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ACADEMIC DEGREES

BSc (Hons) Agricultural Engineering (summa cum laude)	Cranfield University, England	1977
MS Agricultural and Civil Engineering	Iowa State University, Ames, IA.	1981
PhD Water Resources Systems Engineering	Cornell University, Ithaca, NY.	1987
ORCID 0000-0003-3333-4763		
Researcher-ID G-2407-2015		

ACADEMIC

Staff Scientist: Lawrence Berkeley National Laboratory	Oct 90 - present
Group Leader: HydroEcological Engineering Advanced Decision Support	Sept 02- present
Visiting Scientist, Energy Biosciences Institute, University of California, Berkeley	Jan 08 - Dec 15
Associate Scientist, Department of Civil Engineering, University of California, Merced	Jun 05 - present
Adjunct Research Professor, Department of Plant Science, California State University, Fresno	May 05 - present
Research Engineer: University of California, Berkeley	Oct 99 - Sep 03
Postdoctoral Research Associate IV: Cornell University	Jan 87 - Sep 90
Program on Science, Technology and Society	
General Electric Fellow: Cornell University	Jan 85 - Jan 87
Program on Science, Technology and Society.	
Research and Teaching Assistant: Cornell University	Jan 81 - Jan 85
Department of Agricultural Engineering	
Lecturer: Iowa State University Faculty	Dec 77 - Jan 81
Department of Agricultural Engineering	

INDUSTRY / GOVT.

Water Resources Engineer/Affiliate: US Bureau of Reclamation, Division of Planning	Sep 90 - present
Consultant Hydrologist, MFG Inc. (TetraTech Inc.)	Sep 00 - Oct 04
Senior Water Resources Engineer/ Planner	Jan 87 - Sep 90
Interagency San Joaquin Valley Drainage Program	
Research Engineer, US Dept. of Agriculture, Agricultural Research Service	Jan 78 - Dec 79
Irrigation Engineer: Tate and Lyle Corporation	Jun 77 - Dec 77
Spalding, England.	

RECENT AND ONGOING RESEARCH

- Principal Investigator: (2018-2021): Optimizing real-time management of surface and subsurface drainage returns from seasonally managed wetlands in the San Joaquin River. Cooperative project with Grassland Water District (\$398,857 – UC Merced).
- Principal Investigator: (2018-2020): Enhancement of real-time sensor networks and decision support for water conservation and compliance with San Joaquin River salinity TMDL objectives. Cooperative project with the San Joaquin Valley Drainage Authority (\$566,095 –UC Merced).
- Principal Investigator: (2017-2022): Cyberinfrastructure development in support of Reclamation’s Program to Meet Standards goals for implementation of real-time water quality management in the San Joaquin River Basin. (\$749,000 – UC Merced).
- Principal Investigator: (2017-2020): An Integrated Modeling Tool to Assess Mercury Transport and Transformation Processes from Watersheds, Rivers and Burn Sites to Reservoirs. (\$37,000 – UC Merced).

