

# TABLE OF CONTENTS

---

Section 16    References ..... 16-1

- AAR (Association of American Railroads). 2005. *Railroad facts: 2005 edition*. Freight Revenue per Ton Mile and per Ton. Washington. November. p. 30.
- Aboelata, M., D.S. Bowles, and D.M. McClelland. 2003. A model for estimating dam failure life loss. In: *Proceedings of the Australian Committee on Large Dams Risk Workshop*. Launceston, Australia. October.
- Adam, P. 1990. *Saltmarsh ecology*. Cambridge: Cambridge University Press. 461 pp.
- Aguilar, L., and L.J. Thibodeaux. 2005. Kinetics of peat soil dissolved organic carbon release from bed sediment to water. Part 1. Laboratory simulation. *Chemosphere* 58:1309–1318.
- AIR Worldwide Corporation. 2007. Spatially correlated maps of ground motion residuals: Seismic risk study of the Sacramento–San Joaquin Delta, California. Report prepared for Jack R. Benjamin & Associates, Inc.
- Akai, K., J.D. Bray, R.W. Boulanger, J.T. Christian, W.D.L. Finn, L.F. Harder, I.M. Idriss, K. Ishihara, Y.T. Iwasaki, J.K. Mitchell, Y. Moriwake, K. Nakagawa, T.D. O’Rourke, R.B. Seed, N. Sitar, K. Soga, P. Somerville, I. Towhata, and T.L. Youd. 1995. *Geotechnical reconnaissance of the effects of the January 17, 1995, Hyogoken-Nanbu earthquake, Japan*. Report No. UCB/EERC-95/01. July. Earthquake Engineering Research Center, University of California, Berkeley.
- Alameda County Water District. 2005. Urban Water Management Plan. Available at: <http://www.acwd.org>.
- Aldenderfer, M.S., and R.K. Blashfield. 1984. *Cluster analysis*. Series on Quantitative Applications in the Social Sciences. Sage University Press.
- Alley, R.B., P.U. Clark, P. Huybrechts, and I. Joughin. 2005. Ice-sheet and sea level changes. *Science* 310:456–460.
- Alpine, A.E., and J.E. Cloern. 1992. Trophic interactions and direct physical effects control phytoplankton biomass and production in an estuary. *Limnology and Oceanography* 37:946–955.
- Ambler, J.W., J.E. Cloern, and A. Hutchinson. 1985. Seasonal cycles of zooplankton from San Francisco Bay. *Hydrobiologia* 129:177–179.
- Anderson, L.W., and L.A. Piety. 2001. Geologic seismic source characterization of the San Luis-O’Neill area, eastern Diablo Range, California, for B.F. Sisk and O’Neill Forebay dams, San Luis Unit, Central Valley Project, California. *Bureau of Reclamation, Seismotectonic Report*. 2001–2002.
- Angell, M.A., K.L. Hanson, and T. Crampton. 1997. *Characterization of Quaternary contractional deformation adjacent to the San Andreas fault, Palo Alto, California*. Final Report submitted to the U.S. Geological Survey. National Earthquake Hazards Reduction Program, Award No. 1434-95-G-2586.
- Armor, C., R. Baxter, R. Breuer, M. Chotkowski, P. Coulston, S. Culberson, B. Herbold, M. Nobriga, and T. Sommer. 2006. Interagency Ecological Program 2006-2007 Work Plan to Evaluate the Decline of Pelagic Species in the Upper San Francisco Estuary.

- Armor, C., and P.L. Herrgesell. 1985. Distribution and abundance of fishes in the San Francisco Bay Estuary between 1980 and 1982. *Hydrobiologia* 129:211–227.
- Arulnathan, R. 2007. URS Corporation. Personal Communication.
- ASCE (American Society of Civil Engineers). 1977. Crop salt tolerance: Current assessment. *J. Irrig. Drain. Div.* 103:115–134.
- Atkinson, G.M., and D.M. Boore. 2003. Empirical ground-motion relations for subduction zone earthquakes and their applications to Cascadia and other regions. *Bull. Seismol. Soc. Am.* 93:1703–1729.
- Atwater, B.F. 1982. Geologic maps of the Sacramento-San Joaquin Delta, California: *U.S. Geological Survey Miscellaneous Field Studies Map* (MF-1401). Scale 1:24,000, 21 sheets, 15 pp.
- Atwater, B.F., and D.F. Belknap. 1980. Tidal-wetland deposits of the Sacramento-San Joaquin Delta, California. In: *Quaternary Depositional Environments of the Pacific Coast. Proceedings of the Pacific Coast Paleogeography Symposium*. Edited by M.E. Field, A.H. Bouma, I.P. Colburn, R.G. Douglas, and J.C. Ingle. Society of Economic Paleontologists and Mineralogists, Pacific Section, Los Angeles, California. 4:89–103.
- Atwater, B.F., S.G. Conard, J.N. Dowden, C.W. Hedel, R.L. MacDonald, and W. Savage. 1979. History, landforms, and vegetation of the estuary's tidal marshes. In: *San Francisco Bay: The urbanized estuary*. Edited by T.J. Conomos, A.E. Leviton, and M. Berson. American Association for the Advancement of Science, Pacific Division, San Francisco, California. 347–385.
- AVEK (Antelope Valley–East Kern Water District). 2005. Antelope Valley–East Kern Urban Water Management Plan.
- Aydin, A. 1982. The East Bay hills, a compressional domain resulting from interaction between the Calaveras and Hayward-Rogers Creek faults. In: *Proceedings, Conference on Earthquake Hazards in the Eastern San Francisco Bay Area*, Edited by E.W. Hart, S.E. Hirschfeld, and S.S. Schulz. California Division of Mines and Geology Special Publication 62. 11–21.
- Bacher, D. 2005a. *Feds propose threatened listing for Sacramento River green sturgeon*. May 5, 2005. Available at: <http://www.fishsniffer.com/dbachere/050505sturgeon.html>
- Bacher, D. 2005b. *Franks Tract Area: A Fall hot spot for bass on the California Delta*. October 24, 2005. Available at: <http://www.fishsniffer.com/dbacher/051024frankstract.html>
- Baecher, G.B., and J. Christian. 2003. *Reliability and statistics in geotechnical engineering*. London and New York: John Wiley & Sons. 605 pp.
- Bain, K.B., and J.L. Bain. 1982. *Habitat suitability index models: Coastal stocks of striped bass*. U.S. Fish and Wildlife Service, Office of Biological Services, Washington, D.C. FWS/OBS-82/10.1. 29 pp.
- Baldwin, A.H., and I.A. Mendelssohn. 1998. Response of two oligohaline marsh communities to lethal and nonlethal disturbance. *Oecologia* 116:44, 543–555.

- Banck, J. 2004. *Striped bass*. Available at:  
[http://www.fairharbor.com/do/do\\_fish\\_bass\\_biology.htm](http://www.fairharbor.com/do/do_fish_bass_biology.htm)
- Barrat-Segretain, M.H., and C. Amoros. 1995. Influence of flood timing on the recovery of macrophytes in a former river channel. *Hydrobiologia* 316(2), 91–101 (1 p. ¾).
- Barrios, A. 2000. *Agriculture and water quality*. CAE Working Paper Series. WP00-2. June. American Farmland Trust's Center for Agriculture in the Environment. DeKalb, Illinois.
- Bates, L.A. 1977. Soil survey of Solano County, California. U.S. Dept. of Agriculture, Soil Conservation Service Bay Institute in cooperation with the University of California Agricultural Experiment Station, Washington, D.C.
- BAWSCA (Bay Area Water Supply and Conservation Agency). 2006. *Annual Survey*. FY 2004–05. April 2006.
- BDAT (Bay Delta Tributaries Project). 2007. <http://bdat.ca.gov/>
- Beamesderfer, R.C.P., and M.A.H. Webb. 2002. *Green Sturgeon Status Review Information*. Prepared for the State Water Contractors.
- Bennett, W.A. 2005. Critical assessment of the Delta smelt population in the San Francisco Estuary, California. *San Francisco Estuary and Watershed Science* 3(2), 1–71.
- Berg, L., and T.G. Northcote. 1985. Changes in territorial, gill-flaring, and feeding behavior in juvenile Coho salmon (*Oncorhynchus kisutch*) following short-term pulses of suspended sediment. *Canadian Journal of Fisheries and Aquatic Sciences* 42:1410–1477.
- Berkson, J.M., L.L. Kline, and D.J. Orth (eds.). 2002. *Incorporating uncertainty into fishery models*. American Fisheries Society, Bethesda Symposium 27, Maryland.
- Bieber, D.W. 2002. The Midway fault, a left-lateral fault in a right-lateral world (abs). *Association of Engineering Geologists News* 45:56. Poster Session, AEG Annual Convention, Reno, Nevada, September 2002.
- Blurton, Dave, California Department of Fish and Game. 2006. Personal Communication.
- Bogdanov, A.S., S.I. Doroshev, and A.F. Karpevich. 1967. Experimental transfer of (*Salmo gairdneri*) and (*Roccus saxatilis*) of the USA for in bodies of water of the USSR. *Vopr. Ikhtiol.* 42:185–187. (Translated from Russian by R.M. Howland, Narragansett Marine Game Fish Research Laboratory, R.I.).
- Bonfils, C., P. Duffy, B. Santer, D. Lobell, T.J. Phillips, T.M.L. Wigley, and C. Doutriaux. 2006. Identification of external influences on temperatures in California. *Climatic Change* 87(Suppl 1):S43-S55. doi:10.1007/s10584-007-9374-9. Available at:  
[http://meteora.ucsd.edu/cap/cap\\_references.html](http://meteora.ucsd.edu/cap/cap_references.html)
- Boore, D.M., and G.M. Atkinson. 2007. *Boore-Atkinson NGA ground motion relations for the geometric mean horizontal component of peak and spectral ground motion parameters*. PEER 2007/01. Pacific Earthquake Engineering Research Center.
- Boore, D.M., J.F. Gibbs, W.B. Joyner, J.C. Tinsley, and D.J. Ponti. 2003. Estimated ground motion from the 1994 Northridge, California, earthquake at the site of the Interstate 10

