

Steve Bay

Department Head

Toxicology Department

Southern California Coastal Water Research Project

Education

M.S. biology, California State University, Long Beach, 1982

B.S., marine biology, California State University, Long Beach, 1976

Professional Experience

Department Head, Southern California Coastal Water Research Project. Costa Mesa, CA. 1980-present

Biologist, US Army Corps of Engineers. Los Angeles, CA. 1980

Instructor, Fullerton College. Fullerton, CA. 1978

Teaching Assistant, California State University, Long Beach. Long Beach, CA. 1977-1979

Research Assistant, Reish Marine Studies Inc. Los Alamitos, CA. 1977-1978

Research Assistant, University of Southern California. Los Angeles, CA. 1976-1977

Honors and Awards

Los Angeles Regional Water Quality Control Board Water Quality Award for Research (2002)

Southern California Toxicity Assessment Group Award for Outstanding Contribution (1995)

Kenneth L. Johnson Award for Outstanding Graduate Research - California State University Long Beach (1982)

Summa Cum Laude - California State University Long Beach (1976)

President's Honor List - California State University Long Beach (1972-1976)

Professional Appointments

Joint Task Group for Echinoderm Fertilization and Development Test section of Standard Methods
- American Water Works Association (Chair)

Santa Monica Bay Restoration Commission Technical Advisory Committee (Chair)

Reviewer for Environmental Science and Technology, Environmental Toxicology and Chemistry,
Marine Environmental Research, and Integrated Environmental Assessment and Management

Professional Societies and Certifications

Society for Environmental Toxicology and Chemistry

Selected Presentations and Conference Proceedings

Bay, S.M. 2018. Using Multiple Lines of Evidence for Sediment Quality Assessment in Regulatory Programs. Professional training course presented at the SETAC North America Annual Meeting. Sacramento, CA.

Bay, S.M. 2018. Development and Implementation of a Sediment Quality Assessment Framework for Protection of Benthic Communities in Bays and Estuaries. Presented at the SoCal SETAC Annual Meeting. Los Angeles, CA.

Bay, S.M., D. Gillett, K. Schiff, A. Parks. 2017. Implementing a Standardized Weight of Evidence Approach for Sediment Quality Assessment and Management in California: Lessons Learned from Regional Monitoring and TMDLs. Presented at the SETAC North America Annual Meeting. Minneapolis, MN.

Bay, S.M., N. Dodder, D. Gillett, K. Schiff. 2017. Regional Trends in Sediment Quality in Southern California: Responses to Multiple Stressors. Presented at the ACS Annual Meeting. San Francisco, CA.

Bay, S.M., P. Myre, A. Bess. 2016. SEDAG Spiked Sediment Database: A New Resource for Sediment Toxicology Data Discovery and Synthesis. Presented at the SETAC North America Annual Meeting. Orlando, FL.

Bay, S. and B. Greenfield. 2011. Translating Tissue Contamination to Sediment Quality Objectives in California Bays and Estuaries. Presented at the SETAC North America Annual Meeting. Boston, MA.

Bay, S. and C. Vulpe. 2011. Development of a Gene Expression Approach for Sediment Toxicity Identification. Presented at the SETAC North America Annual Meeting. Boston, MA.

Bay, S. 2011. Development of Cooperative Regional Monitoring Programs in Southern California. Presented at Canadian Water Network Annual Meeting. Ottawa, Canada.

Bay, S. and B. Greenfield. 2011. Development of Sediment Quality Objectives for Human Health in California. Presented at International Conference on Remediation of Contaminated Sediments. New Orleans, LA.

Bay, S., C. Vulpe, J. Ryan, F. Van Dolah. 2011. Development of Molecular Tools for Identifying Contaminant and Non-Contaminant Stressors in Sediment Toxicity Tests. Presented at International Conference on Remediation of Contaminated Sediments. New Orleans, LA.

