

# Dr. Eric Stein

Department Head

Biology Department

Southern California Coastal Water Research Project

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## Education

D.Env., environmental science and engineering, University of California, Los Angeles, 1995

M.Ed., science education, University of California, Los Angeles, 1988

B.S., biology, University of California, Los Angeles, 1987

## Professional Experience

Department Head, Southern California Coastal Water Research Project. Costa Mesa, CA. 2002-Present

Adjunct Associate Professor, California State University, Los Angeles, Department of Geography and Urban Analysis. Los Angeles, CA. 1998-2001

Principal Ecologist, Associate Principal, PCR Services Corporation. Pasadena, CA. 1998-2002

Biologist, Senior Project Manager, U.S. Army Corps of Engineers, Los Angeles District, Regulatory Branch. Los Angeles, CA. 1993-1998

Graduate Researcher, UCLA Environmental Science and Engineering Program. Los Angeles, CA. 1991-1993

Biology Teacher, Alhambra High School, Alhambra City School District. Alhambra, CA. 1988-1991

Educational Technology Consultant, IBM Educational Instruction Division. 1990-1995

Research Associate, UCLA Department of Physiology. Los Angeles, CA. 1984-1991

# Honors and Awards

Doug Wilcox Award for Outstanding Associate Editor for Wetlands (2012)

Paul Douglas State Teaching Fellowship

U.S. Army Achievement Medal for Civilian Service

# Professional Appointments

President, Society of Wetland Scientists (2023-present)

Vice-chair, US Army Science Advisory Board/Environmental Advisory Board (2022-present)

Associate Editor Frontiers in Environmental Science: Freshwater Science (2021-present)

Society of Wetland Scientist, Ways and Means Committee (2021-2023)

Associate Editor, Water, Hydrology and Hydroecology Section (MDPI Journal) (2021-present)

Special Issue Editor (Environmental Flows in an Uncertain Future), Frontiers in Environmental Science (2022)

Special Issue Editor (New Perspectives in Wetland Bioassessment and Monitoring), Water (2021-present)

Public Policy Institute of California (PPIC) Water Policy Center research network (2020-present)

LMU Center for Urban Resilience Academic Science Advisory Committee (2019-present)

California Environmental Flows Workgroup (2017-present)

Special Issue Guest Editor (Issue on Environmental Water), Freshwater Biology (2016-2018)

Santa Clara River Estuary Ecological Flows Science Review Panel (2017-2020)

California 4th Climate Assessment Workgroup (2017-2018)

Tijuana Estuary Tidal Restoration Program, Science Advisory Team (2016-present)

Wetland Recovery Project, Science Advisory Panel member (2014-present)

California Healthy Streams Partnership (2011-present)

Santa Monica Bay Restoration Commission Technical Advisory Committee (2013-present)

USEPA, Environmental Law Institute (ELI), Nature Conservancy (TNC) - applying a watershed approach to wetlands mitigation decisions - technical advisory committee (2012-2020).

Associate Editor, Wetlands (Journal of the Society of Wetland Scientists) (2010-2015)

California Wetland Monitoring Workgroup, Co-chair (2008-2014)

USDA-NRCS National Easement Assessment Project - technical team (2011-2013)

U.S. Army Corps of Engineers Workgroup: Quantifying Significance of Aquatic Ecosystems (2010)

Southern California Wetlands Recovery Program Science Advisory Panel, Chair (2004-2010)

Ormond Beach Restoration Science Advisory Committee (2010)

Ballona Wetland Restoration Scientific Advisory Committee, Co-chair (2007-2010)

NOAA National Estuary Eutrophication Workgroup, S. Pacific Coast Coordinator (2007)

Society of Wetland Scientists, Western Chapter President (2008-2010)

Society of Wetland Scientists, Wetland Concerns Committee (2006-present)

National Wetlands Awards, Selection Committee (2007, 2008, 2012)

California State Stream and Wetland Protection Policy Science Advisory Team (2009-2012)

NOAA Water Quality Synthesis, Assessment, and Data Management (SAM) Technical Advisory Committee (2007-2009)

San Francisco Estuary Institute Sources Pathways and Loading Work Group (2006-2011)

Malibu Legacy Park Technical Advisory Committee (2008-2010)

US Army Corps of Engineers - National Workgroup on Arid Stream Assessment (2008)