- Principal Investigator; (2015-2016): Adding groundwater accounting capability to the State-wide agricultural production model (SWAP) using the APSIDE conceptual model. Mercury modeling technical support. (\$74,807 – LBNL).
- Co-Principal Investigator; (2015-2016): Conceptual water budget model for screening analysis of supplemental water supply projects. Project ID: 5289. (\$64,000 – LBNL).
- Co-Principal Investigator (2016-2018): Sustainable subsurface drainage management at the SJRIP facility using the CSUID-II model to optimize salt leaching in Jose tall wheatgrass and alfalfa fields. (\$290,000 – CSU Fresno).
- Principal Investigator; (2011–2016): Modeling technical support, decision support tool development, data analysis and assimilation, GIS integration and staff support related to Reclamation planning - \$ 993,968
- Co-Principal Investigator; (2014–2016): Increasing Drought Resilience Under Climate Change: Assessing Costs and Benefits, Developing Tools, and Analyzing Motivations to Develop Local Groundwater Drought Reserves. NOAA - NA130AR4310121 with Ruth Langridge, UC Santa Cruz - \$ 22,000.
- Co-Principal Investigator; (2014–2016): Potential Impacts of Future Geological Storage of CO₂ on the Groundwater Resources in California's Central Valley Simulations of Deep Basin Pressure Changes and Effect on Shallow Water Resources. California Energy Commission - \$ 250,000.
- Principal Investigator; (2010–2013): Examining frameworks for evaluating groundwater substitution water transfers, phase III wetland groundwater conjunctive use investigation and development of data management and quality assurance techniques in support of real-time monitoring. US Bureau of Reclamation - \$350,000
- Principal Investigator; (2010–2012): GIS-based decision support for wetland drainage salinity management. - US Bureau of Reclamation, Science and Technology Program - \$70,000
- Principal Investigator; (2010–2011): Modeling and analysis of salt fate and transport on agricultural land and seasonal wetlands on the west-side of the San Joaquin Basin, US Bureau of Reclamation, Program to Meet Standards - \$40,000
- Principal Investigator; (2008–2009): Geophysical groundwater quality evaluation in East Bear Creek, California US Bureau of Reclamation - \$100,000
- Principal Investigator; (2007–2008): Improving WESTSIM surface-groundwater simulation model. US Bureau of Reclamation - \$80,000
- Principal Investigator; (2006–2007): Use of geophysical techniques to map groundwater quality. US Bureau of Reclamation - \$43,000
- Principal Investigator; (2007–2008): technical improvements and maintenance of the LBL precision bed sampler. US Bureau of Reclamation - \$10,000
- Principal Investigator; (2007–2008): Enhancement of return flow simulation modeling. US Bureau of Reclamation - \$42,900
- Principal Investigator; (2006–2007): Application of high resolution remote sensing to vegetation mapping in San Joaquin Basin grasslands. US Bureau of Reclamation - \$76,200
- Principal Investigator; (2005–2008): Cooperative project with Grassland Water District and California Department of Fish and Game. Implementation of Real-Time Water Quality management in the Grassland Ecological Area. State Water Resources Control Board - \$960,000.
- Co-Principal Investigator; (2005–2008): Cooperative project with Patterson Irrigation District. Real-Time, Salt and Nutrient Drainage Load Reduction Strategies – Patterson & West Stanislaus Irrigation District. State Water Resources Control Board - \$997,000.
- Co-Principal Investigator; (2005–2008): Cooperative project with Patterson Irrigation District. Decision support for implementation and evaluation of agricultural water reuse best management practices to improve district-level irrigation efficiency. CALFED Water Use Efficiency Program - \$500,000.
- Principal Investigator; (2005–2007): Use of geophysical techniques for reconnaissance assessment of groundwater pumping potential beneath San Joaquin and Tulare basin wetlands. US Bureau of Reclamation - \$120,000.
- Co-Principal Investigator (with Tom Harmon, UC Merced); (2005-2006) ; Real-time sensor development for adaptive real-time management of wetland salinity. UC Salinity-Drainage Program. \$33,000.
- Co-principal Investigator; (2004-2007): San Joaquin River Dissolved Oxygen TMDL. CALFED Directed Action. With: US Geological Survey, University of the Pacific, UC Davis, Systech Inc., Jones and Stokes Inc., West-side Drainage Authority - \$6,800,000.
- Principal Investigator; (2004 – 2005): Enhancement of return flow simulation from agriculture and seasonal wetlands using WESTSIM – USBR - \$76,000.