Bay, S. and A.E. Fetscher. Sediment Contamination and Biological Effects Relationships in California's Sacramento and San Joaquin River Delta. Presented at the ACS Annual Meeting. San Francisco, CA.

Bay, S.M., D.J. Greenstein, K.A. Maruya, W. Lao, S. Lowe and B. Phillips. 2010. Impacts of pyrethroid pesticides on sediment quality and management in California estuaries. Presented at the SETAC North America Annual Meeting. Portland, OR.

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.

Mehinto, A.C., K.J. Kroll, B.S. Jayasinghe, C.M. Lavelle, D. VanDervort, O.K. Adeyemo, S.M. Bay, K.A. Maruya, N.D. Denslow. 2018. Linking In Vitro Estrogenicity to Adverse Effects in the Inland Silverside (*Menidia beryllina*). *Environmental Toxicology and Chemistry* 37:884-892.

Chen, C., M.O. Gribble, J. Bartroff, S.M. Bay, L. Goldstein. 2017. The Sequential Probability Ratio Test: An efficient alternative to exact binomial testing for Clean Water Act 303(d) evaluation. *Journal of Environmental Management* 192:89-93.

Vidal-Dorsch, D.E., S.M. Bay, S.L. Moore, B. Layton, A.C. Mehinto, C.D. Vulpe, M. Brown-Augustine, A. Loguinov, H. Poynton, N. Garcia-Reyero, E.J. Perkins, L. Escalon, N.D. Denslow, C.R. Colli-Dula, T. Doan, S. Shukradas, J. Bruno, L. Brown, G. Van Agglen, P. Jackman, M. Bauer. 2016. Ecotoxicogenomics: Microarray interlaboratory comparability. *Chemosphere* 144:193-200.

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.

Greenfield, B.K., A.R. Melwani, S.M. Bay. 2015. A tiered assessment framework to evaluate human health risk of contaminated sediment. *Integrated Environmental Assessment and Management* 11:459-473.

Bay, S.M. 2015. Water Resources: Toxics TMDLs. *Urban Coast* 5:22-28.

Bay, S.M., M. Dojiri, J. Gully. 2015. Habitat Conditions: Soft-Bottom Benthos. *Urban Coast* 5:108-115.

Judd, N., Y. Lowney, P. Anderson, S. Baird, S.M. Bay, J. Breidt, M. Buonanduci, Z. Dong, D. Essig, M.R. Garry, R.C. Jim, G. Kirkwood, S.L. Moore, C. Niemi, R. O'Rourke, B. Ruffle, L.A. Schaidler, D.E. Vidal-Dorsch. 2015. Fish Consumption as a Driver of Risk-Management Decisions and Human Health-Based Water Quality Criteria. *Environmental Toxicology and Chemistry* 34:2427-2436.

Bay, S.M., R. Hoenicke, K.A. Maruya. 2015. Water Resources: Contaminants of Emerging Concern. *Urban Coast* 5:35-40.

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.

Vidal- Dorsch, D.E., S.M. Bay, D.J. Greenstein, M.E. Baker, G. Hardiman, J.A. Reyes, K.M. Kelley, D. Schlenk. 2014. Biological responses of marine flatfish exposed to municipal wastewater effluent. *Environmental Toxicology and Chemistry* 33:583-591.

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.

Baker, M.E., D.E. Vidal-Dorsch, C. Ribocco, L.J. Sprague, M. Angert, N. Lekmine, C. Ludka, A. Martella, E. Ricciardelli, S.M. Bay, J.R. Gully, K.M. Kelley, C. Schlenk, O. Carnevali, R. Sasik, G. Hardiman. 2013. Molecular analysis of endocrine disruption in hornyhead turbot at wastewater outfalls in southern California using a second generation multi-species microarray. *PLoS ONE* 8:e75553.

Vidal-Dorsch, D.E., S.M. Bay, C. Ribecco, L.J. Sprague, M. Angert, C. Ludka, E. Ricciardelli, 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. *Aquatic Research* 140-141:174-184.