Bay Area Wetlands Regional Monitoring Program - Science Advisory Group (2008-2012)

Technical Advisory Committee member for Assessment of Ecosystem Values of Watersheds in Southern California (2009-2011)

Science Advisory Panel for the National Evaluation of the Ecological Performance of Compensatory Mitigation (2009-2010)

# Professional Societies and Certifications

Coastal and Estuarine Research Federation

Society for Freshwater Science

International Association for Hydro-Environment Engineering and Research

Society of Environmental Toxicology and Chemistry

Society for Wetland Scientists

American Water Resources Association

American Geophysical Union

Pi Lambda Theta Educational Honor Society

## Journal Articles

Sytsma, A., D. Philippus, J.M. Wolfand, K. Irving, K.T. Taniguchi-Quan, E.D. Stein, T.S. Hogue. 2024. Channel restoration in urbanized systems: Guiding design using ecological flow targets and future management scenarios. *Journal of the American Water Resources Association* DOI:10.1111/1752-1688.13232.

Doughty, C.L., H. Gu, R.F. Ambrose, E.D. Stein, E. Borgnis Sloane, M. Martinez, K.C. Cavanaugh. 2024. Climate drivers and human impacts shape 35-year trends of coastal wetland health and composition in an urban region. *Ecosphere* DOI:10.1002/ecs2.4832.

Stein, E.D., C.L. Jerde, E. Andruszkiewicz Allan, A.J. Sepulveda, C.L. Abbott, M.R. Baerwald, J. Darling, K.D. Goodwin, R.S. Meyer, M.A. Timmers, P.M. Thielen. 2024. Critical considerations for communicating environmental DNA science. *Environmental DNA* DOI:10.1002/edn3.472.

Kelly, R.P., D.M. Lodge, K.N. Lee, S. Theroux, A.J. Sepulveda, C.A. Scholin, J.M. Craine, E.A. Allan, K.M. Nichols, K.M. Parsons, K.D. Goodwin, Z. Gold, F.P. Chavez, R.T. Noble, C.L. Abbott, M.R. Baerwald, A.M. Naaum, P.M. Thielen, A.L. Simons, C.L. Jerde, J.J. Duda, M.E. Hunter, J.A. Hagan, R.S. Meyer, J.A. Steele, M.Y. Stoeckle, H.M. Bik, C.P. Meyer, E.D. Stein, K.E. James, A.C. Thomas, E. Demir-Hilton, M.A. Timmers, J.F. Griffith, M.J. Weise, S.B. Weisberg. 2024. Toward a national eDNA strategy for the United States. *Environmental DNA* DOI:10.1002/edn3.432.

Goodrich, K.A., N. Ulibarri, R. Matthew, E.D. Stein, M. Brand, B.F. Sanders. 2023. Toward improved sediment management and coastal resilience through efficient permitting in California. *Environmental Management* 72:558-567.

Wolfand, J.M., A. Sytsma, K.T. Taniguchi-Quan, E.D. Stein, T.S. Hogue. 2023. Impact of wastewater reuse on contaminants of emerging concern in an effluent-dominated river. *Frontiers in Environmental Science* DOI:10.3389/fenvs.2023.1091229.

Siu, J., E.D. Stein, J.S. Brown. 2023. When is Aquatic Resource Type Conversion Appropriate: A Framework for Cleaning Sand out of the Gears and a Case Study for McInnis Marsh. *Wetland Science and Practice* 41:70-85.

Stein, E.D., A.C. Horne, R.E. Tharme, J. Tonkin. 2022. Editorial: Environmental flows in an uncertain future. *Frontiers in Environmental Science* 10:1-5.

Brand, M.W., K. Buffington, J.B. Rogers, K. Thorne, E.D. Stein, B.F. Sanders . 2022. The Multi-Decadal Simulation of Marsh Topography Under Sea Level Rise and Episodic Sediment Loads. *Journal of Geophysical Research* 127:1-20.

Wolfand, J.M., A. Sytsma, V.L. Hennon, E.D. Stein, T.S. Hogue. 2022. Dilution and Pollution: Assessing the Impacts of Water Reuse and Flow Reduction on Water Quality in the Los Angeles River Basin. *Environmental Science and Technology* DOI:10.1021/acsestwater.2c00005.