- and La Cienega Boulevard bridge collapse, West Los Angeles, California, *Bulletin of the Seismological Society of America* 93(6), 2737–2751.
- Boulanger, R.W., and I.M. Idriss. 2004. *Evaluating the potential for liquefaction or cyclic failure of silts and clays*. Center for Geotechnical Modeling, Report No. UCD/CGM-04/01, University of California, Davis, December.
- Bourez, Walter. MBK Engineers, Personal Communication.
- Bowen, M.D., B.B. Baskerville-Bridges, K.W. Frizell, L. Hess, C.A. Carp, S.M. Siegfried, and S.L. Wynn. 2004. *Empirical and experimental analyses of secondary lower efficiency at the Tracy Fish Collection Facility, March 1996 to November 1997*. Tracy Fish Facility Studies, Volume 11, U. S. Bureau of Reclamation, Mid Pacific Region, Denver Technical Service Center.
- Brandes, P.L., and J.S. McLain. 2001. Juvenile Chinook salmon abundance, distribution, and survival in the Sacramento-San Joaquin Estuary. In: *Contributions to the Biology of Central Valley Salmonids*, vol. 2. Edited by R.L. Brown. *Fish Bulletin* 179:39–138.
- Broadbent, F.E. 1960. Factors influencing the decomposition of organic soils of the California Delta, *Hilgardia* 29:587–612.
- Brocher, T.M. 2005. A regional view of urban sedimentary basins in northern California based on oil industry compressional-wave velocity and density logs: *Bulletin of the Seismological Society of America* 95:2093–2114.
- Bronte, Bill. 2006–2007. California Department of Transportation. Personal Communication.
- Brown and Caldwell. 2005. CALFED Water Quality Program Assessment Report. Developed for the CALFED Bay-Delta Program. June. Access online at [http://calwater.ca.gov/Programs/DrinkingWater/adobe\\_pdf/Initial\\_Assessment/WQP\\_Initial\\_Assessment\\_6\\_2005.pdf](http://calwater.ca.gov/Programs/DrinkingWater/adobe_pdf/Initial_Assessment/WQP_Initial_Assessment_6_2005.pdf)
- Brown, J.H. 1995. *Macroecology*. Chicago: University of Chicago Press.
- Brown, J.H., and M.V. Lomilino. 1998. *Biogeography*, 2<sup>nd</sup> Edition. Sunderland, MA: Sinauer Associates. pp. 297–326.
- Brown, J.H., G.C. Stevens, and D.M. Kaufman. 1996. The geographic range: size, shape, boundaries, and internal structure. *Annual Review of Ecology and Systematics* 27:597–623.
- Brown, L.R. 2003. A summary of the San Francisco tidal wetlands restoration series. In: *Issues in San Francisco Estuary Tidal Wetlands Restoration*. *San Francisco Estuary and Watershed Science*. Edited by Larry R. Brown. Vol. 1, Issue 1 (October 2003), Article 6. Available at: <http://repositories.cdlib.org/jmie/sfews/vol1/iss1/art6>
- Bullard, T.F., K.L. Hanson, and H.F. Abramson-Ward. 2004. *Quaternary investigations to evaluate seismic source characteristics of the frontal thrust belt, Palo Alto region, California*. Final Report to U.S. Geological Survey, National Earthquake Hazards Reduction Program, Awards 01HQGR0015 and 01HQCR0016.

- Buol, S.W., F.D. Hole, and R.J. McCracken. 1973. *Soil Genesis and Classification*. Ames, Iowa: The Iowa State University Press.
- Burdick, D.M., and I.A. Mendelssohn. 1990. Relationship between anatomic and metabolic responses to soil waterlogging in the coastal grass *Spartina patens*. *Journal of Experimental Botany* 41:223–228.
- Bureau of Labor Statistics. 2007. Producer Price Index Industry Data. U.S. Department of Labor. Available at: [www.bls.gov](http://www.bls.gov).
- Bürgmann, R., R. Arrowsmith, T. Dumitru, and R. McLaughlin. 1994. Rise and fall of the Southern Santa Cruz Mountains, California, from fission tracks, geomorphology, and geodesy. *Journal of Geophysical Research* 99:20181–20202.
- Burlington Santa Fe Railroad. 2006. BNSF Facts. Available at: <http://www.bnsf.com/media/bnsffacts.html>
- Burton, M.N. 1985. The effects of suspensoids on fish. *Hydrobiologia* 125:221–241.
- Byrne, R., B.L. Ingram, S. Starratt, F. Malamud-Roam, J.N. Collins, and M.E. Conrad. 2001. Carbon-isotope, diatom, and pollen evidence for late Holocene salinity change in a brackish marsh in the San Francisco Estuary. *Quaternary Research* 55:66–76.
- CALFED Bay-Delta Program. 1998. Delta Long-Term Levee Protection Plan, Special Technical Review, Draft. September.
- CALFED Bay-Delta Program. 1999. Levee System Integrity Program Plan, Draft Programmatic EIS/EIR Technical Appendix. June.
- CALFED Bay-Delta Program. 2000a. Water Quality Program Plan. Final Programmatic EIS/EIR Technical Appendix. July.
- CALFED Bay-Delta Program. 2000b. Seismic Vulnerability of the Sacramento-San Joaquin Delta Levees. Levee and Channels Technical Team, Seismic Vulnerability Sub-Team. April.
- CALFED Bay-Delta Program. 2006. CALFED Bay-Delta Program: Levee System Integrity Delta Flood Risk. Accessed Oct. 2006–Jan. 2007. Available at: <http://calwater.ca.gov/Programs/LeveeSystemIntegrity/DeltaFloodRisk.shtml>
- CALFED Bay-Delta Program. 2007. CALFED End of Stage 1 Staff Report. November.
- California Chapter of the American Society of Farm Managers and Rural Appraisers. 2005. *2005 Trends in agricultural land and lease values*.
- California Department of Conservation. 2004. *Annual report of the state oil and gas supervisor*. Publication No. PR06. Division of Oil, Gas, and Geothermal Resources, Sacramento, California.
- California Department of Parks and Recreation. 1997. *Sacramento-San Joaquin Delta recreation survey*. Available at: <http://www.delta.ca.gov/recsur.asp>
- California Energy Commission. 2003. *Transportation fuels, technologies, and infrastructure assessment report*. December. Available at <http://www.energy.ca.gov/reports/100-03-013F.PDF>.

