

Darrin Greenstein

Research Coordinator
Toxicology Department
Southern California Coastal Water Research Project

Education

B.S., marine biology, California State University, Long Beach. 1981

A.S., marine biology, Long Beach City College. 1979

Professional Experience

Research Coordinator, Southern California Coastal Water Research Project. Costa Mesa, CA.
1982-present

Benthic Invertebrate Sorter, Los Angeles County Sanitation Districts. Carson, CA. 1982

Professional Societies and Certifications

Society of Environmental Toxicology and Chemistry

The NELAC Institute-Expert Whole Effluent Testing Committee

Journal Articles

Greenstein, D.J., A.N. Parks, S.M. Bay. 2018. Using spatial and temporal variability data to optimize sediment toxicity identification evaluation (TIE) study designs. *Integrated Environmental Assessment and Management* 15:248-258.

Schiff, K.C., L.L. Tiefenthaler, S.M. Bay, D.J. Greenstein. 2016. Effects of Rainfall Intensity and Duration on the First Flush from Parking Lots. *Water* 8:320.

Schiff, K.C., D.J. Greenstein, N. Dodder, D.J. Gillett. 2015. Southern California Bight regional monitoring. *Regional Studies in Marine Science* 4:34-46.

Greenstein, D.J., S.M. Bay, D.L. Young, S. Asato, K.A. Maruya, W. Lao. 2014. The use of sediment toxicity identification evaluation methods to evaluate clean up targets in an urban estuary. *Integrated Environmental Assessment and Management* 10:260-268.

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Dorsch, D.E., R.C. Colli-Dula, S.M. Bay, D.J. Greenstein, L. Wilborg, D. Petschauer, N.D. Denslow. 2013. Gene expression of fathead minnows exposed to two types of treated municipal wastewater effluents. *Environmental Science and Technology* 47:11268-11277.

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Vidal-Dorsch, D.E., S.M. Bay, M.A. Mays, D.J. Greenstein, D. Young, J.C. Wolf, D. Pham, A.V. Loguinov, C. Vulpe. 2012. Using gene expression to assess the status of fish from anthropogenically influenced estuarine wetlands. *Environmental Science and Technology* 46:69-77.

Lao, W., D. Tsukada, D.J. Greenstein, S.M. Bay, K.A. Maruya. 2010. Analysis, occurrence, and toxic potential of pyrethroids, and fibronil in sediments from an urban estuary. *Environmental Toxicology and Chemistry* 29:843-851.

Greenstein, D.J., S.M. Bay, B. Anderson, G.T. Chandler, J.D. Farrar, C. Keppler, B. Phillips, A. Ringwood, D. Young. 2008. Comparison of methods for evaluating acute and chronic toxicity in

marine sediments. *Environmental Toxicology and Chemistry* 27:933-944.

Yang, Z.Y., K.A. Maruya, D.J. Greenstein, D. Tsukada, E.Y. Zeng. 2008. Experimental verification of a model describing solid phase microextraction (SPME) of freely dissolved organic pollutants in sediment porewater. *Chemosphere* 72:1435-1440.

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Yang, Z.Y., D.J. Greenstein, E.Y. Zeng, K.A. Maruya. 2007. Determination of poly(dimethyl)siloxane-water partition coefficients for selected hydrophobic organic chemicals using ¹⁴C-labeled analogs. *Journal of Chromatography A* 1148:23-30.

Greenstein, D.J., L.L. Tiefenthaler, S.M. Bay. 2004. Toxicity of parking lot runoff after application of simulated rainfall. *Environmental Contamination and Toxicology* 47:199-206.

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Roy, L.A., S. Steinert, S.M. Bay, D.J. Greenstein, Y. Sapozhnikova, O. Bawardi, I. Leifer, D. Schlenk. 2003. Biochemical effects of petroleum exposure in hornyhead turbot (pleuronichthys verticalis) exposed to a gradient of sediments collected from a natural petroleum seep in California, USA. *Aquatic Toxicology* 65:159-169.

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Bay, S.M., D.J. Greenstein, S.L. Lau, M.K. Stenstrom, C.G. Kelley. 1996. Toxicity of dry weather flow from the Santa Monica Bay watershed. *Bulletin of Southern California Academy of Sciences* 95:33-45.

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Thompson, B.E., S.M. Bay, J.W. Anderson, J.D. Laughlin, D.J. Greenstein, D.T. Tsukada. 1989. Chronic effects of contaminated sediments on the urchin *Lytechinus pictus*. *Environmental Toxicology Chemistry* 8:629-637.

Brown, D.A., S.M. Bay, D.J. Greenstein, P. Szalay, G.P. Hershelman, C.F. Ward, A.M. Westcott, J.N. Cross. 1987. Municipal wastewater contamination in the southern California Bight. Part II. Cystolic distribution of biochemical effects in fish livers. *Marine Environmental Research* 21:135-161.

Book Chapters

Jirik, A., S.M. Bay, D.J. Greenstein, A. Zellers, S.L. Lau. 1998. Application of TIEs in studies of urban stormwater impacts on marine organisms. in: E.E. Little, A.J. DeLonay, B.M. Greenberg (eds.), *Environmental Toxicology and Risk Assessment: Seventh Volume* pp. 284-298. American Society for Testing and Materials. West Conshohocken, PA.