Stein, E.D., J.S. Brown, A. Canney, M. Mirkhanian, H. Lowman, K. O'Connor, R. Clark. 2022. Prioritizing Stream Protection, Restoration and Management Actions Using Landscape Modeling and Spatial Analysis. *Water* 14:1375.

Grantham, T.E., D.M. Carlisle, J. Howard, B. Lane, R. Lusardi, A. Obester, S. Sandoval-Solis, B. Stanford, E.D. Stein, K.T. Taniguchi-Quan, S.M. Yarnell, J.K.H. Zimmerman. 2022. Modeling Functional Flows in California's Rivers. *Frontiers in Environmental Science* 10:787473.

Wolfand, J.M., K.T. Taniguchi-Quan, R. Abdi, E. Gallo, K. Irving, D. Philippus, J.B. Rogers, E.D. Stein, T.S. Hogue. 2022. Balancing water reuse and ecological support goals in an effluent dominated river. *Journal of Hydrology X* 15:100124.

Taniguchi-Quan, K.T., K. Irving, E.D. Stein, A. Poresky, R.A. Wildman Jr., A. Aprahamian, C. Rivers, G. Sharp, S.M. Yarnell, J.R. Feldman. 2022. Developing Ecological Flow Needs in a Highly Altered Region: Application of California Environmental Flows Framework in Southern California, USA. *Frontiers in Environmental Science* 10:787631.

Irving, K., K.T. Taniguchi-Quan, A. Aprahamian, C. Rivers, G. Sharp, R.D. Mazor, S. Theroux, A. Holt, R. Peek, E.D. Stein. 2022. Application of Flow-Ecology Analysis to Inform Prioritization for Stream Restoration and Management Actions. *Frontiers in Environmental Science* 9:787462.

Yarnell, S.M., A. Willis, A. Obester, R.A. Peek, R.A. Lusardi, J. Zimmerman, T.E. Grantham, E.D. Stein. 2022. Functional Flows in Groundwater-Influenced Streams: Application of the California Environmental Flows Framework to Determine Ecological Flow Needs. *Frontiers in Environmental*

*Science* 9:788295.

Abdi, R., A. Rust, J.M. Wolfand, K.T. Taniguchi-Quan, K. Irving, D. Philippus, E.D. Stein, T.S. Hogue. 2022. Thermal Suitability of the Los Angeles River for Cold Water Resident and Migrating Fish Under Physical Restoration Alternatives. *Frontiers in Environmental Science* 9:749085.

Peek, R., K. Irving, S.M. Yarnell, R. Lusardi, E.D. Stein, R.D. Mazor. 2022. Identifying Functional Flow Linkages Between Stream Alteration and Biological Stream Condition Indices Across California. *Frontiers in Environmental Science* 9:790667.

Stein, E.D., J. Zimmerman, S.M. Yarnell, B. Stanford, B. Lane, K.T. Taniguchi-Quan, A. Obester, T.E. Grantham, R.A. Lusardi, S. Sandoval-Solis. 2021. The California Environmental Flows Framework: Meeting the Challenges of Developing a Large-Scale Environmental Flows Program. *Frontiers in Environmental Science* 9:769943.

Rogers, J.B., E.D. Stein, M.W. Beck, K. Flint, A. Kinoshita, R.F. Ambrose. 2021. Modelling future changes to the hydrological and thermal regime of unaltered streams using projected changes in climate to support planning for sensitive species management. *Ecohydrology*  
DOI:10.1002/eco.2299.

Abdi, R., J.B. Rogers, A. Rust, J.M. Wolfand, D. Philippus, K.T. Taniguchi-Quan, K. Irving, E.D. Stein, T.S. Hogue. 2021. Simulating the thermal impact of substrate temperature on ecological restoration in shallow urban rivers. *Journal of Environmental Management*  
DOI:10.1016/j.jenvman.2021.112560.

Brand, M.W., L. Guo, E.D. Stein, B.F. Sanders. 2021. Multi-decadal simulation of estuarine sedimentation under sea level rise with a response-surface surrogate model. *Advances in Water Resources* DOI:10.1016/j.advwatres.2021.103876.

Stein, E.D., E.M. Gee, J.B. Adams, K. Irving, L.V. Niekerk. 2021. Advancing the Science of Environmental Flow Management for Protection of Temporarily Closed Estuaries and Coastal Lagoons. *Water* DOI:10.3390/w13050595.