- California Energy Commission. 2006. *Spring 2006 petroleum fuels price spike report to the Governor*. CEC-600-2006-012.
- California Farm Water Coalition. 1999. *Water fact book*. Available at: [www.water-ed.org](http://www.water-ed.org)
- California Regional Water Quality Control Board—Central Valley Region. 1998. *Fourth Edition of the Water Quality Control Plan (Basin Plan) Sacramento River and San Joaquin River Basins*. Sacramento, California.
- California Urban Water Agencies. 1991. *Cost of industrial water shortages*. Prepared by Spectrum Economics, Inc.
- Caltrans (California Department of Transportation). 2001. California Intermodal Transportation Management System (ITMS). ITMS Basic Documentation prepared by Booz Allen & Hamilton Inc. Team.
- Caltrans (California Department of Transportation). 2006 Traffic Volumes (Annual Average Daily Traffic (AADT)) for all vehicles on California State Highways. Available at: <http://traffic-counts.dot.ca.gov>.
- Cao, T., W.A Bryant, B. Rowshandel, D. Branum, and C.J. Wills. 2003. The revised 2002 California probabilistic seismic hazard maps. June. California Geological Survey. Available at: [http://www.consrv.ca.gov/CGS/rghm/psha/fault\\_parameters/pdf/2002\\_CA\\_Hazard\\_Maps.pdf](http://www.consrv.ca.gov/CGS/rghm/psha/fault_parameters/pdf/2002_CA_Hazard_Maps.pdf)
- CAPA (California Association of Port Authorities). 2005. CAPA Tonnage Statistics.
- Cappiella, K., C. Malzone, R. Smith, and B. Jaffe. 2005. *Sedimentation and bathymetry changes in Suisun Bay, 1867-1990*. U.S. Geological Survey, Open-File Report 99-563.
- Carlton, J.T. 1979. Introduced invertebrates of San Francisco Bay. In: *San Francisco Bay—The Urbanized Estuary*, T.J. Conomos (ed.). pp. 427–444. American Association for the Advancement of Science, Pacific Division, San Francisco, California.
- Carlton, J.T., J. Thompson, L.E. Schemel, and F.H. Nichols. 1990. Remarkable invasion of San Francisco Bay (California, USA) by the Asian clam *Potamocorbula amurensis* I. Introduction and dispersal. *Marine Ecol. Prog. Series* 66:81–94.
- Carollo Engineers. 2000. Bufferlands Master Plan. Chapter 2. Resource and Land Inventory. Final Draft. August.
- Carpenter, D.W., A.L. Ramirez, and J. Wagoner. 1980. Status report on the geology of the Lawrence Livermore Laboratory site and adjacent areas: Lawrence Livermore National Laboratories UCLR-53065, v. 2.
- Carpenter, D.W., J.J. Sweeney, P.W. Kasameyer, N.R. Burkhard, K.G. Knauss, and R.J. Shlemon. 1984. Geology of the Lawrence Livermore National Laboratory site and adjacent areas: Lawrence Livermore National Laboratory, UCRL-53316.
- Casitas Municipal Water District. 2005. Urban Water Management Plan.
- Castaic Lake. 2005. Castaic Lake Water Agency Urban Water Management Plan.
- Casulli, V., and E. Cattani. 1994. Stability, accuracy and efficiency of a semi-implicit method for three-dimensional shallow water flow. *Computers Math. Applic.* 27(4), 99–112.

- Casulli, V., and R.A. Walters. 2000. An unstructured, three-dimensional model based on the shallow water equation. *International Journal for Numerical Methods in Fluids* 2000:32:
- Cayan, D., P. Bromirski, K. Hayhoe, M. Tyree, M. Dettinger, and R. Flick. 2006b. *Projecting Future Sea Level*. Report to the California Climate Change Center. March.
- Cayan, D.R., S.A. Kammerdiener, M.D. Dettinger, and J.M. Caprio. 2001. Changes in the onset of spring in the western United States. *Eos Trans. AGU* 85(47), Fall Meet. Suppl.
- Cayan, D., E. Maurer, M. Dettinger, M. Tyree, K. Hayhoe, C. Bonfils, P. Duffy, and B. Santer. 2006a. *Projecting Future Sea Level. California Energy Commission Report # CEC-500-2005-202-SF*. March 2006. Available at:  
[http://www.climatechange.ca.gov/climate\\_action\\_team/reports/index.html](http://www.climatechange.ca.gov/climate_action_team/reports/index.html)
- Cazenave, A. 2006. How fast are the ice sheets melting? *Science* 314:1250–1252.
- CBDA (California Bay-Delta Authority). 1998. Long-term levee protection plan. Programmatic EIS/EIR. Technical Appendix. 1998.
- CBDA (California Bay-Delta Authority). 2001a. Bay breach rolls in. *Science in Action*. December 2001:3–6.
- CBDA (California Bay-Delta Authority). 2001b. The breaching business. *Science in Action*. December 2001:3–6.
- CBDA (California Bay-Delta Authority). 2004. The junction jigsaw. *Estuary* 13(4), 1–7.
- CCWD (Contra Costa Water District), Carollo Engineers, and Hanson Environmental. 2003. CALFED Old River Water Quality Improvement Project. August 13.
- CDEC (California Data Exchange Center). No date. California Department of Water Resources Division of Flood Management. Data download for a single station. URL:  
<http://cdec.water.ca.gov/queryCSV.html>
- CDFG (California Department of Fish and Game). 1964. The effect of water development on the Delta environment. Annual report (1963-1964). Delta Fish and Wildlife Protection Study. Cited In: *Ecological Analysts, Inc. Pittsburg Power Plant Cooling Water Intake Structures 316(b) Demonstration*. 1981.
- CDFG (California Department of Fish and Game). 2005. Central Valley Bay-Delta Branch. Available at: <http://delta.dfg.ca.gov/>
- CDFG (California Department of Fish and Game). 2006a. Fall Midwater Trawl Survey. Available at: <http://www.delta.dfg.ca.gov/baydelta/monitoring/fmwt.asp>
- CDFG (California Department of Fish and Game). 2006b. Striped Bass in San Francisco Bay. Available at <http://delta.dfg.ca.gov/baydelta/monitoring/striper.asp>
- CDOG (California Division of Oil and Gas). 1982. Oil and gas fields, Northern California: Volume 3 of Publication TR10. State of California.
- Cech, J.J. Jr., and C.E. Crocker. 2002. Physiology of sturgeon: Effects of hypoxia and hypercapnia. *J. Appl. Ichthyology* 18:320–324.

- Cech, J.J. Jr., S.J. Mitchell, D.T. Castleberry, and M. McEnroe. 1990. Distribution of California stream fishes: Influence of environmental temperature and hypoxia. *Environmental Biology of Fishes* 29:95–105.
- Cech, J.J. Jr., S.J. Mitchell, and T.E. Wragg. 1984. Comparative growth of juvenile white sturgeon and striped bass: Effects of temperature and hypoxia. *Estuaries* 7:12–18.
- Cedergren, H. 1967. *Seepage, drainage and flow nets*. New York: McGraw-Hill Book Company.
- Central Coast Water Authority. 2005. Urban Water Management Plan.
- CEPA (California Environmental Protection Agency). 2006a. Climate Action Team Report to Governor Schwarzenegger and the California Legislature. March, 2006.
- CEPA (California Environmental Protection Agency). 2006b. California Environmental Protection Agency. Climate Action Team Report to Governor Schwarzenegger and the California Legislature. Appendix – Climate Scenarios for California. March, 2006. Also available as Cayan, D., E. Maurer, M. Dettinger, M. Tyree, K. Hayhoe, C. Bonfils, P. Duffy, and B. Santer, 2006b. Climate Change Scenarios for California: Appendix to the California Energy Commission Report # CEC-500-2005-203-SF. Available at: <http://www.energy.ca.gov/2005publications/CEC-500-2005-203/CEC-500-2005-203-SF.PDF>
- CH2M Hill. 2006 Technical Memorandum Analytical Framework: LCPSIM 2030 Update. Prepared for Common Assumptions Analytical Framework.
- Chappell, S., Suisun Resource Conservation District. 2006. Personal Communication.
- Chen, J.L., C.R. Wilson, D.D. Blankenship, and B.D. Tapley. 2006a. *Geophys Res. Lett* 33, L11502.
- Chen, J.L., C.R. Wilson, and B.D. Tapley. 2006b. Satellite gravity measurements confirm accelerated melting of Greenland ice sheet. *Science* 313(5795), 1958–1960 DOI: 10.1126/science.112900.
- Chen, S. 2007. Results of PG&E transmission planning analysis, personal email.
- Cheng, R.T., and V. Casulli. 2001. Evaluation of the UnTRIM model for 3-D Tidal Circulation. Reprint from: *Proceedings of the 7th International Conference on Estuarine and Coastal Modeling*. St. Petersburg, FL. November 2001. 628–642.
- Cherven, V.B., and W.F. Edmondson (eds.). 1992. Structural Geology of the Sacramento Basin: Annual Meeting, Pacific Section, Society of Economic Paleontologists and Mineralogists, Volume MP-41.
- Chow, V.T. 1959. *Open-channel hydraulics*. New York: McGraw-Hill Inc.
- Church, J.A., N.J. White, R. Coleman, K. Lambeck, and J.X. Mestrovic. 2004. Estimates of the regional distribution of sea level rise over the 1950–2000 period. *J. Clim.* 17:2609.
- CIMIS (California Irrigation Management Information System). 2006. CIMIS Office of Water Use Efficiency (OWUE), California Department of Water Resources (DWR). Web-site accessed Oct.–Dec. 2006. Available at: <http://www.cimis.water.ca.gov/cimis/welcome.jsp>