Bay, S.M., K.C. Schiff, D.J. Greenstein, L.L. Tiefenthaler. 1997. Stormwater Runoff of Santa Monica Bay: Toxicity, Sediment Quality, and Benthic Community Impacts. in: O.T. Magoon, H. Converse, B. Baird, M. Miller-Henson (eds.), *California and the World Ocean '97* pp. 900-921. American Society of Civil Engineers. Reston, VA.

Technical Reports

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Parks, A.N., D.J. Greenstein, K.C. Schiff. 2021. Marina del Rey Harbor Site-Specific Objective Study. Technical Report 1208. Southern California Coastal Water Research Project. Costa Mesa, CA.

Bay, S.M., D.J. Greenstein, A.N. Parks, D.J. Gillett, W. Lao, D.W. Diehl. 2021. Sediment Quality Assessment Technical Support Manual. Technical Report 777. Southern California Coastal Water Research Project. Costa Mesa, CA.

Parks, A.N., D.J. Greenstein, K. McLaughlin, K.C. Schiff. 2020. Southern California Bight 2018 Regional Monitoring Program: Volume I. Sediment Toxicity. Technical Report 1117. Southern California Coastal Water Research Project. Costa Mesa, CA.

Bay, S.M., D.J. Greenstein, A.N. Parks. 2018. Spatial and Temporal Variability in Sediment Toxicity Identification Evaluations. Technical Report 1014. Southern California Coastal Water Research Project. Costa Mesa, CA.

Schiff, K.C., D.J. Greenstein. 2016. Stormwater Monitoring Coalition Toxicity Testing Laboratory Guidance Document. Technical Report 956. Southern California Coastal Water Research Project Authority. Costa Mesa, CA.

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Bay, S.M., D.J. Greenstein, K.A. Maruya, W. Lao. 2010. Toxicity Identification Evaluation of Sediment (Sediment TIE) in Ballona Creek Estuary: Final Report. Technical Report 634. Southern California Coastal Water Research Project. Costa Mesa, CA.

Bay, S.M., D.J. Greenstein, J.A. Ranasinghe, D.W. Diehl, A.E. Fetscher. 2009. Sediment quality assessment draft technical support manual. Technical Report 582. Southern California Coastal Water Research Project. Costa Mesa, CA.

Bay, S.M., D.J. Greenstein, J.A. Ranasinghe, D.W. Diehl, A.E. Fetscher. 2009. Sediment quality assessment draft technical support manual (Appendix A). Technical Report 582.A. Southern

California Coastal Water Research Project. Costa Mesa, CA.

Bay, S.M., D.J. Greenstein, J.A. Ranasinghe, D.W. Diehl, A.E. Fetscher. 2009. Sediment quality assessment draft technical support manual (Appendix B). Technical Report 582.B. Southern California Coastal Water Research Project. Costa Mesa, CA.

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Westminster, CA.

Bay, S.M., D.J. Greenstein, V. Raco-Rands, J.W. Anderson. 1989. Responses of marine organisms to wastewater: comparisons between species and effluent types. Technical Report 0239.

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Bay, S.M., D.J. Greenstein. 1988. Results of recent wastewater toxicity tests. Technical Report 224. Southern California Coastal Water Research Project. Long Beach, CA.

Bay, S.M., D.J. Greenstein. 1987. Evaluation of bioassay methods for red abalone, mysid shrimp and giant kelp. Technical Report 210. Southern California Coastal Water Research Project. Long Beach, CA.

Annual Report Articles

Vidal-Dorsch, D.E., R.C. Colli-Dula, S.M. Bay, D.J. Greenstein, L. Wiborg, D. Petschauer, N.D. Denslow. 2013. Gene expression of fathead minnows (*Pimephales promelas*) exposed to two types of treated municipal wastewater effluents.

Vidal-Dorsch, D.E., S.M. Bay, C. Ribocco, L.J. Sprague, M. Angert, C. Ludka, O. Carnevali, D.J. Greenstein, D. Schlenk, K.M. Kelley, J.A. Reyes, S. Snyder, B. Vanderford, L.C. Wiborg, D. Petschauer, R. Sasik, M. Baker, G. Hardiman. 2013. Genomic and phenotypic response of hornyhead turbot exposed to municipal wastewater effluents.

Greenstein, D.J., S.M. Bay, D. Young, S. Asato, K.A. Maruya, W. Lao. 2013. The use of sediment toxicity identification evaluation methods to evaluate clean-up targets in an urban estuary.

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Bay, S.M., J.R. Gully, D.J. Greenstein, P.J. Markle, J.A. Ranasinghe. 2011. Relationship of sediment toxicity to benthic community impacts and water body management decisions.

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Lao, W., L.L. Tiefenthaler, D.J. Greenstein, K.A. Maruya, S.M. Bay, K. Ritter, K.C. Schiff. 2011. Pyrethroids in southern California coastal sediments.

Vidal-Dorsch, D.E., S.M. Bay, M.A. Mays, D.J. Greenstein, D. Young, J. Wolf, D. Pham, A.V. Loguinov, C. Vulpe. 2011. Using gene expression to assess the status of fish from anthropogenically influenced estuarine wetlands.

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Greenstein, D.J., S. Alzadjali, S.M. Bay. 1996. Toxicity of ammonia to purple sea urchin (Strongylocentrotus purpuratus) embryos.

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Brown, D.A., S.M. Bay, D.J. Greenstein. 1985. Summary of the cadmium detoxification experiment.

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