Jeff Brown

Senior Research Technician
Biology Department
Southern California Coastal Water Research Project

Education

M.S., biology, California State University, Long Beach, 1995

B.S., marine biology, California State University, Long Beach, 1988

Professional Experience

Senior Research Technician, Southern California Coastal Water Research Project Authority. Costa Mesa, CA, 1990-present.

Honors and Awards

Richard B. Loomis Research Award, Department of Biological Sciences, California State University, Long Beach (1990, 1992)

Journal Articles

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., 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.

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.

Schiff, K.C., J.S. Brown, S. Trump, D. Hardin. 2016. Near-Coastal Water Quality at Reference Sites Following Storm Events. *Marine Pollution Bulletin* 103:294-300.

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.

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., 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.

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.

Brown, J.S., M. Sutula, C. Stransky, J. Rudolph, E. Byron. 2010. Sediment contaminant chemistry and toxicity of freshwater in urban wetlands in southern California. *Journal of the American Water Resources Association* 46:367-384.

Sapozhnikova, Y., E. Wirth, K.C. Schiff, J.S. Brown, M. Fulton. 2007. Antifouling pesticides in the coastal waters of southern California. *Marine Pollution Bulletin* 54:1972-1978.

Schiff, K.C., J.S. Brown, D.W. Diehl, D.J. Greenstein. 2007. Extent and magnitude of copper contamination in marinas of the San Diego region, California, USA. *Marine Pollution Bulletin* 54:322-328.

Greenstein, D.J., S.M. Bay, A. Jirik, J.S. Brown, C. Alexander. 2003. Toxicity assessment of sediment cores from Santa Monica Bay, California. *Marine Environmental Research* 56:277-297.

Brown, J.S., S.A. Steinert. 2003. DNA damage and biliary PAH metabilites in flatfish from southern California bays and harbors, and the Channel Islands. *Ecological Indicators* 3:263-274.

Brown, J.S., S.M. Bay, D.J. Greenstein, W. Ray. 2001. Concentrations of methyl-tert-butyl ether (MTBE) in inputs and receiving waters of southern California. *Marine Pollution Bulletin* 42:957-966.

Technical Reports

Mazor, R.D., J.S. Brown. 2025. An assessment of the biological condition of streams in the San Francisco Bay. Technical Report 1419. Southern California Coastal Water Research Project. Costa Mesa, CA.

Mazor, R.D., K. Irving, D.J. Gillett, J.S. Brown, A. Santana. 2025. Improving biointegrity in engineered channels. Technical Report 1437. Southern California Coastal Water Research Project. Costa Mesa, CA.

Mazor, R.D., J.S. Brown, L.L. Tiefenthaler, A. Le Compte Santiago, G. Keating. 2025. Hydrologic assessment of reference streams in the Los Angeles region. Technical Report 1412. Southern California Coastal Water Research Project. Costa Mesa, CA.

Mazor, R.D., R. Darling, J.S. Brown, C. Loflen, J. Olson, G.M. Keating, M. Robinson. 2024. Candidate metrics for an index to assess the ecological condition of intermittent and ephemeral streams in Southern California when they are dry. Technical Report 1398. Southern California Coastal Water Research Project. Costa Mesa, CA.

Brown, J.S., R.D. Mazor. 2023. An assessment of the biological condition of streams in the San Francisco Bay. Technical Report 1340. Southern California Coastal Water Research Project. Costa Mesa, CA.

Mazor, R.D., J.S. Brown, R. Darling. 2023. Ecological conditions of dry streams in the Los Angeles region. Technical Report 1333. Southern California Coastal Water Research Project. Costa Mesa, CA.

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. Technical Report 1246. Southern California Coastal Water Research Project. Costa Mesa, CA.

Stein, E.D., J.S. Brown, N. Bishop, R. Kihslinger, B.J. Topping, P. Hough. 2022. An Integrated Framework for Evaluating Wetland and Stream Compensatory Mitigation. Technical Report 1209. Environmental Protection Agency. Washington, DC.

Stein, E.D., J.S. Brown, T. Smith, C. Cox, N. Nibbelink, K. Sheehan Hill, B.J. Topping, P. Hough. 2022. An Integrated Framework for Evaluating Wetland and Stream Compensatory Mitigation -

Summary of Pilot Applications. Technical Report 1210. Environmental Protection Agency. Washington, DC.

Stein, E.D., J.S. Brown, J.D. Siu. 2022. Aquatic Resource Type Conversion Evaluation Framework Version 2.0. Technical Report 1110. Southern California Coastal Water Research Project. Costa Mesa, CA.