- Clahan, K.B., D. Wagner, S. Bezore, G. Saucedo, and C. Gutierrez. 2005. *New geologic mapping of the northern San Francisco Bay region: Implications and findings for Quaternary faulting*. U.S. Geological Survey National Earthquake Research Program, Northern California Earthquake Hazards, Research Summaries. FY2005. 2 pp.
- Clarke, D.G., and D.H. Wilber. 2000. *Assessment of potential impacts of dredging operations due to sediment resuspension*. DOER. Technical Note E9. 14 pp.
- CNDDDB (California Natural Diversity Database). 1996. Records search for the Bay-Delta study area. Cited in: *California Bay-Delta Authority 1998. Long Term Levee Protection Plan*.
- CNDDDB (California Natural Diversity Database). 2007. *Special-status plant species in the DRMS study area*.
- CNPS (California Native Plant Society). 2007. Available at: <http://www.cnps.org>
- Coachella Valley Water District. 2005. *Urban Water Management Plan*.
- Cohen, A.N. 1998. *Ships' ballast water and the introduction of exotic organisms into the San Francisco Estuary: Current status of the problem and options for management*. San Francisco Estuary Institute, Richmond, California.
- Cohen, A.N. 2000. Biological invasions in coastal waters. *J. Shellfish Res.* 19(1), 630–631.
- Cohen A.N., and J.T. Carlton. 1995. *Non-indigenous aquatic species in a United States estuary: A case study of the biological invasion of the San Francisco Bay and Delta*. U.S. Fish and Wildlife Service Report.
- Cohen A.N., and J.T. Carlton. 1998. Accelerating invasion rate in a highly invaded estuary. *Science* 279:555–558.
- Cohen, A.N., and P.B. Moyle. 2004. Summary of data and analyses indicating that exotic species have impaired the beneficial uses of certain California waters.
- Collins, J.N., and T.C. Foin. 1993. Evaluation of the impacts of aqueous salinity on the shoreline vegetation of the tidal marshlands in the San Francisco Estuary. p. C-2–C-25 In: San Francisco Estuary Project.
- Connor, M., Davis, J., Leatherbarrow, J., and C. Werme. 2004. *Legacy pesticides in San Francisco Bay. Conceptual Model/Impairment Assessment*. SFEI Contribution #313. Prepared by San Francisco Estuary Institute. November 11, 2004.
- Consortium for Electric Reliability Technology Solutions. 2003. California's Electricity Generation and Transmission Interconnection Needs under Alternative Scenarios. California Energy Commission Consultant Report 500-03-106.
- Contra Costa Water District. 2005. *Urban Water Management Plan*.
- Cooke, J., and Coleman, D. 1973. *Disaster strikes Isleton*. Reclamation Era. U.S. Government Printing Office, Washington, D.C. Vol. 59, No. 1. 24 pp.
- Cornell, C.A. 1968. Engineering seismic risk analysis. *Bull. Seismol. Soc. Am.* 58:1583–1606.

- Cosby, S.W. 1941. *Soil survey of the Sacramento-San Joaquin Delta Area, California*. Bureau of Plant Industry, U. S. Department of Agriculture. 1–47.
- Cosio, Gilbert. 2007. Personal communication to URS by Gilbert Cosio.
- Crane, R.C. 1995a. Geologic map of the Midway. 7.5 minute quadrangle.
- Crane, R.C. 1995b. Geologic map of the Brentwood 7.5 minute quadrangle.
- Crestline-Lake Arrowhead Water Agency. 2005. Urban Water Management Plan.
- CWDD (Converse, Ward, Davis, and Dixon). 1981. Partial technical background data for the Mokelumne aqueduct security plan for EBMUD, Oakland, CA.
- Cyrus, D.P., and S.J.M. Blaber. 1992. Turbidity and salinity in a tropical northern Australian Estuary and their influence on fish distribution. *Estuarine Coastal, and Shelf Science* 35:545–563.
- d’Allesio, M.A., I.A. Johanson, R. Bürgmann, D.A. Schmidt, and M.H. Murray. 2005. Slicing up the San Francisco Bay Area: Block kinematics and fault slip rates from GPS-derived surface velocities. *Journal of Geophysical Research* 110. B06403, doi:10.1029/2004JB003496.
- Damron, J.J., and Daniel, C. 2000. *Central California Valley Interferometric Synthetic Aperture Radar (IFSAR) Collection*. U.S. Army Corps of Engineers. Alexandria, Virginia.
- Davis, H.C., and H. Hidu. 1969. Effects of turbidity-producing substances in seawater on eggs and larvae of three genera of bivalve mollusks. *Veliger* 11(4), 316–323.
- Dawson, E.M., Roth, W.H., Nesarajah, S., Bureau, G., and Davis, C.A. 2001. A practice oriented pore-pressure generation model. In: *Proceedings, 2<sup>nd</sup> International FLAC Symposium, Lyon, France, October*.
- De Woul, M., and R. Hock. 2005. Static mass-balance sensitivity of Arctic glaciers and ice caps using a degree-day approach. *2005 Annals of Glaciology* 42(1), 217–224(8).
- Dean, A.F., S.M. Bollens, C. Simenstad, and J. Cordell. 2004. Marshes as sources or sinks of an estuarine mysid: Demographic patterns and tidal flux of *Neomysis kadiakensis* at China Camp marsh, San Francisco Estuary. *Estuarine, Coastal and Shelf Science* 63:1–11.
- DeGeorge, Jon. 2007. Personal Communication.
- Delta Petroleum Corporation. Roger A. Parker, President and CEO. 2004. Delta Petroleum Corporation Announces First Quarter Fiscal 2005 Results for the Three Months Ended September 30, 2004. Denver, CO.
- Delta Protection Commission. 2002. Land Use and Resource Management Plan for the Primary Zone of the Delta. Regional Location Maps – Delta Atlas. Soils. May. Soils map online at: <http://www.delta.ca.gov/atlas/soil.pdf>
- Dempsey, Michael, Department of Water Resources. 2006. Personal communication via e-mail on November 3, 2006.
- Dennis, B., P. Muholland, and J.M. Scott. 1991. Estimation of growth and extinction parameters for endangered species. *Ecological Monographs* 61(2), 115–143.

- Denton, R.A. 1993. Accounting for antecedent conditions in sea-water intrusion modeling – applications to the San Francisco Bay-Delta. In: *Hydraulic Engineering*, Edited by H.W. Shen, S.T. Su, and F. Wen. ASCE. 448–453.
- dePolo, C.M. 1994. The maximum background earthquake for the Basin and Range Province, western North America. *Bull. Seismol. Soc. Am.* 84:466–472.
- Desert Water Agency. 2005. Urban Water Management Plan.
- Dettinger, M.D. 2004a. From climate-change spaghetti to climate-change distribution. *California Energy Commission Report # 50004-028*.
- Dettinger, M.D. 2004b. A component-resampling approach for estimating probability distributions from small forecast ensembles. *Climatic Change* 76. DOI: 10.1007/s10584-005-9001-6.
- Dettinger, M.D. 2005. From climate-change spaghetti to climate-change distributions for 21<sup>st</sup> century California. *San Francisco Estuary and Marine Science* 3:1–14.
- Dettinger, M.D. 2006. A component resampling approach for estimating probability distributions from small forecast ensembles. *Climatic Change* DOI: 10.1007/s10584-005-9001-6.
- Dettinger, M.D., and D.R. Cayan. 1995. Large-scale atmospheric forcing of recent trends toward early snowmelt runoff in California. *J. Climate*. 8:602–623.
- Dettinger, M.D., D.R. Cayan, M.K. Meyer, and A.E. Jeton. 2004. Simulated hydrologic responses to climate variations and change in the Merced, Carson, and American River Basins, Sierra Nevada, California, 1900–2099. *Climatic Change* 62(1–3) January 2004.
- Deverel, S.J. 1983. Chemical transformations as related to the oxidation-reduction potential in central California organic soils. Doctoral dissertation. University of California at Davis.
- Deverel, S.J. 1999. *Subsidence reversal in the Sacramento-San Joaquin Delta, Report to CALFED Bay-Delta Program*. 44pp. Appendix E of Environmental Impact Report.
- Deverel, S.J., and S.A. Rojstaczer. 1996. Subsidence of agricultural lands in the Sacramento-San Joaquin Delta, California: Role of aqueous and gaseous carbon fluxes. *Water Resources Research* 32:2359–2367.
- Deverel, S.J., B. Wang, and S.A. Rojstaczer. 1998. Subsidence of organic soils, Sacramento-San Joaquin Delta. In: *Land subsidence case studies and current research. Proceedings of the Joseph Poland Subsidence Symposium*. Edited by J.W. Borchers. Association of Engineering Geologists, Sudbury, MA, 489–502.
- Dibblee, T.W. 1980. *A preliminary geologic map of the Livermore Quadrangle, Alameda and Contra Costa Counties, California*. U.S. Geological Survey Open-File Report 80-533b, scale 1:24,000.
- Dibblee, T.W. 1981. *A preliminary map of the Mendenhall Springs Quadrangle, Alameda County, California*. U.S. Geological Survey Open-File Report 81-235, scale 1:24,000.
- DOF (California Department of Finance). 2007a. E-4 *Historical population estimates for city, county and the state, 1991-2000, with 1990 and 2000 census counts*. Sacramento, California. August.

