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Education

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

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

Professional Experience

Laboratory 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

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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Lao, W., L.L. Tiefenthaler, D.J. Greenstein, K.A. Maruya, S.M. Bay, K. Ritter, K.C. Schiff. 2012. Pyrethroids in southern California coastal sediments. *Environmental Toxicology and Chemistry* 31:1649-1656.

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.

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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.

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.

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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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guttata) to cadmium: biochemical effects of chronic exposure. *Aquatic Toxicology* 16:311-320.

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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

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.

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Bay, S.M., D.J. Greenstein, A.N. Parks, C.Q.T. Zeeman. 2016. Assessment of Bioaccumulation in

San Diego Bay. Technical Report 953. 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.

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

Bay, S.M., D.J. Greenstein, D. Young. 2007. Evaluation of methods for measuring sediment toxicity in California bays and estuaries. Technical Report 503. Southern California Coastal Water Research Project. Costa Mesa, CA.

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Bay, S.M., D.J. Greenstein, D. Vidal, D. Schlenk. 2003. Investigation of metals toxicity in San Diego Creek. Technical Report 407. Southern California Coastal Water Research Project. Westminster, CA.

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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.

Greenstein, D.J., S.M. Bay. 2011. Selection of methods for assessing sediment toxicity in California bays and estuaries.

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.

Greenstein, D.J., S.M. Bay, M. Jacobe, C. Barton, K. Sakamoto, D. Young, K. Ritter, K.C. Schiff. 2011. Regional assessment of marine and estuarine sediment toxicity in southern California.

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.

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Lao, W., D. Tsukada, D.J. Greenstein, S.M. Bay, K.A. Maruya. 2009. Analysis, occurrence, and toxic potential of pyrethroids and fipronil in sediments from the Ballona Creek estuary.

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detoxification.

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