shrestha**, S.H. Su, S.C. James, P.J. Shaller, M. Doroudian, C.E. Firstenberg, and C.T. Thompson, presented at the 13th International Conference on Estuarine and Coastal Modeling, San Diego, CA, November 4–6, 2013.

"The Station Fire Revisited, Projected Versus Realized Flood Impacts 2009–2013," P.J. Shaller, K. Cydzik, M. Sama, J. Wren, and **P. Shrestha**, presented at 2013 Floodplain Management Conference, Anaheim, CA, September 4, 2013.

"The Station Fire Revisited, Projected Versus Realized Flood Impacts 2009–2013," P.J. Shaller, K. Cydzik, M. Sama, J. Wren, and **P. Shrestha**, presented at 2013 Wildland Fire Litigation Conference, Monterey, CA, April 21, 2013.

- "Storm Surge Study of the Hawaiian Islands Using the EST Method," **P.L. Shrestha**, R.T. Lenaburg, N.W. Scheffner, M. Rezakhani, D. Hamilton, and K. Cydzik, Proceedings of the World Environmental and Water Resources Congress 2011, Palm Springs, CA, May 22–26, 2011. [https://doi.org/10.1061/41173\(414\)238](https://doi.org/10.1061/41173(414)238)
- "Reconnaissance Following the May 12, 2008 M7.9 Wenchuan Earthquake, Sichuan, China," K. Cydzik, D. Hamilton, H. Stennar, A. Cattarossi, and **P.L. Shrestha**, Poster, World Environmental and Water Resources Congress 2011, Palm Springs, CA, May 22–26, 2011.
- "A Case Study of the Fire-flood Sequence in Southern California," P.J. Shaller, K. Cydzik, J. Wren, D. Hamilton, and **P.L. Shrestha**, Presentation, Wildland Fire Litigation Conference, San Diego, CA, April 15–17, 2011.
- "Assessment of Alluvial Fan Flooding Hazards and Proposed Mitigation, Thousand Palms, California," P.J. Shaller, **P.L. Shrestha**, D. Hamilton, N. Jordan, M. Doroudian, and M. Rezakhani, Presentation, Floodplain Management Association Annual Conference, Henderson, NV, November 2–5, 2010.
- "Assessment of Flood Hazard, Travertine Point Area, Southeastern California," P.J. Shaller, **P.L. Shrestha**, M. Doroudian, and M. Rezakhani, Presentation, Floodplain Management Association Annual Conference, Henderson, NV, November 2–5, 2010.
- "The January 10, 2005 La Conchita Landslide," P.J. Shaller, **P.L. Shrestha**, M. Doroudian, D. Hamilton, and D. Sykora, Poster, GSA Cordilleran Section and Pacific Section AAPF with Western Regional SPE, Anaheim, CA, May 27–29, 2010.
- "Natural Hazard Public Policy Implications of the May 12, 2008 M7.9 Wenchuan Earthquake, Sichuan, China," K. Cydzik, D. Hamilton, H. Stenner, A. Cattarossi, and **P.L. Shrestha**, Poster, American Geophysical Union 2009 Fall Meeting, San Francisco, CA, December 14–18, 2009.
- "Numerical Modeling to Support Floodplain Mapping in Coastal Areas," K. Cydzik, **P.L. Shrestha**, D. Hamilton, M. Rezakhani, N.W. Scheffner, and R.T. Lenaburg, Poster, American Geophysical Union 2009 Fall Meeting, San Francisco, CA, December 14–18, 2009.
- "EST-Based Tropical Storm Flood Mapping of the Hawaiian Islands," R.T. Lenaburg, N.W. Scheffner, **P.L. Shrestha**, K. Cydzik, M. Rezakhani, and D.L. Hamilton, Proceedings of An International Perspective on Environmental and Water Resources, Bangkok, Thailand, January 5–7, 2009.
- "Inland Flood Hazard Analysis and Mitigation," **P.L. Shrestha**, D. Hamilton, N. Jordan, J.E. Lyle, M. Doroudian, P.J. Shaller, S. Wardak, K. Cydzik, and J. Medellin, Poster, ASCE-EWRI World Environmental & Water Resources Conference, Honolulu, HI, May 12–16, 2008.
- "Sedimentation Analysis in an Open Channel Network for Existing and Proposed Development Conditions," S. Wardak, B. Murillo, D. Hamilton, **P.L. Shrestha**, M. Doroudian, K. Cydzik, J. Medellin, and P.J. Shaller, Poster, ASCE-EWRI World Environmental and Water Resources Conference, Honolulu, HI, May 12–16, 2008.
- "Hurricane Flood Insurance Study for the Hawaiian Islands," J.W. Gangai, R. Lenaburg, B. Batten, E. Drei-Horgan, N. Scheffner, D. Hamilton, M. Rezakhani, and **P. Shrestha**, Proceedings of the ASCE-COPRI Solutions to Coastal Disasters Congress 2008, Oahu, HI, April 13–16, 2008. [https://doi.org/10.1061/40968\(312\)39](https://doi.org/10.1061/40968(312)39)