- DOF (California Department of Finance). 2007b. *Population projections for California and its counties 2000-2050, by age, gender and race/ethnicity*. Sacramento, California. July.
- Draper, A.J. 2004. CalSim: Generalized model for reservoir system analysis. *Journal of Water Resources Planning and Management*. American Society of Civil Engineers. 130(6), 480–489.
- Drexler, J.Z., K.L. Verosub, I. Delusina, C.S. de Fontaine, N. Lunning, and S. Wong. 2006. Project REPEAT: Rates and evolution of peat accretion through time in the Sacramento-San Joaquin Delta, California. *Eos Trans. AGU*. 87(52), Fall Meet. Suppl., Abstract PP51A-1125.
- Driller, M.W. 1990. Analysis of safe slopes for levees in the Sacramento-San Joaquin Delta. Project submitted in partial satisfaction of the requirement for the Degree of Master of Science, California State University, Sacramento.
- Driller, M.W. 2006. *Delta Seismic Study – SI Phase III. Draft Report*. California Department of Water Resources (DWR). July 24.
- Dudas, J. 2007. Personal Communication.
- Duffy, P.B. 2007. Projecting sea level rise for the 21st Century. Technical Memorandum. Prepared for the Delta Risk Management Strategy (DRMS)/California Department of Water Resources.
- Duffy, Phil. 2006. Personal communication.
- Duffy, P.B., B. Govindasamy, J. Milovich, K. Taylor, and S. Thompson. 2003. High resolution simulations of global climate, Part 1: Present Climate. *Climate Dynamics* 21:371–390.
- DuVall, R. et al. 2005. Jones Tract flood water quality investigations. Municipal Water Quality Investigations Program. Division of Environmental Services. Department of Water Resources. Draft Report. October.
- DWR (California Department of Water Resources). 1958. Report: Salinity Control Structures Study.
- DWR (California Department of Water Resources). 1979. Re-evaluation of seismic hazards for Clifton Court Forebay, Bethany Dams and Reservoir, Patterson Reservoir, Del Valle Dam and Lake Del Valle. State of California, Department of Water Resources, Sacramento, California.
- DWR (California Department of Water Resources). 1980. Subsidence of organic soils in the Sacramento-San Joaquin Delta, Central District, Sacramento, California.
- DWR (California Department of Water Resources). 1986. *Sacramento – San Joaquin Delta Emergency Water Plan, Report to the Legislature*. December.
- DWR (California Department of Water Resources). 1992. *Seismic stability of Delta levees*.
- DWR (California Department of Water Resources). 1993. Land use mapping data. Cited in: *California Bay-Delta Authority 1998. Long term levee protection plan*.
- DWR (California Department of Water Resources). 1994. *Geology report – Grant line canal barrier*. Division of Design and Construction, California Department of Water Resources.

- DWR (California Department of Water Resources). 1995a. Estimation of Delta Island diversions and return flows. February.
- DWR (California Department of Water Resources). 1995b. *Sacramento-San Joaquin Delta Atlas*. California Department of Water Resources, Sacramento, California. 121 pp. August.
- DWR (California Department of Water Resources). 1999a. *California State water project atlas*. June.
- DWR (California Department of Water Resources). 1999b. Suisun Marsh salinity control gates annual fisheries monitoring report for 1997. Memorandum report. November 1999.
- DWR (California Department of Water Resources). 2000a. *CALFED Suisun Marsh levee breach modeling study results*. Revised December 21, 2000. Available online at [http://www.iep.ca.gov/suisun/modeling/CALFEDlevee/calfed\\_rpt/chapter5.html](http://www.iep.ca.gov/suisun/modeling/CALFEDlevee/calfed_rpt/chapter5.html)
- DWR (California Department of Water Resources). 2000b. *Suisun Marsh Monitoring Program Reference Guide*. Environmental Services Office.
- DWR (California Department of Water Resources). 2001. *Comprehensive review: Suisun Marsh monitoring data 1985-1995*. Environmental Services Office. Table 1-4.
- DWR (California Department of Water Resources). 2004. *After action report: 2004 Jones Tract flood incident*. October 2004.
- DWR (California Department of Water Resources). 2005a. The California water plan update. *Bulletin 160-05*. Sacramento, California. December.
- DWR (California Department of Water Resources). 2005b. Presentation to Senate Natural Resources and Water Committee Hearing on January 31, 2006.
- DWR (California Department of Water Resources). 2006a. Progress on incorporating climate change into management of California's water resources. Technical Memorandum Report. July.
- DWR (California Department of Water Resources). 2006b. Dayflow output. Interagency Ecological Program. Available at: <http://iep.water.ca.gov/dayflow/output/index.html>. Accessed in October 2006.
- DWR (California Department of Water Resources). 2006c. IFSAR topographic data provided with the GIS database.
- DWR (California Department of Water Resources). 2006d. Suisun marsh roads and levees: Map. Available at: <http://www.iep.ca.gov/suisun/map/roadMap.html>. Accessed 2006.
- DWR (California Department of Water Resources). 2006e. The value of the agricultural output of the California Delta. Revised Draft Paper by Jim Rich, California Department of Water Resources (DWR), Division of Planning and Local Assistance. July 27, 2006, including spreadsheet DGAR RA JR 706 rev.xls.
- DWR (California Department of Water Resources). 2006f. *CalSim 2030: Common assumptions base case for 2030 level of development*.

- DWR (California Department of Water Resources). 2007. Water Data Library (WDL) Water Quality Data. Clifton Court Intake. Available at:  
[http://wdl.water.ca.gov/includes/station\\_details.cfm?qst\\_id=10](http://wdl.water.ca.gov/includes/station_details.cfm?qst_id=10)
- DWR (California Department of Water Resources). 2008. Bay Delta Office, Delta Modeling Section. Description of Analytical Tools. DSM2. Available at:  
<http://www.waterplan.water.ca.gov/docs/tools/descriptions/DSM2-description.pdf>
- DWR (California Department of Water Resources). N.d. Historical inundations of Delta Island. Bay-Delta Office, Delta Levees Program. Available at:  
[http://baydeltaoffice.water.ca.gov/ndelta/levees/historic\\_inundation\\_delta.htm](http://baydeltaoffice.water.ca.gov/ndelta/levees/historic_inundation_delta.htm)
- DWR (California Department of Water Resources). N.d. DRMS, *Comparison of repairs of major levee breaks in the Delta*. Available at: <http://www.drms.water.ca.gov/doc/>
- DWR and USBR (California Department of Water Resources and U.S. Bureau of Reclamation). 2002. CalSimII Benchmark Studies Assumptions. As cited in Vicuna 2006.
- DWR and USBR (California Department of Water Resources and U.S. Bureau of Reclamation). 2005. South Delta improvements program EIS/EIR (draft). October.
- Dyurgerov, M.B., and M.F. Meier. 2002. Twentieth century climate change: Evidence from small glaciers. *Proceedings of the National Academy of Sciences*, National Academy of Sciences. May 14, 2002. 99(10), 6524–6526.
- Easterling, D.R., G.A. Meehl, C. Parmesan, S.A. Changnon, T.R. Karl, and L.O. Mearns. 2000. Climate extremes: Observations, modeling, and impacts. *Science* 289 (5487): 2068–2074.
- EBMUD (East Bay Municipal Utility District). 1995. *Final Report: Mokelumne Aqueduct Seismic Upgrade Project, Preliminary Design*. August 3.
- EBMUD (East Bay Municipal Utility District). 1996. *Initial Study and Mitigated Negative Declaration for the Mokelumne Aqueduct Seismic Upgrade Project*. March.
- EBMUD (East Bay Municipal Utility District). 2005. *Urban Water Management Plan*.
- Ecological Analysts, Inc. 1981. Pittsburg Power Plant Cooling Water Intake Structures 316(b) Demonstration. Prepared for: Pacific Gas & Electric Company (PG&E).
- EDAW. 2005. *Flooded Islands Feasibility Study Baseline Report*. Prepared for the California Department of Water Resources, for submittal to the California Bay-Delta Authority, February 2005.
- Efron, B. 1982. The jackknife, the bootstrap, and other resampling plans. *Society for Industrial and Applied Mathematics*, Philadelphia, Pennsylvania, USA.
- Ekstrom, G., M. Nettles, and V.C. Tsai. 2006. Seasonality and increasing frequency of Greenland glacial earthquakes. *Science* 311(5768), 1756–1758. 24 March 2006.  
DOI: 10.1126/science.1122112.
- Energy Information Administration. 2005. Annual Energy Review 2005. Table 6.7, Natural Gas Wellhead, City Gate and Imports Prices, Selected Years, 1949 to 2005.
- Englehardt, Jerry. 2007. Kinder Morgan. Personal Communication.