Theroux, S., R.D. Mazor, M.W. Beck, P.R. Ode, E.D. Stein, M. Sutula. 2020. Predictive biological indices for algae populations in diverse stream environments. *Ecological Indicators*  
DOI:10.1016/j.ecolind.2020.106421.

Taylor, J., E.D. Stein, M.W. Beck, R.F. Ambrose. 2020. The impact of climate change induced alterations of streamflow and stream temperature on the distribution of riparian species. *PLoS ONE* DOI:10.1371/journal.pone.0242682.

Ulibarri, N., K.A. Goodrich, P. Wagle, M. Brand, R. Matthew, E.D. Stein, B.F. Sanders. 2020. Barriers and opportunities for beneficial reuse of sediment to support coastal resilience. *Ocean*

*and Coastal Management* DOI:10.1016/j.ocecoaman.2020.105287.

Aylagas, E., A. Borja, X. Pochon, A. Zaiko, N. Keeley, K. Bruce, P. Hong, G.M. Ruiz, E.D. Stein, S. Theroux, N. Geraldi, A. Ortega, L. Gajdzik, D.J. Coker, Y. Katan, T. Hikmawan, A. Saleem, S. Alamer, B.H. Jones, C.M. Duarte, J. Pearman, S. Carvalho. 2020. Translational Molecular Ecology in practice: Linking DNA-based methods to actionable marine environmental management. *Science of the Total Environment* DOI:10.1016/j.scitotenv.2020.140780.

Harvey, M.E., S.N. Giddings, E.D. Stein, J.A. Crooks, C. Whitcraft, T. Gallien, J.L. Largier, L.L. Tiefenthaler, H. Meltzer, G. Pawlak, K. Thorne, K. Johnston, R. Ambrose, S.C. Schroeter, H.M. Page, H. Elwany. 2020. Effects of Elevated Sea Levels and Waves on Southern California Estuaries During the 2015–2016 El Niño. *Estuaries and Coasts* DOI:10.1007/s12237-019-00676-1.

Sultana, R., M. Mroczek, A. Sengupta, S. Dallman, E.D. Stein. 2020. Improving Effective Impervious Estimates to Inform Stormwater Management. *Water Resources Management* DOI:10.1007/s11269-019-02474-7.

Stein, E.D., C.L. Doughty, J. Lowe, M. Cooper, E. Sloane, D. Bram. 2020. Establishing Targets for Regional Coastal Wetland Restoration Planning Using Historical Ecology and Future Scenario Analysis: The Past, Present, Future Approach. *Estuaries and Coasts* DOI:10.1007/s12237-019-00681-4.

Yarnell, S.M., E.D. Stein, J.A. Webb, T. Grantham, R.A. Lusardi, J. Zimmerman, R.A. Peek, B.A. Lane, J. Howard, S. Sandoval-Solis. 2020. A Functional Flows Approach to Selecting Ecologically Relevant Flow Metrics for Environmental Flow Applications. *River Research and Applications* DOI:10.1002/rra.3575.

Giraldo, M.A., S. Dark, P. Pendleton, E.D. Stein, R.D. Mazor, J. Andreas. 2019. Environmental predictors of stream flow in semi-arid watersheds for biological assessments. *Ecological Indicators* 104:429-438.

Beck, M., R.D. Mazor, S. Johnson, K. Wisenbaker, J. Westfall, P.R. Ode, R. Hill, C. Loflen, M. Sutula, E.D. Stein. 2019. Prioritizing Management Goals for Stream Biological Integrity Within the Developed Landscape Context. *Freshwater Science* DOI:10.1086/705996.

Simons, A.L., R.D. Mazor, E.D. Stein, S. Nuzhdin. 2019. Using alpha, beta, and zeta diversity in describing the health of stream-based benthic macroinvertebrate communities. *Ecological Applications* DOI:10.1002/eap.1896.

Parker, S.R., S.K. Adams, R.W. Lammers, E.D. Stein, B.P. Bledsoe. 2019. Targeted hydrologic model calibration to improve prediction of ecologically-relevant flow metrics. *Journal of Hydrology* 573:546-556.