- Principal Investigator: (2003 – 2005): SJRRHRP Water Quality Monitoring and Decision Support System – USBR - \$139,760
- Principal Investigator: (2004 – 2005): Geophysical logging techniques for groundwater resource quality mapping in the Grassland Ecological Area – USBR Science and Technology Grant - \$30,000.
- Principal Investigator: (2004 – 2006): Use of remote sensing for estimation of wetland evapotranspiration in the San Luis National Wildlife Refuge, California. USBR Science and Technology Grant - \$117,000.
- Co-Principal Investigator: (2003-2005) (with Norm Miller, Larry Dale and Chris Ding): Laboratory Director’s Research and Development Grant. The California Water and Energy System: An Approach for Addressing Future Crises. LBNL - \$450,000.
- Principal Investigator: (2003 – 2004): Calibration and application of WESTSIM, using updated IGSM2 model code, to drainage problem areas and seasonal wetlands – USBR - \$69,000.
- Principal Investigator: (1999 – 2004): Adaptive Real-Time Management of Wetland Return Flows in the Grasslands Basin, California. CALFED grant - \$635,000.
- Principal Investigator: (2003-2005) Adaptive Real-Time Management of Wetland Salinity from the San Luis National Wildlife Refuge. CALFED grant - \$360,000. Co-PI: Dennis Woolington, US Fish and Wildlife Service.
- Co-Principal Investigator: (2001 – 2003): Discriminating Between West-Side Sources of Nutrients and Organic Carbon Contributing to Algae Growth and Oxygen Demand in the San Joaquin River. CALFED grant with Will Stringfellow - \$179,000.
- Co-Principal Investigator: (2001 – 2004): Panoche-Silver Creek Selenium Management Planning. CALFED grant with Panoche Silver Creek CRMP- \$890,000.
- Co-Investigator: (1999 – 2003): An integrated modeling system for environmental impact analysis of climate variability and extreme weather events in the San Joaquin Basin, California. EPA Grant with Professor John Dracup, UCB - \$900,000.
- Principal Investigator: (1995 – 1998): Application of Advanced Decision Support Systems to Water Resources Planning. USBR grant - \$220,000.
- Research Coordinator: (1996 - 2001): Algal-bacterial selenium removal system in the Panoche Water District. USBR and CALFED grants with Professors Oswald and Leighton - \$1,300,000.
- Principal Investigator: (1997 - 2002): Development of the Westside Integrated Groundwater-Surface Water Model (WESTSIM). USBR grant - \$190,000.
- Principal Investigator: (1993 - 1995) In-transit selenium losses in the Grasslands Basin. USBR grant - \$120,000.
- Principal Investigator: (1994 - 1995): Modeling selenium in-transit losses. SWRCB Grant with Professor H.W. Shen - \$60,000.
- Co-Principal Investigator: (1996- 2002): Real-Time water Quality Management in the San Joaquin River. CALFED grant and USBR challenge grant with Department of Water Resources and California Regional Water Quality Control Board - \$1,200,000.

RESEARCH INTERESTS

Application of systems analysis techniques to solving complex water resources problems. Analysis of environmental, social and economic impacts of global climate change in California. Development of decision support systems and simulation models to improve understanding and facilitate negotiation of solutions to future water resource and water quality problems. Primary research focus during past decade has been on developing decision making tools for assessing the impacts of drainage water quality on the west side of the San Joaquin Valley with an emphasis on salinity and selenium. Field research has included investigations of natural selenium in-transit losses in a wetland channel used for drainage discharges and surface water deliveries, cooperative work with private and public wetlands in the Grasslands Basin to develop monitoring and management responses to a salinity TMDL and participation in microbial mesocosm studies to identify bacterial species capable of selenium bioremediation. Results of these natural system bioremediation experiments are being used to help optimize the performance of an algal-bacterial selenium bioremediation plant for treating agricultural drain water in the Panoche Water District in the western San Joaquin Valley.