Greenstein, D.J., S.M. Bay, M. Jacobe, C. Barton, K. Sakamoto, D. Young, K. Ritter, K.C. Schiff. 2013. Regional assessment of marine and estuarine sediment toxicity in Southern California, USA. *Environmental Monitoring and Assessment* 185:2055-2065.

Maruya, K.A., D.E. Vidal-Dorsch, S.M. Bay, J.W. Kwon, K. Xia, K.L. Armbrust. 2012. Organic contaminants of emerging concern in sediments and flatfish collected near outfalls discharging treated wastewater effluent to the southern California Bight. *Environmental Toxicology and Chemistry* 31:2683-2688.

Beegan, C., S.M. Bay. 2012. Transitioning sediment quality assessment into regulations: Challenges and solutions in implementing California's sediment quality objectives. *Integrated Environmental Assessment and Management* 8:586-588.

Greenstein, D.J., S.M. Bay. 2012. Selection of methods for assessing sediment toxicity in California bays and estuaries. *Integrated Environmental Assessment and Management* 8:625-637.

Ritter, K.J., S.M. Bay, R.W. Smith, D.E. Vidal-Dorsch, L.J. Field. 2012. Development and evaluation of sediment quality guidelines based on benthic macrofauna responses. *Integrated Environmental Assessment and Management* 8:610-624.

Bay, S.M., K.J. Ritter, D.E. Vidal-Dorsch, L.J. Field. 2012. Comparison of national and regional sediment quality guidelines for classifying sediment toxicity in California. *Integrated Environmental Assessment and Management* 8:597-609.

Bay, S.M., D.E. Vidal-Dorsch, D. Schlenk, K.M. Kelley, K.A. Maruya, J.R. Gully. 2012. Integrated coastal effects study: synthesis of findings. *Environmental Toxicology and Chemistry* 31:2711-2722.

Reyes, J.A., D.E. Vidal-Dorsch, D. Schlenk, S.M. Bay, J.L. Armstrong, J.R. Gully, C. Cash, M. Baker, T.D. Stebbins, G. Hardiman, K.M. Kelley. 2012. Evaluation of reproductive endocrine status in hornyhead turbot sampled from southern California's urbanized coastal environments. *Environmental Toxicology and Chemistry* 31:2689-2700.

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.

- Forsgren, K.L., S.M. Bay, D.E. Vidal-Dorsch, X. Deng, G. Lu, J. Armstrong, J.R. Gully, D. Schlenk. 2012. Annual and seasonal evaluation of reproductive status of hornyhead turbot at municipal wastewater outfalls in the Southern California Bight. *Environmental Toxicology and Chemistry* 31:2701-2710.
- Vidal-Dorsch, D.E., S.M. Bay, K.A. Maruya, S.A. Snyder, R.A. Trenholm, B.J. Vanderford. 2012. Contaminants of emerging concern in municipal wastewater effluents and marine receiving water. *Environmental Toxicology and Chemistry* 31:2674-2682.
- Bay, S.M., D.E. Vidal-Dorsch. 2012. Determining the impacts of contaminants of emerging concern in marine ecosystems. *Environmental Toxicology and Chemistry* 31:2672-2673.
- 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.
- Bay, S.M., S.B. Weisberg. 2012. Framework for interpreting sediment quality triad data. *Integrated Environmental Assessment and Management* 8:589-596.
- 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.
- Maruya, K.A., E.Y. Zeng, D. Tsukada, S.M. Bay. 2009. A passive sampler based on solid-phase microextraction for quantifying hydrophobic organic contaminants in sediment pore water. *Environmental Toxicology and Chemistry* 28:733-740.
- Kwon, J.-W., K.L. Armbrust, D. Vidal-Dorsch, S.M. Bay, K. Xia. 2009. Determination of 17 alpha-ethynylestradiol, carbamazepine, diazepam, simvastatin, and oxybenzone in fish livers. *Journal of AOAC International* 92:359-369.
- Kayhanian, M., C. Stransky, S.M. Bay, S.-L. Lau, M.K. Stenstrom. 2008. Toxicity of urban highway runoff with respect to storm duration. *Science of the Total Environment* 389:386-406.
- 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.
- Bay, S.M., W. Berry, P.M. Chapman, R. Fairey, T. Gries, E. Long, D. MacDonald, S.B. Weisberg. 2007. Evaluating consistency of best professional judgment in the application of a multiple lines of evidence sediment quality triad. *Integrated Environmental Assessment and Management* 3:491-497.