- Doughty, C.L., K.C. Cavanaugh, R.F. Ambrose, E.D. Stein. 2019. Evaluating regional resiliency of coastal wetlands to sea level rise through hypsometry-based modeling. *Global Change Biology* 25:78-92.
- Lane, B.A., S. Sandoval-Solis, E.D. Stein, S.M. Yarnell, G.B. Pasternack, H.E. Dahlke. 2018. Beyond Metrics? The Role of Hydrologic Baseline Archetypes in Environmental Water Management. *Environmental Management* DOI:10.1007/s00267-018-1077-7.
- Guo, L., M. Brand, B.F. Sanders, E. Foufoula-Georgiou, E.D. Stein. 2018. Tidal asymmetry and residual sediment transport in a short tidal basin under sea level rise. *Advances in Water Resources* 121:1-8.
- Mazor, R.D., J.T. May, A. Sengupta, K. McCune, B.P. Bledsoe, E.D. Stein. 2018. Tools for managing hydrologic alteration on a regional scale: Setting targets to protect stream health. *Freshwater Biology* DOI:10.1111/fwb.13062.
- Arthington, A.H., J.G. Kennen, E.D. Stein, J.A. Webb. 2018. Recent advances in environmental flows science and water management - Innovation in the Anthropocene. *Freshwater Biology* DOI:10.1111/fwb.13108.
- Kennen, J.G., E.D. Stein, J.A. Webb. 2018. Evaluating and managing environmental water regimes in a water-scarce and uncertain future. *Freshwater Biology* DOI:10.1111/fwb.13104.
- Sengupta, A., S.K. Adams, B.P. Bledsoe, E.D. Stein, K. McCune, R.D. Mazor. 2018. Tools for managing hydrologic alteration on a regional scale: Estimating changes in flow characteristics at ungauged sites. *Freshwater Biology* DOI:10.1111/fwb.13074.
- Sengupta, A., R.J. Hawley, E.D. Stein. 2018. Predicting Hydromodification in Streams using Non-Linear Memory Based Algorithms. A Southern California case study. *Journal of Water Resources Planning and Management* DOI:10.1061/(ASCE)WR.1943-5452.0000853.
- Stein, E.D., A. Sengupta, R.D. Mazor, K. McCune, B.P. Bledsoe, K. McCune, S. Adams. 2017. Application of regional flow-ecology relationships to inform watershed management decisions: Application of the ELOHA framework in the San Diego River watershed, California, USA. *Ecohydrology* 10:1869.
- Fong, L.S., E.D. Stein, R.F. Ambrose. 2017. Development of Restoration Performance Curves for Streams in Southern California Using an Integrative Condition Index. *Wetlands* 37:289-299.
- Stein, E.D., J.S. Brown, R.D. Mazor. 2017. Transferability of bioassessment indices among water body types and ecoregions: A California experiment in wetland assessment. *Ecological Indicators* 81:65-73.

Howard, M.D.A., C. Nagoda, R.M. Kudela, K. Hayashi, A. Tatters, D.A. Caron, L. Busse, J.S. Brown, M. Sutula, E.D. Stein. 2017. Microcystin Prevalence throughout Lentic Waterbodies in Coastal Southern California. *Toxins* 9:231.

Pyne, M.I., D.M. Carlisle, C.P. Konrad, E.D. Stein. 2017. Classification of California streams using combined deductive and inductive approaches: Setting the foundation for analysis of hydrologic alteration. *Ecohydrology* 10:e1802.

Ode, P.R., A.C. Rehn, R.D. Mazor, K.C. Schiff, E.D. Stein, J.T. May, L.R. Brown, D.B. Herbst, D.J. Gillett, K. Lunde, C.P. Hawkins. 2016. Evaluating the adequacy of a reference-site pool for ecological assessments in environmentally complex regions. *Freshwater Science* 35:237-248.

Mazor, R.D., A.C. Rehn, P.R. Ode, M. Engeln, K.C. Schiff, E.D. Stein, D.J. Gillett, D.B. Herbst, C.P. Hawkins. 2016. Bioassessment in complex environments: designing an index for consistent meaning in different settings. *Freshwater Science* 35:249-271.

Saintilan, N., K. Rogers, C. Toms, E.D. Stein, D. Jacobs. 2016. Intermittent Estuaries: Linking Hydro-geomorphic Context to Climate Change Resilience. *Journal of Coastal Research* 75:133-137.