PROFESSIONAL SERVICE

National Science Foundation, EPSCoR Reviewer, May 2015, October 2015, April 2016.
 Co-Convener, International Environmental Modeling and Software Conference, San Diego, CA
 Chair Technical and Economic Committee, CVSALTS – Central Valley Salinity Coalition, (2008 – present)

Convener, 2002, 2003, 2004, past Convener, 2005. California Water and Environmental Modeling Forum.
Co-Chair and Founder, Water and Environment Technology Team (WETT), LBNL, 2005-2008
Berkeley Laboratory Delegate, White House Conference on Industrial Ecology
Department of Energy, Water-Energy Nexus Committee
Chair, Inter-Laboratory Committee on Water Resources
CALFED Water Quality Technical Group
San Joaquin River Management Program (Steering Committee and Water Quality Subcommittee)
American Society of Civil Engineers
American Geophysical Union
Water Environment Federation
California Irrigation Institute
US Committee of Irrigation and Drainage
International Symposium for Environmental Software Systems - Vice President and Member Board of Directors
International Environmental Modelling and Software Society – Member, Board of Directors
Environmental Modeling and Software Journal, Editorial Board
Socio-Economic Systems Modeling (Elsevier) - Editorial Board
Open Water Journal (IWA) - Editorial Board
Chair, Technical Committee, Central Valley Salinity Coalition, CVSALTS
Member Executive Committee, Central Valley Salinity Coalition, CVSALTS

LICENCES

Registered Professional Engineer

HONORS

Fellow, American Society of Civil Engineers, Environmental and water Resources Institute, March 2018.
Fellow, American Society of Civil Engineers, August 2015.
Distinguished Service Award, California Water and Environmental Modeling Forum, February 2014.
Hugo B. Fischer Award. Awarded by the California Water and Environmental Modeling Forum, April, 2013.
Fellow, International Environmental Modelling and Software Society, May 2010.
Fellow, International Symposium for Environmental Software Systems, May 2006.
Diplomate American Academy for Water Resources Engineers D.WRE, Oct 2007
Who's Who in America
Who's Who in California
Gamma Sigma Delta, Alpha Epsilon, Honor Societies

SOCIAL/CIVIC

Co-Manager, Wine Country Polo Club
United States Polo Association
Berkeley Yacht Club
Woodlake Neighborhood Association
Dominican-Black Canyon Neighborhood Association
Manorial Society of Great Britain

PUBLICATION WEBSITES (FOR DOWNLOADS)

ResearchGate: https://www.researchgate.net/profile/Nigel_Quinn/publications/
Google Scholar: <https://scholar.google.com/citations?user=vDpQLgoAAAAJ&hl=en&oi=ao>
Academia: <https://ibl.academia.edu/NigelQuinn>
HEADS Web page: <http://esd.staging.wpengine.com/heads/intern-research-projects/>
Researcher ID: [G-2407-2015](#)
OCHID: [0000-0003-3333-4763](#)