- Environmental Protection Information Center. Center for Biological Diversity. 2001. Petition to List the North American Green Sturgeon (*Acipenser medirostris*) as an Endangered or Threatened Species under the Endangered Species Act. June 201.
- EPA (U.S. Environmental Protection Agency). 2004. *An examination of EPA risk assessment principles and practices*. Office of the Science Advisor, EPA/100/B-04/001.
- EPA (U.S. Environmental Protection Agency). 2007. Region 9: News Releases, Kinder Morgan, SFPP agree to pay nearly \$5.3 million to resolve federal and state environmental violations: Settlement addresses Suisun Marsh, Alameda, Donner Lake spills. May 21.
- EPA (U.S. Environmental Protection Agency). 2008. Ecological Toxicity Information Region 5. Last updated on May 19, 2008. Access online at <http://www.epa.gov/region5superfund/ecology/html.toxprofeles.htm>
- Ernest, S.K.M., and J.H. Brown. 2001. Homeostasis and compensation: The role of species and resources in ecosystem stability. *Ecology* 82:2118–2132.
- Essential Services Task Force. 2004. Kinder Morgan Pipeline Disruption.
- Evans, R.O., and N.R. Fausey. 1999. Effects of inadequate drainage on crop growth and yield. In: *Agricultural drainage*. R.W. Skaggs and J. van Schilfgaarde (eds.). Madison, WI: American Society of Agronomy. pp. 13–54.
- FAO (Food and Agriculture Organization). 1976. Irrigation and Drainage Paper #29: Water Quality for Agriculture.
- FEMA (Federal Emergency Management Agency). 2004. *Using HAZUS-MH for Risk Assessment*. Report No. 433. August.
- FEMA (Federal Emergency Management Agency). 2005a. Final Draft Guidelines for Coastal Flood Hazard Analysis and Mapping for the Pacific Coast of the United States. FEMA Regions IX, X, and FEMA Headquarters, Washington, DC.
- FEMA (Federal Emergency Management Agency). 2005b. Mitigation BCA Toolkit Version 2.0. BC Overview Training Materials. Data Derivation. Draft. January.
- FEMA (Federal Emergency Management Agency). 2006. HAZUS-MH MR2. May.
- Fenton, C.H., and C.S. Hitchcock. 2001. Recent geomorphic and paleoseismic investigations of thrust faults in Santa Clara Valley, California. In: *Engineering Geology Practice in Northern California*, H. Ferriz, and R. Anderson (eds.). pp. 71–89. *California Division of Mines and Geology Bulletin* 210.
- Field, C.B., G.C. Daily, F.W. Davis, S. Gaines, P.A. Matson, J. Melack, and N.L. Miller. 1999. Confronting climate change in California: *Ecological Impacts on the Golden State*. Union of Concerned Scientists, Cambridge, Massachusetts, and Ecological Society of America.
- Flick, R.E., J.F. Murray, and L.C. Ewing. 2003. Trends in United States tidal datum statistics and tide range. *Journal of Waterway, Port, Coastal, and Ocean Engineering* 129(4), 155–164.
- Florsheim, J.L., and M.D. Dettinger. 2007. Climate and floods still govern California levee breaks. *Geophys. Res. Lett.* 34.

- Frankel, A. 1995. Mapping seismic hazard in the central and eastern United States. *Seismological Research Letters* 66:8–21.
- Frankel, A., M. Peterson, C. Mueller, K. Haller, R. Wheeler, E. Leyendecker, R. Wesson, S. Harmsen, C. Cramer, D. Perkins, and K. Rukstales. 2002. *Documentation for the 2002 update of the national seismic hazard maps*. U.S. Geological Survey Open-File Report 02-420. 33 pp.
- Freeze, R.A., and J.A. Cherry. 1979. *Groundwater*. New Jersey: Prentice Hall.
- Fujii, R., A.J. Ranalli, G.R. Aiken, and B.A. Bergamaschi. 1998. *Dissolved organic carbon concentrations and compositions, and trihalomethane formation potentials in waters from agricultural peat soils, Sacramento-San Joaquin Delta, California: Implications for drinking-water quality*. Water-Resources Investigation Report 98-4147. U.S. Geological Survey. Prepared in cooperation with the California Department of Water Resources.
- Galehouse, J.S. 1995. *Theodolite measurements of creep rates on San Francisco Bay region faults*. U.S. Geological Survey Open-file Report 95-210.
- Galinato, M.I., and A.G. van der Valk. 1986. Seed germination trains of annuals and emergents recruited during drawdowns in the Delta Marsh, Manitoba, Canada. *Aquatic Botany AQBODS* 26 (½): 89–102.
- Garrity, N.J., R. Battalio, P.J. Hawkes, and D. Roupe. 2007. Evaluation of event and response approaches to estimate the 100-year coastal flood for Pacific Coast sheltered waters. In: *Proceedings of 30th International Conference on Coastal Engineering* San Diego, California, September 3–8, 2006.
- GEI Consultants, Inc. 1996. Planned Filling of Scour Pond, Sherman Island Levee Rehabilitation, Reclamation District No. 341. October 15.
- Geo-Slope International. 2004. SEEP/W for Finite Element Seepage Analysis, Version 6.17. Calgary, Alberta, Canada.
- Gharegooloo, Ali, City of Stockton. 2006. Personal Communication.
- Gilbert, G.K. 1917. *Hydraulic-mining debris in the Sierra Nevada*. U.S. Geological Survey Professional Paper 105, Washington, DC: Government Printing Office, 154 pp.
- Gilinski, J. and W. Stepniewski. 1983. *Oxygen and its role for plants*. Boca Raton, Florida: CRC Press.
- Gingras, M. 1997. Mark/recapture experiments at Clifton Court Forebay to estimate pre-screening loss to juvenile fishes: 1976–1993. Technical Report 55. Interagency Ecological Program.
- Gleckler, P.J., T.M.L. Wigley, B.D. Santer, J.M. Gregory, K. AchutaRao, and K.E. Taylor. 2006. Volcanoes and climate: Krakatoa's signature persists in the ocean. *Nature* 439(7077), 675–675.
- Gleick, P.H. 1987. Regional hydrologic consequences of increases in atmospheric carbon dioxide and other trace gases. *Climatic Change* 10(2), 137–161.
- Goals Project. 2000. *Baylands ecosystem species and community profiles: Life histories and environmental requirements of key plants, fish and wildlife*. Prepared by the San Francisco

- Bay Area Wetlands Ecosystem Goals Project. P.R. Olofson (ed.). San Francisco Bay Regional Water Quality Control Board, Oakland, California.
- Goda, Y. 1985. *Random seas and design of maritime structures*. Tokyo: University of Tokyo Press.
- Goldman, G., B. McWilliams, V. Pradhan, and C. Brown. 1998. *The economic impact of recreational boating and fishing in the Delta*. Department of Agricultural and Resource Economics, University of California at Berkeley.
- Goman, M.F., and L.E Wells. 2000. Trends in river flow affecting the northeastern reach of the San Francisco Bay Estuary over the past 7000 years. *Quaternary Research* 54:206–217.
- Gornitz, V. 2007. *Sea level rise: After the ice melted and today*. NASA Goddard Institute for Space Studies. New York. January. Available at: [http://www.giss.nasa.gov/research/briefs/gornitz\\_09](http://www.giss.nasa.gov/research/briefs/gornitz_09)
- Gradall, K.S., and W.A. Swenson. 1982. Responses of brook trout and creek chubs to turbidity. *Transactions of the American Fisheries Society* 111:392–395.
- Graham, W.J. 1999. *A procedure for estimating loss of life caused by dam failure*. DSO-99-06. September 1999. Dam Safety Office, Bureau of Reclamation, U.S. Department of Interior.
- Graham, W.J. 2008. Personal communication to URS concerning enhancement to procedure described in his 1999 paper.
- Grahm, Pat, Manager, Grizzly Island Wildlife Complex. 2006. Personal Communication.
- Grant, J., and B. Thorpe. 1991. Effects of suspended sediment on growth, respiration, and excretion of the soft-shell clam (*Mya arenaria*). *Can. J. Fish. Aquat. Sci.* 48:1285–1292.
- Gravier, G., California Department of Water Resources. 2006. Telephone conversation with M. Forrest, URS. December 8.
- Graymer, R.W., W. Bryant, C.A. McCabe, S. Hecker, and C.S. Prentice. 2006. Map of Quaternary-active faults in the San Francisco Bay region. *U. S. Geological Survey Scientific Investigations Map* 2919, one sheet, scale 1:275,000.
- Gregor, Nick, Senior Seismologist, Pacific Engineering & Analysis (510 528-2821). 2007. Telephone conversation with Ivan Wong, Principal Seismologist/Vice President, Seismic Hazards Group, URS. Ground motion attenuation relationship for Cascadia subduction zone megathrust earthquakes. April.
- Gregory, R.S. 1993. Effect of turbidity on the predator avoidance behavior of juvenile Chinook salmon (*Oncorhynchus tshawytscha*). *Canadian Journal of Fisheries and Aquatic Sciences* 50:241–246.
- Gregory, R.S. and T.G. Northcote. 1993. Surface, planktonic, and benthic foraging by juvenile chinook salmon (*Oncorhynchus tshawytscha*) in turbid laboratory conditions. *Canadian Journal of Fisheries and Aquatic Sciences* 50:233–240.
- Grimaldo, L., and Z. Hymanson. 1999. What is the impact of the introduced Brazilian waterweed *Egeria Densa* to the Delta ecosystem? *IEP Newsletter* 12(1), 43–45.