Brooks, R.P., D. Faber-Langendoen, G. Serenbetz, J. Rocchio, E.D. Stein, K. Walz. 2016. Towards Creating a National Reference Wetlands Registry. *National Wetlands Newsletter* 38:7-11.

Stein, E.D., L.G. Lackey, J.S. Brown. 2015. How accurate are probability-based estimates of wetland extent? Results of a California validation study. *Wetlands Ecology and Management* 24:347-356.

Cox, H., E.D. Stein, L. Protopapadakis, M. Dojiri. 2015. Water Resources: Water Supply and Use from a Water Quality Perspective. *Urban Coast* 5:3-10.

Fetscher, A.E., E.D. Stein, M.D.A. Howard. 2015. Looking Ahead: Preliminary Examination of Stream Cyanotoxins in Santa Monica Bay and California Watersheds. *Urban Coast* 5:198-200.

Fetscher, A.E., M.D.A. Howard, R. Stancheva, R.M. Kudela, E.D. Stein, M. Sutula, L.B. Busse, R.G. Sheath. 2015. Wadeable streams as widespread sources of benthic cyanotoxins in California, USA. *Harmful Algae* 49:105-116.

Stein, E.D. 2015. Habitat Highlights: Regional Stream Monitoring in Southern California. *Urban Coast* 5:128-129.

Ambrose, R.F., J.H. Dorsey, K. Johnston, E.D. Stein. 2015. Habitat Conditions: Coastal Wetlands. *Urban Coast* 5:59-68.

Dagit, R., F. Federico, L. Kats, E.D. Stein. 2015. Habitat Conditions: Freshwater Aquatic and

Riparian Habitats. *Urban Coast* 5:48-58.

Von Bitner, T., E.D. Stein, L. Protopapadakis, K. Thorsen. 2015. Water Resources: Trash and Debris. *Urban Coast* 5:29-34.

Gibson, J.F., E.D. Stein, D.J. Baird, C.M. Finlayson, X. Zhang, M. Hajibabaei. 2015. Wetland Ecogenomics - The Next Generation of Wetland Biodiversity and Functional Assessment. *Wetland Science and Practice* 32:27-32.

Feldman, D.L., A. Sengupta, L. Stuvick, E.D. Stein, V. Pettigrove, M. Arora. 2015. Governance issues in developing and implementing offsets for water management benefits: Can preliminary evaluation guide implementation effectiveness?. *WIREs Water* 2:121-130.

White, B.P., E.M. Pilgrim, L.M. Boykin, E.D. Stein, R.D. Mazor. 2014. Comparison of four species-delimitation methods applied to a DNA barcode data set of insect larvae for use in routine bioassessment. *Freshwater Science* 33:338-348.

Mazor, R.D., E.D. Stein, P.R. Ode, K.C. Schiff. 2014. Integrating intermittent streams into watershed assessments: applicability of an index of biotic integrity. *Freshwater Science* 33:459-474.

Lackey, L.G., E.D. Stein. 2014. Evaluating Alternative Temporal Survey Designs For Monitoring Wetland Area And Detecting Changes Over Time In California. *Journal of the American Water Resources Association* 51:388-399.

Lackey, L.G., E.D. Stein. 2014. Selecting the optimum plot size for a California design-based stream and wetland mapping program. *Environmental Monitoring and Assessment* 186:2599-2608.

Stein, E.D., B.P. White, R.D. Mazor, J.K. Jackson, J.M. Battle, P.E. Miller, E.M. Pilgrim, B.W. Sweeney. 2014. Does DNA barcoding improve performance of traditional stream bioassessment metrics?. *Freshwater Science* 33:302-311.

Jackson, J.K., J.M. Battle, B.P. White, E.M. Pilgrim, E.D. Stein, P.E. Miller, B.W. Sweeney. 2014. Cryptic biodiversity in streams: a comparison of macroinvertebrate communities based on morphological and DNA barcode identifications. *Freshwater Science* 33:312-324.

Stein, E.D., M.C. Martinez, S. Stiles, P.E. Miller, E.V. Zakharov. 2014. Is DNA Barcoding Actually Cheaper and Faster than Traditional Morphological Methods? Results from a Survey of Freshwater Bioassessment Efforts in the United States. *PLoS ONE* 9:e95525.