- Vidal, D.E., S.M. Bay. 2005. Comparative sediment quality guideline performance for predicting sediment toxicity in southern California, USA. *Environmental Toxicology and Chemistry* 24:3173-3182.
- Vidal, D., S.M. Bay, D. Schlenk. 2005. Effects of dietary selenomethionine on larval Rainbow Trout (Oncorhynchus mykiss). *Environmental Contamination and Toxicology* 49:71-75.
- 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.
- 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.
- Bay, S.M., E.Y. Zeng, T.D. Lorenson, K. Tran, C. Alexander. 2003. Temporal and spatial distributions of contaminants in sediments of Santa Monica Bay, California. *Marine Environmental Research* 56:255-276.
- Bay, S.M., A. Jirik, S. Asato. 2003. Interlaboratory variability of amphipod sediment toxicity tests in a cooperative regional monitoring program. *Environmental Monitoring and Assessment* 81:257-268.
- Schiff, K.C., S.M. Bay. 2003. Impacts of stormwater discharges on the nearshore benthic environment of Santa Monica Bay. *Marine Environmental Research* 56:225-243.
- McGann, M., C.R. Alexander, S.M. Bay. 2003. Response of benthic foraminifers to sewage discharge and remediation in Santa Monica Bay, California. *Marine Environmental Research* 56:299-342.
- Schiff, K.C., S.M. Bay, D.W. Diehl. 2003. Stormwater toxicity in Chollas Creek and San Diego Bay, California. *Environmental Monitoring and Assessment* 81:119-132.
- Zeng, E.Y., S.M. Bay, D.J. Greenstein, C. Vista, C. Yu, K. Ritter. 2003. Toxic effects of polychlorinated biphenyl bioaccumulation in sea urchins exposed to contaminated sediments. *Environmental Toxicology and Chemistry* 22:1065-1074.
- 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.
- Bay, S.M., B.H. Jones, K.C. Schiff, L. Washburn. 2003. Water quality impacts of stormwater discharges to Santa Monica Bay. *Marine Environmental Research* 56:205-223.

- Washburn, L., K.A. McClure, B.H. Jones, S.M. Bay. 2003. Spatial scales and evolution of stormwater plumes in Santa Monica Bay. *Marine Environment Research* 56:103-125.
- Schiff, K.C., S.M. Bay, C. Stransky. 2002. Characterization of stormwater toxicants from an urban watershed to freshwater and marine organisms. *Urban Water* 4:215-227.
- 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.
- Schiff, K.C., M.J. Allen, E.Y. Zeng, S.M. Bay. 2000. Southern California. *Marine Pollution Bulletin* 41:76-93.
- Schweitzer, L.E., S.M. Bay, I.H. Suffet. 2000. Dietary assimilation of a polychlorinated biphenyl in adult sea urchins (*Lytechinus pictus*) and maternal transfer to their offspring. *Environmental Toxicology and Chemistry* 19:1919-1924.
- Schweitzer, L.E., J.E. Hose, I.H. Suffet, S.M. Bay. 1997. Differential toxicity of three polychlorinated biphenyl congeners in developing sea urchin embryos. *Environmental Toxicology and Chemistry* 16:1510-1514.
- 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.
- Thompson, B., S.M. Bay, D.J. Greenstein, J. Laughlin. 1991. Sublethal effects of hydrogen sulfide in sediments on the urchin *Lytechinus pictus*. *Marine Environmental Research* 31:309-321.
- Bay, S.M., D.J. Greenstein, P. Szalay, D.A. Brown. 1990. Exposure of scorpionfish (*Scorpaena guttata*) to cadmium: biochemical effects of chronic exposure. *Aquatic Toxicology* 16:311-320.
- Brown, D.A., S.M. Bay, G.P. Hershelman. 1990. Exposure of scorpionfish (*Scorpaena guttata*) to cadmium: effects of acute and chronic exposures on the cytosolic distribution of cadmium, copper, and zinc. *Aquatic Toxicology* 16:295-310.
- Buchman, M.F., S.M. Bay, R.J. Breteler, R.S. Carr, P.M. Chapman, J.E. Hose, A.L. Lissner, J. Scott, D.A. Wolfe. 1990. Comparative evaluation of five toxicity tests with sediments from San Francisco Bay and Tomales Bay, California. *Environmental Toxicology and Chemistry* 9:1193-1214.
- Thompson, B., S.M. Bay. 1990. Understanding sediment toxicity off southern California. *Fisheries and Aquatic Sciences* 2:1048-1050.
- Nipper, M.G., S.M. Bay, D.J. Greenstein. 1989. Short-and long-term sediment toxicity test methods