Mazor, R.D., J.S. Brown, E.D. Stein, J.R. Olson, M.D. Robinson, A. Caudillo, S. Johnson, G. Mak, C. Clarke, K. O'Connor, K.K. Hammerstrom, R. Clark. 2021. Development of an Assessment Framework for Dry Ephemeral and Intermittent Streams in California and Arizona. Technical Report 1176. Southern California Coastal Water Research Project. Costa Mesa, CA.

Taniguchi-Quan, K.T., R.D. Mazor, J.S. Brown, R. Guill, M. Yeager, A. Suter, J. Rudolph, W. Isham, S. Johnson. 2020. 2018-2019 Report on the SMC Stream Survey. Technical Report 1127. Southern California Coastal Water Research Project. Costa Mesa, CA.

Mazor, R.D., J. Olson, M. Robison, A. Caudillo, J.S. Brown. 2019. Assessing the biological condition of dry ephemeral and intermittent streams. Technical Report 1089. Southern California Coastal Water Research Project. Costa Mesa, CA.

Stein, E.D., J.S. Brown, A. Barrera. 2019. Aquatic Resource Type Conversion Evaluation Framework: Literature Review and Summary of Existing State of Practice. Technical Report 1074. Southern California Coastal Water Research Project. Costa Mesa, CA.

Mazor, R.D., M. Beck, J.S. Brown. 2018. 2017 Report on the Southern California Stormwater Monitoring Coalition Regional Stream Survey. Technical Report 1029. Southern California Coastal Water Research Project. Costa Mesa, CA.

Stein, E.D., K.B. Lunde, J.S. Brown. 2017. Assessment of the condition of San Francisco Bay Area depressional wetlands. Technical Report 940. Surface Water Ambient Monitoring Program. Sacramento, CA.

Mazor, R.D., J.S. Brown, E.D. Stein, J.R. Olson, M.D. Robinson, T. Clark. 2017. Assessment of Episodic Streams in the San Diego Region. Technical Report 1011. Southern California Coastal Water Research Project. Costa Mesa, CA.

Brown, J.S., E.D. Stein, C. Solek, A.E. Fetscher. 2016. Assessment of the Condition of Southern California Depressional Wetlands: Application of Macroinvertebrate, Diatom and Overall Condition Indices for Assessing Southern California Depressional Wetlands. Technical Report 921. State Water Resources Control Board Surface Water Ambient Monitoring Program. Sacramento, CA.

Fetscher, A.E., K. Lunde, E.D. Stein, J.S. Brown. 2015. Standard Operating Procedures (SOP) for Collection of Macroinvertebrates, Benthic Algae, and Associated Physical Habitat Data in

California Depressional Wetlands. Technical Report 832. Southern California Coastal Water Research Project Authority. Costa Mesa, CA.

Schiff, K.C., J.S. Brown, S. Trump, D. Hardin. 2015. Near-Coastal Water Quality at Reference Sites Following Storm Events. Technical Report 853. Southern California Coastal Water Research Project Authority. Costa Mesa, CA.

Schiff, K.C., J.S. Brown. 2015. North Coast Areas of Special Biological Significance Regional Monitoring Program: First Year Results. Technical Report 856. Southern California Coastal Water Research Project Authority. Costa Mesa, CA.

Schiff, K.C., J.S. Brown. 2015. Proposition 84 Grant Evaluation Report: Assessing Pollutant Reductions to Areas of Biological Significance. Technical Report 858. Southern California Coastal Water Research Project Authority. Costa Mesa, CA.

Schiff, K.C., J.S. Brown. 2015. South Coast Areas of Special Biological Significance Regional Monitoring Program Year 2 Results. Technical Report 852. Southern California Coastal Water Research Project Authority. Costa Mesa, CA.

Stein, E.D., J.S. Brown, K. Cayce, M. Klatt, M. Salomon, P. Pendleton, S. Dark, K. O'Connor, C. Endris. 2014. California Aquatic Resources Status and Trends Program: Mapping Methodology. Technical Report 833. Southern California Coastal Water Research Project Authority. Costa Mesa, CA.

Brown, J.S., S.M. Bay. 2011. Temporal Assessment of Chemistry, Toxicity and Benthic Communities in Sediments at the Mouths of Chollas Creek and Paleta Creek, San Diego Bay. Technical Report 668. Southern California Coastal Water Research Project. Costa Mesa, CA.

Stein, E.D., J.S. Brown. 2009. Effects of post-fire runoff on surface water quality: Development of a southern California regional monitoring program with management questions and implementation recommendations. Technical Report 598. Southern California Coastal Water Research Project. Costa Mesa, CA.

Stein, E.D., J.S. Brown. 2009. Effects of post-fire runoff on surface water quality: Development of a southern California regional monitoring program with management questions and implementation recommendations (Appendix A). Technical Report 598.A. Southern California Coastal Water Research Project. Costa Mesa, CA.