- Grimaldo, L.F., R.E. Miller, and C. Peregrin. 2000. Examining the relative predation risks of juvenile Chinook salmon in shallow water habitats of the Central Delta: The effect of submerged aquatic vegetation on predation risk. *IEP Newsletter* 13(1):55–59.
- Gross, Ed. 2007. Personal Communication.
- Gross, E.S., J.R. Koseff, and S.G. Monismith. 1999. Evaluation of advective schemes for estuarine salinity simulations. *Journal of Hydraulic Engineering* 125(1), 32–46.
- Gross, E.S., M.L. MacWilliams, and W. Kimmerer. Simulating periodic stratification in the San Francisco Estuary. In: *Proceedings of the 9th Estuarine and Coastal Modeling Conference*, ASCE, 155–175.
- Gross, E.S., M.L. MacWilliams, and N. Nidzieko. 2007b. Delta Risk Management Strategy – Three-Dimensional Salinity Simulations of Sea Level Rise Scenarios. Prepared for California Department of Water Resources. March, 2007.
- Gross, E.S., N. Nidzieko, and M.L. MacWilliams. 2007a. Delta Risk Management Strategy – Parameterization of Mixing Using a Three-Dimensional Hydrodynamic Model. Prepared for California Department of Water Resources. March, 2007.
- Hambright, Marla, Department of Water Resources, Sacramento. 2007. Personal Communication.
- Hanks, T.C., and W.H. Bakun. 2002. A bilinear source-scaling model for M-log A observations of continental earthquakes: *Bull. Seismol. Soc. Am.* 92:1841–1846.
- Hansen, D.V., and Rattray, M. 1965. Gravitational circulation in straits and estuaries, *Journal of Marine Research* 23:104–122.
- Hanson, C.H. 2001. Are juvenile Chinook salmon entrained at unscreened diversions in direct proportion to the volume of water diverted? In: *Contributions to the biology of Central Valley salmonids*. Vol. 2. R.L. Brown (ed.). Fish Bulletin No. 179:331–341.
- Hanson, C.H., J. Coil, B. Keller, J. Johnson, J. Taplin, and J. Monroe. 2004. *Assessment and evaluation of the effects of sand mining on aquatic habitat and fishery populations of Central San Francisco Bay and the Sacramento–San Joaquin Estuary*. Prepared for Hanson Aggregates Mid-Pacific, Inc., RMC Pacific Materials, Inc., and Jerico Products/Morris Tug and Barge. Final Report. September.
- Hanson, K.L., and J.R. Wesling. 2006. Mapping of the West Napa fault zone for input into the Northern California Quaternary fault database. USGS NEHRP Northern California Earthquake Hazards Research Summaries FY2005. 3rd Annual Northern California Earthquake Hazards Workshop, January 18–19, 2006, Workshop Report, pp. 38–39.
- Hanson, K.L., and J.R. Wesling. 2007. Mapping of the West Napa fault zone for input into the Northern California Quaternary fault database. USGS NEHRP Northern California Earthquake Hazards Research Summaries FY2006. 3rd Annual Northern California Earthquake Hazards Workshop. Workshop Report. 2 pp.
- Harland Tait & Associates. 1994. Fault and limited geotechnical investigation North Fairfield Site, Fairfield, California. Unpublished report submitted to the City of Fairfield.

- Harrison, C. 2001. CALFED Science Program Expert Review Panel: Hydrodynamics and salinity response to levee breaches in the Suisun Marsh. *IEP Newsletter* 14(4): 16-17.
- Hart, E.W. 1980. Calaveras and Verona faults (Dublin Quadrangle). *California Division of Mines and Geology Fault Evaluation Report FER-108*.
- Hart, E.W. 1981a. Las Positas fault, south branch. *California Division of Mines and Geology Fault Evaluation Report FER-112*.
- Hart, E.W. 1981b. Pleasanton and related faults (Dublin Quadrangle vicinity). *California Division of Mines and Geology Fault Evaluation Report FER-109*.
- Hartford, D., and G.B. Baecher. 2004. *Risk and Uncertainty in Dam Safety*. London: Thomas Telford, Ltd.
- Haskin, H.H., and S.M. Weed. 1976. *Oyster setting and early spat survival at critical salinity levels on natural seed oyster beds of Delaware Bay*. New Brunswick, N.J: Water Resources Research Institute, Rutgers University.
- Haugerud, R.A., and S.D. Ellen. 1990. Coseismic ground deformation along the northeast margin of the Santa Cruz Mountains. In: *Field guide to neotectonics of the San Andreas fault system, Santa Cruz Mountains, in light of the 1989 Loma Prieta earthquake*. D.P. Schwartz and D.J. Ponti (eds.). U.S. Geological Survey Open File Report 90-274. pp. 32–38.
- Hayes, D. 2007. *Historical atlas of California, with original maps*. Berkeley: University of California Press. (Figure 2-2).
- Hayhoe, K., D. Cayan, C.B. Field, P.C. Frumhoff, E.P. Maurer, N.L. Miller, S.C. Moser, S.H. Schneider, K. Nicholas Cahill, E.E. Cleland, L. Dale, R. Drapek, R. M. Hanemann, L.S. Kalkstein, J. Lenihan, C.K. Lunch, R.P. Neilson, S.C. Sheridan, and J.H. Vervill. 2004. Emissions pathways, climate change, and impacts on California. *PNAS* 101(34) 12422–12427.
- Healey, M.C. 1991. Life history of Chinook salmon (*Oncorhynchus tshawytscha*). In: *Pacific salmon life histories*. C. Groot and L. Margolis (eds.). Vancouver: UBC Press.
- Henricks, Dan. 2006. City of Isleton. Personal Communication.
- Herbert, D.W.M., and J.M. Richards. 1963. The growth and survival of fish in some suspensions of solids of industrial origin. *International Journal of Air and Water Pollution* 7:297–302.
- Herbold, B., A.D. Jassby, and P.B. Moyle. 1992. Status and trends report on aquatic resources in the San Francisco Estuary. San Francisco Estuary Project, U.S. Environmental Protection Agency, Oakland, California. 257 pp.
- Herd, D.G., and E.E. Brabb. 1980. Faults at the General Electric test reactor site, Vallecitos Nuclear Center, Pleasanton, California: A summary review of their geometry, age of last movement, recurrence, origin, and tectonic setting and the age of the Livermore Gravels. *U. S. Geological Survey Administrative Report*.
- Herren, J., and S.S. Kawasaki. 1998. Inventory of water diversions in four geographic areas in California's Central Valley. In: *Contributions to the biology of Central Valley salmonids*. pp. 343–355.