PEER REVIEWED JOURNAL PUBLICATIONS

1. Zhang H.X. and N.W.T Quinn. 2018. Simple Models and Analytical Procedures for Total Maximum Daily Load Assessment: A Brief Review. *Journal of Hydrologic Engineering*, ASCE. In press.
2. Quinn N.W.T., S. Kumar and S. Imen 2018. Use of Remote Sensing and GIS in Watershed Analysis and Developing TMDLs. *Journal of Hydrologic Engineering*, ASCE. In press.
3. Quinn N.W.T., R. La Plante, S. Kumar, F. Cubas, D.K. Borah. 2018. Understanding the State-of-Practice for TMDL Modeling using TMDL Reports. In review.
4. Quinn, N.W.T. and J. Cronin. 2018. Projecting future irrigated agriculture under saline conditions using the hydro-salinity, crop production optimization model APSIDE. IFIP AICT 507. In: *Environmental Software Systems, Computer Science for Environmental Protection, ISESS 2017*, J. Hrebicek, R. Denzer, G. Schimak and T.Pitner, Editors. Croatia, May 10-12, 2017. Springer.
5. Quinn, N.W.T., B. Hughes, A. Osti, J. Herr and J. Wang. 2018. Real-time, web-based decision support for stakeholder implementation of basin-scale salinity management. IFIP AICT 507. Keynote. In: *Environmental Software Systems, Computer Science for Environmental Protection, ISESS 2017*, J. Hrebicek, R. Denzer, G. Schimak and T.Pitner, Editors. Croatia, May 10-12, 2017. Springer.
6. Quinn N.W.T, A. Osti, J. Herr, E. Raley and J. Wang. 2018. WARMF-Online – A Web-Based Portal Supporting Real-time Salinity Management in the San Joaquin River Basin. *Open Water*, Vol 1, No. 1. <http://scholarsarchive.byu.edu/openwater/vol4/iss1/4/>
7. Parrott L. and N.W.T. Quinn. 2016. A complex systems approach for multi-objective water quality regulation on wetland landscapes. *Ecosphere* 7(6):e01363.10.1002/ecs2.1363. Impact factor 2.3.
8. Sathre R., H. Breunig, J. Greenblatt¹, P. Larsen, E. Masanet, T.McKone, N.W.T. Quinn¹, C. Scown. 2016. Spatially-explicit water balance implications of carbon capture and sequestration. *Environmental Modelling & Software*. 75: 153-162.
9. Reis S., E. Seto, A. Northcross, N.W.T. Quinn, M. Convertino, R.L. Jones, H.R. Maier^g, U. Schlink, S. Steinle, M. Vieno, M.C. Wimberly. 2015. Integrating modelling and smart sensors for environmental and human health. *Journal of Environmental Modeling and Software*. 74, 238-46. doi:10.1016/j.envsoft.2015.06.003
10. Quinn N.W.T. and J.R. Burns. 2015. Use of a hybrid optical remote sensing classification technique for seasonal wetland habitat degradation assessment resulting from adoption of real-time salinity management practices. *Journal of Applied Remote Sensing*. 03/2015; 9(1):1-25.
11. Quinn N.W.T, R. Tassej and J. Wang. 2014. Use of online data and computational resources to implement real-time salinity management - an efficient regulatory alternative to TMDL-mandated waste discharge requirements. DOI: 10.4018/978-1-4666-7336-6.ch004 In: *Handbook of Research on Advancements in Environmental Engineering*, Edition: *Advances in Environmental Engineering and Green Technologies (AEEGT) Book Series*, Chapter: *Basin-Scale, Real-Time Salinity Management Using Telemetered Sensor Networks*, Publisher: IGI Global, Editors: Nediljka Gaurina-Medjimurec, pp.89-117
12. Quinn N.W.T. and Olga Epshtein 2014. Seasonally-Managed Wetland Footprint Delineation and Evapotranspiration Estimation using Landsat ETM and Satellite Imagery. *Journal of Environmental Modeling and Software*. 04/2014; 54(April):9-23.
13. Laniak G.F., G. Olchin, J. Goodall, A. Voinov, M. Hill, P. Glynn, G. Whelan, G. Geller, N.W.T. Quinn, M. Blind, S. Peckham, S. Reaney, N. Gaber, R. Kennedy and A. Hughes. 2013. Integrated Environmental Modeling: A Vision and Roadmap for the Future. *Journal of Environmental Modeling and Software*. *Environmental Modelling and Software* 01/2013; 39:3-23
14. Hua P., S. Borglin, N.A. Kamennaya, L. Chen, H. Park, L. Mahoney, A. Kijac, G. Shan, L. Krystle, L. Chavarría, C. Zhang, N.W.T. Quinn, D. Wemmerc, H. Holman, C. Jansson. 2012. Metabolic phenotyping of the cyanobacterium *Synechocystis* 6803 engineered for production of alkanes and free fatty acids. *Applied Energy*. 01/2012; 102: DOI:10.1016/j.apenergy.2012.08.047.