with the amphipod *Grandidierella japonica*. *Environmental Toxicology Chemistry* 8:1191-1200.

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.

Brown, D.A., S.M. Bay, J.F. Alfafara, G.P. Hershelman, K.D. Rosenthal. 1984. Detoxification/toxification of cadmium in scorpionfish (*Scorpaena guttata*): acute exposure. *Aquatic Toxicology* 5:93-107.

Hose, J.E., H.W. Puffer, P.S. Oshida, S.M. Bay. 1983. Developmental and cytogenetic abnormalities induced in the purple sea urchin by environmental levels of benzo(a) pyrene. *Archives of Environmental Contamination Toxicology* 12:319-325.

Bay, S.M., P.S. Oshida, K.D. Jenkins. 1983. A simple new bioassay based on echinochrome synthesis by larval sea urchins. *Marine Environmental Research* 8:29-39.

Book Chapters

Word, J.Q., B.B. Albrecht, M.L. Anghera, R. Baudo, S.M. Bay, D.M. Di Toro, J.L. Hyland, C.G. Ingersoll, P.F. Landrum, E.T. Long, J.P. Meador, D.W. Moore, T.P. O'Connor, J.P. Shine. 2005. Predictive Ability of Sediment Quality Guidelines. in: R.J. Wenning, G.E. Batley, C.G. Ingersoll, D.W. Moore (eds.), *Use of Sediment Quality Guidelines* pp. 121-161. Society of Environmental Toxicology and Chemistry. Pensacola, FL.

Bay, S.M., B.S. Anderson, R.S. Carr. 2003. Relative Performance of Porewater and Solid-Phase Toxicity Tests: Characteristics, Causes, and Consequences. in: R.S. Carr, M. Nipper (eds.), *Porewater Toxicity Testing* pp. 11-36. Society of Environmental Toxicology and Chemistry. Pensacola, FL.

Schiff, K.C., M.J. Allen, E.Y. Zeng, S.M. Bay. 2000. Southern California. in: C.R.C. Sheppard (ed.), *Seas at the Millenium: An Environmental Evaluation - Volume I: Regional Chapters: Europe, The Americas and West Africa* pp. 385-404. Elsevier Science. New York, NY.

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.

Bay, S.M., R. Burgess, D. Nacci. 1993. Status and applications of Echinoid (Phylum echinodermata) Toxicity test methods. in: W.G. Landis, J.S. Hughes, M.A. Lewis (eds.), *Environmental Toxicology & Risk Assessment* pp. 281-302. American Society for Testing and Materials. Philadelphia, PA.

Schiff, K.C., D.J. Reish, J.W. Anderson, S.M. Bay. 1992. A comparative evaluation of produced water toxicity. in: J.P. Ray, F.R. Engelhart (eds.), *Produced Water* pp. 199-207. Plenum Press. New York, NY.