Fetscher, A.E., R. Stancheva, J.P. Kociolek, R.G. Sheath, E.D. Stein, R.D. Mazor, P.R. Ode, L.B. Busse. 2013. Development and comparison of stream indices of biotic integrity using diatoms vs.

non-diatom algae vs. a combination. *Journal of Applied Phycology* 26:433-450.

Stein, E.D., B.P. White, R.D. Mazor, P.E. Miller, E.M. Pilgrim. 2013. Evaluating ethanol-based sample preservation to facilitate use of DNA barcoding in routine freshwater biomonitoring programs using benthic macroinvertebrates. PLoS ONE 8:e51273.

Lackey, L.G., E.D. Stein. 2013. Evaluation of design-based sampling options for monitoring stream and wetland extent and distribution in California. Wetlands 33:717-725.

Burke, M.P., T.S. Hogue, A. Kinoshita, J. Barco, C. Wessel, E.D. Stein. 2013. Pre- and post-fire pollutant loads in an urban fringe watershed in Southern California. Environmental Monitoring and Assessment 185:10131-10145.

Brown, J.S., E.D. Stein, D. Ackerman, J.H. Dorsey, J. Lyon, P.M. Carters. 2013. Metals and bacteria partitioning to various size particles in Ballona Creek storm water runoff. Environmental Toxicology and Chemistry 32:320-328.

Stein, E.D. 2013. Using regional stormwater monitoring programs to provide reference data for wetland mitigation performance evaluation. National Wetlands Newsletter 35:13-14.

Stein, E.D., M.R. Cover, A.E. Fetscher, C. O'Reilly, R. Guardado, C.W. Solek. 2013. Reach-scale geomorphic and biological effects of localized streambank armoring. Journal of the American Water Resources Association 49:780-792.

Bledsoe, B.P., E.D. Stein, R.J. Hawley, D. Booth. 2012. Framework and tool for rapid assessment of stream susceptibility to hydromodification. Journal of the American Water Resources Association 48:788-808.

Hawley, R.J., B.P. Bledsoe, E.D. Stein, B.E. Haines. 2012. Channel evolution model of semiarid stream response to urban-induced hydromodification. Journal of the American Water Resources Association 48:722-744.

Stein, E.D., J.S. Brown, T.S. Hogue, M.P. Burke, A. Kinoshita. 2012. Stormwater contaminant loading following southern California wildfires. Environmental Toxicology and Chemistry 31:2625-2638.

Dark, S., E.D. Stein, D. Bram, J. Osuna. 2012. Historical Ecology as a Living Resource for Informing Urban Wetland Restoration. Urban Coast 3:54-60.

Solek, C.W., M. Sutula, E.D. Stein, C. Roberts, R. Clark, K. O'Connor, K.J. Ritter. 2012. Determining the health of California's coastal salt marshes using rapid assessment. Wetland Science and Practice 29:8-28.

Lopez, S.R., T.S. Hogue, E.D. Stein. 2012. A framework for evaluating regional hydrologic sensitivity to climate change using archetypal watershed modeling. *Hydrology and Earth System Sciences Discussions* 9:13729-13771.

Ranasinghe, J.A., E.D. Stein, P.E. Miller, S.B. Weisberg. 2012. Performance of two southern California benthic community condition indices using species abundance and presence-only data: Relevance to DNA barcoding. *PLoS ONE* 7:e40875.

Brown, J.S., D. Ackerman, E.D. Stein. 2012. Continuous in situ characterization of particulate sizes in urban stormwater: Method testing and refinement. *Journal of Environmental Engineering* 138:673-679.

Solek, C.W., E.D. Stein, M. Sutula. 2011. Demonstration of an integrated watershed assessment using a three-tiered assessment framework. *Wetlands Ecology and Management* 19:459-474.

Ackerman, D., E.D. Stein, K.J. Ritter. 2011. Evaluating performance of stormwater sampling approaches using a dynamic watershed model. *Environmental Monitoring and Assessment* 180:283-302.

Tiefenthaler, L.L., E.D. Stein, K.C. Schiff. 2011. Levels and patterns of fecal indicator bacteria in stormwater runoff from homogenous land use sites and urban watersheds. *Journal of Water and Health* 9:279-290.

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