15. Rahilly P.J.A., D. Li, Q. Guo, J. Zhu¹, R. Ortega, N.W.T. Quinn, and T.C. Harmon. 2012. Mapping swamp timothy (*Criopsis schenoides*) seed productivity using spectral values and vegetation indices in managed wetlands. *International Journal of Remote Sensing*, 33(16), 4902–4918.
16. Gardner J. C., N.W.T. Quinn, J. Van Gerpen, and J. Simonpietri. 2011. Oilseed and algal oils as biofuel feedstocks. *Soil and Water Conservation Society, Position Paper*. <http://www.swcs.org>. Soil and Water Conservation Society, Sept 30, 2011.
17. McIntosh, B.S., J.C. Ascough II, M. Twery, J. Chew, A. Elmahdi, D. Haase, J. Harou, D. Hepting, S. Cuddy, A.J. Jakeman, S. Chen, A. Kassahun, S. Lautenbach, K. Matthews, W. Merritt, N.W.T. Quinn, I. Rodriguez-Roda, S. Sieber, M. Stavenga, A. Sulis, J. Ticehurst, M. Volk, M. Wrobel, H. van Delden, S. El-Sawah. 2011. *Environmental Decision Support Systems (EDSS) Development – Challenges and Best Practices*. Special Issue, *Environmental Modelling and Software*.
18. Quinn N.W.T. 2011. Contrasts in the use of information technology for real-time salinity management in the San Joaquin Basin, California, USA and Hunter River Basin, New South Wales, Australia. *Agricultural Water Management*. Vol. 98 (6), p.930-940, Apr 2011.
19. Quinn N.W.T., R. Ortega and L. Holm. 2011. Environmental sensor networks and continuous data quality assurance to manage salinity within a highly regulated river basin. *Decision Support Systems in Agriculture, Food and the Environment: Trends, Applications and Advances*. Nediljka Gaurina-Medjimurec, Editor. IGI Global, ISBN 978-1-4666-7336-6.
20. Quinn N.W.T., G. Lee and D. Cozad. 2010. Information technology and decision support tools for stakeholder-driven river basin salinity management. *IEEE Proceedings, 43rd Annual HICSS Conference, Kawaii, Hawaii, Feb 5-9, 2010*.
21. Quinn N.W.T., R. Ortega, P.J.A, Rahilly and C.W. Royer. 2010. Use of environmental sensors and sensor networks to develop water and salinity budgets for seasonal wetland real-time water quality management. *Environmental Modelling and Software*. Vol 25, 1045-1058.
22. Quinn N.W.T, 2009. Information technology and innovative drainage management practices for selenium load reduction from irrigated agriculture to provide stakeholder assurances and meet contaminant mass loading policy objectives. *Agricultural Water Management*, 96 (3), p.484-492, Mar 2009.
23. Quinn N.W.T, 2009. Environmental decision support system development for seasonal wetland salt management in a river basin subjected to water quality regulation. *Agricultural Water Management*, 96 (2), p.247-254, Feb 2009.
24. Stringfellow W.T, Herr J., Litton G., Brunell M., Borglin S., Hanlon J., Chen C., Graham J., Burks R., Dahlgren R., Kendall C., Brown R. and Quinn N.W.T. 2009. Investigation of river eutrophication as part of a low dissolved oxygen total maximum daily load implementation. *Water Science & Technology—WST Vol 59 No 1 pp 9–14 © IWA Publishing*.
25. Stringfellow W.T., J.S. Hanlon, S. E. Borglin, and N.W.T. Quinn. 2008. Sources of Biochemical Oxygen Demand in Western Tributaries of the San Joaquin River, California. *Agricultural Water Management*, 95. pp 527-538.
26. Su, G.W., N.W.T. Quinn, P.J. Cook, and W. Shipp. 2006. Miniaturization of the flowing fluid electrical conductivity logging technique, *Ground Water*, Vol. 44, No.5 pp. 754-757, Sept-Oct, 2006. LBNL-59032.
27. Quinn N.W.T. and K.C. Jacobs 2006. An Emergency Environmental Response System to Protect Migrating Salmon in the Lower San Joaquin River. *Environmental Modelling and Software*. Vol. 22, pp 416-422. Elsevier Science Ltd. Online. doi:10.1016/j.physletb.2003.10.071. April 17, 2006. LBNL-60622.
28. Quinn N.W.T., K.C. Jacobs, C.W. Chen and W.T Stringfellow. 2005. Elements of a Decision Support System for Real-Time Management of Dissolved Oxygen in the San Joaquin River Deep Water Ship Channel. *Environmental Modelling and Software*. Elsevier Science Ltd. June 2005. LBNL Report-55929.
29. Brekke, L.D., N.L. Miller, N.W.T. Quinn, J.A. Dracup, and D. Hilts. 2004. Climate Change Impacts on San Joaquin River Basin water allocation. Paper No. 02103RR. *Journal of American Water Resources Association*, Vol 40, No. 1, pp. 149-164.