Sutula, M., J.S. Brown, E. Fetscher, M. Mattson, S. Madon, G. Santolo, E. Byron, C. Stransky. 2008. Habitat value and treatment effectiveness of freshwater urban wetlands. Technical Report 559. Southern California Coastal Water Research Project. Costa Mesa, CA.

Schiff, K.C., J.S. Brown, D.W. Diehl. 2006. Extent and magnitude of copper contamination in

marinas of the San Diego region, CA USA. Technical Report 483. Southern California Coastal Water Research Project. Westminster, CA.

Brown, J.S., S.M. Bay. 2005. Assessment of best management practice (BMP) effectiveness. Technical Report 461. Southern California Coastal Water Research Project. Westminster, CA.

Bay, S.M., D.J. Greenstein, J.S. Brown. 2004. Newport Bay sediment toxicity studies. Technical Report 433. Southern California Coastal Water Research Project. Westminster, CA.

Bay, S.M., J.S. Brown. 2003. Chemistry and toxicity in Rhine Channel sediments. Technical Report 391. Southern California Coastal Water Research Project. Westminster, CA.

Bay, S.M., J.S. Brown. 2003. Organophosphorus pesticides in the Malibu Creek watershed. Technical Report 403. Southern California Coastal Water Research Project. Westminster, CA.

Allen, M.J., A.K. Groce, D. Diener, J.S. Brown, S.A. Steinert, G. Deets, J.A. Noblet, S.L. Moore, D.W. Diehl, E.T. Jarvis, V. Raco-Rands, C. Thomas, Y. Ralph, R. Gartman, D. Cadien, S.B. Weisberg, T. Mikel. 2002. Southern California Bight 1998 Regional Monitoring Program: V. Demersal fishes and megabenthic invertebrates. Technical Report 380. Southern California Coastal Water Research Project. Westminster, CA.

Schiff, K.C., J.S. Brown, S.B. Weisberg. 2001. Model monitoring program for large ocean discharges in southern California. Technical Report 357. Southern California Coastal Water Research Project. Westminster, CA.

Bay, S.M., J.S. Brown. 2000. Assessment of the MTBE discharge impacts on California marine water quality. Technical Report 319. Southern California Coastal Water Research Project. Westminster, CA.

Bay, S.M., D.J. Greenstein, A.W. Jirik, J.S. Brown. 1998. Southern California Bight 1994 Pilot Project: VI. Sediment toxicity. Technical Report 309. Southern California Coastal Water Research Project. Westminster, CA.

Bay, S.M., D.J. Greenstein, J.S. Brown, A. Jirik. 1994. Investigation of toxicity in Palos Verdes sediments. Technical Report 286. Southern California Coastal Water Research Project. Westminster, CA.

Annual Report Articles

Stein, E.D., J.S. Brown, T.S. Hogue, M.P. Burke, A. Kinoshita. 2012. Stormwater contaminant loading following wildfires.

Brown, J.S., E.D. Stein, D. Ackerman, J.H. Dorsey, J. Lyon, P.M. Carter. 2011. Metals and bacteria partitioning to various size particles in Ballona Creek stormwater runoff.

Brown, J.S., D. Ackerman, E.D. Stein. 2009. Continuous in situ characterization of particulate sizes in urban stormwater: Method testing and refinement.

Brown, J.S., M. Sutula, C. Stransky, J. Rudolph. 2008. Sediment contaminant chemistry and toxicity of freshwater urban wetlands.

Sapozhnikova, Y., E. Wirth, K.C. Schiff, J.S. Brown, M. Fulton. 2007. Antifouling pesticides in the coastal waters of southern California.

Brown, J.S., S.M. Bay. 2006. Assessment of Best Management Practice (BMP) effectiveness for reducing toxicity in urban runoff.

Schiff, K.C., J.S. Brown, D.W. Diehl, D.J. Greenstein. 2006. Extent and magnitude of copper contamination in marinas of the San Diego region, California.

Greenstein, D.J., S.M. Bay, J.S. Brown. 2004. Characterization of sediment toxicity in Newport Bay.

Brown, J.S., S.A. Steinert. 2003. PAH exposure and DNA damage in flatfish from southern California bays and harbors, and the Channel Islands.

Greenstein, D.J., S.M. Bay, A.W. Jirik, J.S. Brown, C. Alexander. 2001. Toxicity assessment of sediment cores from Santa Monica Bay.

Bay, S.M., J.S. Brown, D.J. Greenstein, A.W. Jirik. 2001. Toxicity of methyl-tert-butyl ether (MTBE) to California marine life.

Brown, J.S., S.M. Bay, D.J. Greenstein, W.R. Ray. 2001. Concentrations of methyl-tert butyl ether (MTBE) in inputs and receiving waters of southern California.

Brown, J.S., S.M. Bay. 1999. Biomarkers of contaminant exposure and effect in flatfish from southern California.