- "Analysis of Flood Hazards for a Residential Development," **P. Shrestha**, D. Hamilton, J. Lyle, M. Doroudian, and P. Shaller, Proceedings of the ASCE-World Environmental and Water Resources Congress 2007, Tampa, FL, May 15–19, 2007. [https://doi.org/10.1061/40927\(243\)26](https://doi.org/10.1061/40927(243)26)
- "A Three-Dimensional Model for Lake Sam Rayburn, Texas," **P. Shrestha**, G. Bigham, D. Hamilton, and M. Doroudian, Proceedings of the ASCE International Perspective on Environmental and Water Resources, New Delhi, India, December 18–20, 2006.
- "Hydrological Potential for the Restoration of the Mesopotamian Marshlands," A. Cattarossi, P. Mastrocola, D. Hamilton, and **P. Shrestha**, Proceedings of the ASCE International Perspective on Environmental and Water Resources, New Delhi, India, December 18–20, 2006.
- "Post-Katrina Strategies to Manage Consequences of Levee Failure," K. Futornick, **P. Shrestha**, D. Sykora, and D. Hamilton, Presentation, A&WMA 99th Annual Conference and Exhibition, New Orleans, LA, June 20–23, 2006.
- "Flood Hazard Analysis and Protection Plan for a Residential Development," D. Hamilton, **P. Shrestha**, J. Lyle, M. Doroudian, and P. Shaller, Proceedings of the ASCE-World Environmental and Water Resources Congress 2006, Omaha, NE, May 21–25, 2006. [https://doi.org/10.1061/40856\(200\)204](https://doi.org/10.1061/40856(200)204)
- "Investigation of Flood and Debris Flow Recurrence — Andreas Canyon, San Jacinto Range, Southern California," P. Shaller, D. Hamilton, **P. Shrestha**, J. Lyle, and M. Doroudian, Proceedings of the ASCE-World Environmental and Water Resources Congress 2006, Omaha, NE, May 21–25, 2006. [https://doi.org/10.1061/40856\(200\)455](https://doi.org/10.1061/40856(200)455)
- "The Fire-Flood-Erosion Sequence in California — A Recipe for Disaster," P. Shaller, D. Hamilton, J. Lyle, E. Mathieson, and **P. Shrestha**, Proceedings of the ASCE-World Environmental and Water Resources Congress 2006, Omaha, NE, May 21–25, 2006. [https://doi.org/10.1061/40856\(200\)454](https://doi.org/10.1061/40856(200)454)
- "Continuous Treatment of Cohesive and Non-cohesive Sediment Dynamics in a 3-dimensional Model of Meandering Flow," C. Jones, S. James, J. Roberts, and **P. Shrestha**, Presentation, 9th Estuarine and Coastal Modeling (ECM9), Charleston, NC, October 31–November 2, 2005.
- "Quantifying Resuspension of Fine-grained Bottom Sediments," **P. Shrestha**, J. Roberts, S. James, and J. Gailani, Presentation, InterCoh2005, Saga University, Saga, Japan, September 20–23, 2005.
- "Investigation of Flood Hazards on Alluvial Floodplains," P. Shaller, D. Hamilton, M. Doroudian, **P. Shrestha**, J. Lyle, and A. Cattarossi, Proceedings of the ASCE-World Water and Environmental Resources Congress 2005, Anchorage, AK, May 15–19, 2005. [https://ascelibrary.org/doi/abs/10.1061/40792\(173\)421](https://ascelibrary.org/doi/abs/10.1061/40792(173)421)
- "Noncohesive Sediment Transport Modeling with Multiple Size Classes," S. James, **P. Shrestha**, and J. Roberts, Proceedings of the ASCE-World Water and Environmental Resources Congress 2005, Anchorage, AK, May 15–19, 2005. [https://ascelibrary.org/doi/abs/10.1061/40792\(173\)429](https://ascelibrary.org/doi/abs/10.1061/40792(173)429)
- "Impact of Sewage Line Spills on Pathogen Levels in Recreational Waters," **P. Shrestha**, D. Hamilton, N. Jordan, M. Doroudian, S. Hong, and D. Proctor, Proceedings of the ASCE-World Water and Environmental Resources Congress 2005, Anchorage, AK, May 15–19, 2005. [https://doi.org/10.1061/40792\(173\)127](https://doi.org/10.1061/40792(173)127)

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"Fire-flood-erosion Sequence: Analysis and Mitigation," P. Shaller, D. Hamilton, J. Lyle, E. Medley, E. Mathieson, and **P. Shrestha**, Presentation, Arid Regions 10th Biennial Conference, Restoration and Management of Arid Watercourses, Mesa, AZ, November 16–19, 2004.

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