30. Quinn N.W.T., L.D. Brekke, N.L. Miller, T. Heinzer, H. Hidalgo and J.A. Dracup. 2004. Model Integration For Assessing Future Hydroclimate Impacts On Water Resources, Agricultural Production And Environmental Quality in the San Joaquin Basin, California. *Environmental Modelling and Software*. Elsevier Science Ltd. Vol. 19. pp 305-316. (LBNL-51708)
31. Quinn N.W.T. and W.M. Hanna. 2003. A Decision Support System for Adaptive Real-Time Management of Seasonal Wetlands in California. 2003. *Environmental Modelling and Software*. Vol. 18, Issue 6, pp 503-511. Elsevier Science Ltd. (LBNL-50238)
32. Green, F.B., Lundquist, T.J., Quinn, M.W.T., Zarate, M.A., Zubieta, I.X. and W.J. Oswald. 2003. Selenium and nitrate removal from agricultural drainage using the AIWPS® technology. *Water Science & Technology*, 48 (2): 299-305, 2003.
33. Quinn N.W.T. and W.M. Hanna. 2002. Real-Time Adaptive Management of Seasonal Wetlands to Improve Water Quality in the San Joaquin River. *Advances in Environmental Research*. Vol. 5, pp 309-317. Elsevier Science Ltd.
34. Quinn N.W.T, N.L. Miller, J.A. Dracup, L. Brekke and L.F. Grober. 2001. An Integrated Modeling System for Environmental Impact Analysis of Climate Variability and Extreme Weather Events in the San Joaquin Basin, California. *Advances in Environmental Research*. Elsevier Science Ltd. Vol 5 (2001) 309-317.
35. Swayne, D., Denzer, R., Lilburne, L., Purvis, M., Quinn, N.W.T. and Storey, A., 2000. Environmental decision support systems: exactly what are they? In: Denzer, R., Swayne, D.A., Purvis, M. and Schimak, G., Editors, 2000. *Environmental software Systems*. Environmental Information and Decision Support. IFIP TC5 WG5.11. International Federation for Information Processing, Part IV, Kluwer Academic Publishers, Norwell, Mass, pp. 259-268.
36. Quinn, N.W.T., T.J. Lundquist, F.B. Green, W.J. Oswald, T Leighton and M.A. Zarate. 2000. An algal-bacterial treatment system to reduce selenium loads in agricultural drainage. *California Agriculture*. November-December, Vol 54 No. 6.
37. Quinn N.W.T. and J. Karkoski. 1998. Potential for real time management of water quality in the San Joaquin Basin, California. *Journal of the American Water Resources Association*, Vol. 36, No. 6, December.
38. Quinn N.W.T. and P. Vorster. 1998. The comparative role of science in in resolving environmental problems at Kesterson Reservoir and Mono Lake, California. *Lakes and Reservoirs: Research and Management*, Vol. 3, 187-191.
39. Quinn, N.W.T., J. McGahan and M. Delamore. 1998. Innovative drainage management techniques to meet monthly and annual selenium load targets. *California Agriculture*, Vol. 52, No. 5, September-October. 1998.
40. Quinn N.W.T. and J. Clyde. 1998. A bed sediment sampler for precise depth profiling of contaminant concentrations in aquatic environments. *Journal of Environmental Quality*, Vol.27: pp. 64-67
41. Quinn, N.W.T., L.F. Grober, J. Kipps, C.W. Chen and E. Cummings. 1997. Computer model improves real-time management of water quality. *California Agriculture*, Vol. 51, No. 5, September-October. 1997
42. Quinn N.W.T, Richard B. Smith, Charles M. Burt, Tracy Slavin, and Stuart Styles. 1989. Evaluation of unlined ditch and reservoir seepage losses in Westlands Water District. *California Agriculture*, Nov-Dec.
43. Quinn N.W.T and J.M. Laflen. 1983. Characteristics of raindrop throughfall under corn canopy. *Transactions of the ASAE*. Vol 26, no 5, pp 1445-1450.
44. Quinn N.W.T. and J.M. Laflen. 1981. Properties of transformed rainfall under corn canopy. *American Society of Agricultural Engineering*, ASAE. paper no 81-2059.
45. Quinn N.W.T, R.P.C. Morgan and A.J. Smith. 1980. Simulation of soil erosion induced by human trampling. *Journal of Environmental Management*, Vol 10, no. 1, pp 155-165.
46. Elwell H.A. and N.W.T. Quinn. 1975. A rapid method for estimating the dry mass of soil from erosion research plots. *Rhodesian Journal of Agricultural Research*, Vol 13, pp 149-154.