Brown, D.A., S.M. Bay, R.W. Gossett. 1985. Using the natural detoxification capacities of marine organisms to assess assimilative capacity. in: R.D. Cardwell, R. Purdy, R.C. Bahner (eds.), *Aquatic Toxicology and Hazard Assessment: 7th Symposium* pp. 364-382. American Society for Testing and Materials. Philadelphia, PA.

Technical Reports

Gillett, D.J., A.N. Parks, S.M. Bay. 2019. Calibration of the Multivariate AZTI Marine Biotic Index (M-AMBI) for Potential Inclusion into California Sediment Quality Objective Assessments in San Francisco Bay. Technical Report 1070. San Francisco Estuary Institute. Richmond, 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.

Bay, S.M., A.N. Parks, A.R. Melwani, B.K. Greenfield. 2017. Development of a Sediment Quality Assessment Framework for Human Health Effects. Technical Report 1000. Southern California Coastal Water Research Project. Costa Mesa, CA.

Denslow, N., K. Kroll, S. Jayasinghe, O. Adeyemo, C. Lavelle, E. Li, A.C. Mehinto, S.M. Bay, K.A. Maruya. 2017. Linkage of In Vitro Assay Results With In Vivo Endpoints Final Report - Phase 1 and 2. Technical Report 983. San Francisco Estuary Institute. Richmond, CA.

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.

Bay, S.M., L. Wiborg, D.J. Greenstein, N. Haring, C. Pottios, C. Stransky, K.C. Schiff. 2015. Southern California Bight 2013 Regional Monitoring Program. Volume I - Sediment Toxicity Report. Technical Report 899. Southern California Coastal Water Research Project Authority. Costa Mesa, CA.

Bay, S.M., D.J. Greenstein, J.A. Ranasinghe, D.W. Diehl, A.E. Fetscher. 2013. Sediment Quality Assessment Technical Support Manual. Technical Report 777. Southern California Coastal Water Research Project. Costa Mesa, CA.

Bay, S.M., D.J. Greenstein, S.L. Moore, K.J. Ritter, J.A. Ranasinghe. 2013. Evaluation of Sediment Condition Using California's Sediment Quality Objectives Assessment Framework. Technical Report 764. Southern California Coastal Water Research Project. Costa Mesa, CA.

Bay, S.M., C.D. Vulpe, A.V. Loguinov, A. Arai. 2012. Application of Gene Expression Analysis for Sediment Toxicity Stressor Identification. Technical Report 660. Southern California Coastal Water Research Project. Costa Mesa, CA.

Bay, S.M., C.D. Vulpe, A.V. Loguinov, A. Arai. 2012. Application of Gene Expression Analysis for Sediment Toxicity Stressor Identification (Appendices B-D). Technical Report 660.Z. Southern California Coastal Water Research Project. 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.

Bay, S.M., D.E. Vidal-Dorsch, D. Schlenk, K.M. Kelley, M.E. Baker, K.A. Maruya, J.R. Gully. 2011. Sources and Effects of Endocrine Disruptors and other Contaminants of Emerging Concern in the Southern California Bight Coastal Ecosystem. Technical Report 650. Southern California Coastal Water Research Project. Costa Mesa, CA.

Bay, S.M., D.J. Greenstein, M. Jacobe, C. Barton, K. Sakamoto, D. Young, K.J. Ritter, K.C. Schiff. 2011. Southern California Bight 2008 Regional Monitoring Program: I. Sediment Toxicity. Technical Report 640. Southern California Coastal Water Research Project. Costa Mesa, CA.

Greenstein, D.J., S.M. Bay, D. Young. 2011. Sediment Toxicity Identification Evaluation for the Mouths of Chollas and Paleta Creeks, San Diego. Technical Report 669. Southern California Coastal Water Research Project. Costa Mesa, CA.

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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