BOOK CHAPTERS AND EDITED VOLUMES

1. Padmanabhan, G. A. Pandit, W.H. Frost, B. Benham, D.K. Borah, R.A. Camacho-Rincon, X. Fang, M.M. Hantush, R.H. Hawkins, E.Z. Hosseinipour, S. Kumar, R.C. Lott, J.L. Martin, S.C. McCutcheon, Y.M. Mohamoud, A.R. Parker, N.W.T. Quinn, K.G. Renard, M. Rezaeianzadeh, F.A. Rose, F.D. Theurer, T. Wool, H. Zhang, 2017. Total Maximum Daily Load Analysis and Modeling: Assessment of the Practice, ASCE EWRI, TMDL Analysis and Modeling Task Committee, Environmental and Water Resources Institute (EWRI), American Society of Civil Engineers, Reston, Virginia.
2. Quinn, N.W.T. 2014. Advances in wetland salinity management. In: A.C. Chang and D. Brawer Silva (eds.), Salinity and Drainage in San Joaquin Valley, California: Science, Technology, and Policy, Global Issues in Water Policy 5, DOI 10.1007/978-94-007-6851-2_3, © Springer Science+Business Media Dordrecht 2014
3. Quinn N.W.T. 2014. The San Joaquin Valley: Salinity and Drainage Problems and the Framework for a Response. In: A.C. Chang and D. Brawer Silva (eds.), Salinity and Drainage in San Joaquin Valley, California: Science, Technology, and Policy, Global Issues in Water Policy 5, DOI 10.1007/978-94-007-6851-2_3, © Springer Science+Business Media Dordrecht 2014 LBNL Topical Report – LBL-38498.
4. Quinn N.W.T., 2013. International Perspectives on Water Quality Management and Pollutant Control, ISBN 978-953-51-0999-0, edited by Nigel W.T. Quinn, PhD, P.E. DWRE.
<http://www.intechopen.com/books/international-perspectives-on-water-quality-management-and-pollutant-control>
5. Quinn N.W.T., R. Ortega and L. Holm. 2010. Environmental sensor networks and continuous data quality assurance to manage salinity within a highly regulated river basin. In: Manos, B., Matsatsinis, N., Paparrizos, K., & Papathanasiou, J. (2010). Decision Support Systems in Agriculture, Food and the Environment: Trends, Applications and Advances (pp. 1-554). Hershey, PA: IGI Global. doi:10.4018/978-1-61520-881-4.
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