- Hitchcock, C.S., and K.I. Kelson. 1999. Growth of late Quaternary folds in southwest Santa Clara Valley, San Francisco Bay area: Implications of triggered slip for seismic hazard and earthquake recurrence. *Geology* 27(5): 391–394.
- HLA (Harding Lawson Associates). 1989. Delta Wetlands Project, Sacramento-San Joaquin River, HLA job # 18749 001.03.
- HLA (Harding Lawson Associates). 1991. Interceptor well modeling, Delta Wetlands Project, Sacramento-San Joaquin River Delta. HLA job # 18749016.03.
- HLA (Harding Lawson Associates). 1992. Geotechnical Investigation and Design, Wilkerson Dam, Bouldin Island. HLA job # 11472-008.
- Howard, R.A., and I.A. Mendelssohn. 1999a. Salinity as a constraint on growth of oligohaline marsh macrophytes. I. Species variation in stress tolerance. *American Journal of Botany* 86(6): 784–794.
- Howard, R.A., and I.A. Mendelssohn. 1999b. Salinity as a constraint on growth of oligohaline marsh macrophytes. II. Salt pulses and recovery potential. *American Journal of Botany* 86(6), 795–806.
- Howard, R.J., and I.A. Mendelssohn. 2000. Structure and composition of oligohaline marsh plant communities exposed to salinity pulses. *Aquatic Botany* 68:143–164.
- HTE (Hultgren-Tillis Engineers). 2003. Reservoir Island Levee – Delta Wetland Project, Sacramento-San Joaquin River Delta. March. R.K. Hultgren-Tillis Engineers, 2056 Commerce Avenue, Concord, CA 94520. tillis@hultgrentillis.com
- Hudson, M. I., M. Idriss, and M. Beikae. 1994. *User's Manual for QUAD4M*. Center for Geotechnical Modeling, Department of Civil & Environmental Engineering, University of California, Davis. May.
- Hyndmann, R.D., and K. Wang. 1993. Thermal constraints on the zone of major thrust earthquake failure: The Cascadia subduction zone. *Journal of Geophysical Research* 98:2039–2060.
- Hyndmann, R.D., and K. Wang. 1995. The rupture zone of Cascadia great earthquakes from current deformation and the thermal regime. *Journal of Geophysical Research* 100:22, 133–22, 154.
- Ingebritsen, S.E., and Ikehara, M.E. 1999. Sacramento-San Joaquin Delta: The sinking heart of the state. In: Galloway, D., Jones, D.R. and Ingebritsen, S.E. (eds.). *Land Subsidence in the United States*. U.S. Geological Survey Circular 1182: 83–94.
- IPCC (Intergovernmental Panel on Climate Change). 2000. Special Report on Emissions Scenarios. Adopted March 2000. Available at: <http://www.grida.no/climate/ipcc/emission/index.htm>
- IPCC (Intergovernmental Panel on Climate Change). 2001. Third Assessment Report. Climate Change: The Scientific Basis. Contribution of Working Group I to the Third Assessment Report of the IPCC. Cambridge University Press, Cambridge, 2001. Available at: [http://www.grida.no/climate/ipcc\\_tar/](http://www.grida.no/climate/ipcc_tar/) and published by the Cambridge University Press.

- IPCC (Intergovernmental Panel on Climate Change). 2007. *Fourth assessment report. Climate change 2007: The physical science basis*. Report of Working Group I. Available at: <http://www.ipcc.ch>.
- Itasca (Itasca Consulting Group). 2005. FLAC, Fast Lagrangian Analysis of Continua, version 5.0, user's guide. (Itasca Consulting Group, Inc., Thrasher Square East, 708 South Third Street, Suite 310, Minneapolis, Minnesota).
- Jahns, R.H., and R.C. Harding. 1982. Evaluation of the inferred Verona fault in the Vallecitos Valley, California (abs.). In *Proceedings, Conference on Earthquake Hazards in the Eastern San Francisco Bay Area, California*. E.W. Hart, S.E. Hirschfeld, and S.S. Schulz (eds.). *Calif. Div. Mines Geol. Spec. Pub.* 62:185.
- James, M.L. 2001. Ecotones in coastal wetland restoration. In: *Handbook for restoring tidal wetlands*. J.B. Zedler (ed.). Boca Raton, Florida: CRC Press. pp. 65–66.
- Jassby, A.D. 2005. Phytoplankton regulation in a eutrophic tidal river (San Joaquin River, California). *San Francisco Estuary and Watershed Science* 3(1), Article 3. Available online at <http://repositories.cdlib.org/jmie/sfews/vol3/iss1/art3>
- Jassby, A.D., J.E. Cloern, and B.E. Cole. 2002. Annual primary production: Patterns and mechanisms of change in a nutrient-rich tidal ecosystem. *Limnology and Oceanography* 47:698–712.
- Jassby, A.D., W.J. Kimmerer, S.G. Monismith, C. Armor, J.E. Cloern, T.M. Powell, J.R. Schubel, and T.J. Vendlinksi. 1995. Isohaline position as a habitat indicator for estuarine populations. *Ecological Applications* 5(1), 272–289.
- JBA (Jack R. Benjamin & Associates, Inc.). 2005. *Preliminary seismic risk analysis associated with levee failures in the Sacramento–San Joaquin Delta*. Prepared for California Bay-Delta Authority and California Department of Water Resources in association with Resource Management Associates and Economic Insights. June.
- JBA (Jack R. Benjamin & Associates, Inc.). 2006a. *Initial technical framework paper: Upstream reservoir management/Delta water operations/Delta Island water use*. Prepared by URS Corporation/Jack R. Benjamin & Associates, Inc. Prepared for Department of Water Resources. September, 2006.
- JBA (Jack R. Benjamin & Associates, Inc.). 2006b. *Initial technical framework paper: hydrodynamics/water quality*. Prepared by URS Corporation/Jack R. Benjamin & Associates, Inc. Prepared for Department of Water Resources. September, 2006.
- Jennings, C.W. 1994. *Fault activity map of California and adjacent areas*. California Department of Conservation, Division of Mines and Geology, Geologic Data Map No. 6, scale 1:750,000.
- Johnstone, W.M., Sakamoto, D., Assaf, H., and Bourban, S. 2005. Architecture, modeling framework and validation of BC Hydro's Virtual Reality Life Safety Model. ISSH. *Stochastic Hydraulics*. Nijmegen, The Netherlands. May 23–24, 2005.

- Josselyn, M. 1983. The ecology of San Francisco Bay tidal marshes: A community profile. U.S. Fish and Wildlife Service, Division of Biological Services, Washington, D.C. FWS/OBS-83/23. 102 pp.
- Josselyn, M.N., S.P. Faulkner, and W.H. Patrick, Jr. 1990. Relationships between seasonally wet soils and occurrence of wetland plants in California. *Wetlands* 10:7–26.
- Joyce, B., S. Vicuna, L. Dale, J. Dracup, M. Hanemann, D. Purkey, and D. Yates. 2006. *Climate change impacts on water for agriculture in California: A case study in the Sacramento Valley*. A Report From: California Climate Change Center. CEC-500-2005-194-SF. Included as an appendix in the Climate Action Team Final Report, p. 737. March 2006.
- Kano, R.M. 1990. Occurrence and abundance of predator fish in Clifton Court Forebay, California. Technical Report 24. Interagency Ecological Program.
- Kaplan, S., and B.J. Garrick. 1981. Quantitative Definition of Risk. *Risk Analysis* 1(1).
- Karp, C., L. Hess, and C. Liston. 1995. *Re-evaluation of louver efficiencies for juvenile Chinook salmon and striped bass, 1993*. Tracy Fish Facility Studies, Vol. 3, U. S. Bureau of Reclamation, Mid-Pacific Region and Denver Technical Services Center. 31 pp.
- Kates, R.W., C.E. Colten, S. Laska, and S.P. Leatherman. 2006. Reconstruction of New Orleans after Hurricane Katrina: A research perspective. In: *Proceedings of the National Academy of Sciences* (PNAS), 103(40), 14653–14660. October 3.
- Keefer, D.I., and S.E. Bodily. 1983. Three-point approximations for continuous random variables. *Management Science* 26: 595–609.
- Keeley, J.E., and P.H. Zedler. 1998. Characterization and global distribution of vernal pools, pp. 1-14. In: C.W. Witham, E.T. Bauder, D. Belk, W.R. Ferren, Jr., and R. Ornduff (eds), *Conservation and Management of Vernal Pool Ecosystems—Proceedings from a 1996 Conference*. California Native Plant Society, Sacramento.
- Kelson, K.I., J.N. Baldwin, and C.M. Brankman. 2003. *Late Holocene displacement of the central Calaveras fault, Furtado Ranch Site, Gilroy, CA: Final Technical Report*. U.S. Geological Survey, Award 01-HQ-GR00124, p. 1-38.
- Kennedy, D.G., J. Caskey, C.S. Hitchcock, K.I. Kelson, S.C. Thompson, R.S. Rubin, S.F. Connelly, G. Borchardt, T.F. Bullard, K.L. Hanson, H. Abramson Ward, M.M. Angell, and J.R. Wesling. 2005. *Seismic hazard of the front range thrust faults, Santa Cruz Mountains*. Field trip guidebook and volume prepared for the Joint Meeting of the Cordilleran Section, GSA and Pacific Section, AAPG, April 29–May 1, 2005, San Jose, California.
- Kern County Water Agency. 2005. Urban Water Management Plan.
- Kimmerer, W.J. 1998. Zooplankton of San Francisco Bay: Report of a pilot monitoring program. *Interagency Ecological Program Newsletter* 11(2): 19–23.
- Kimmerer, W.J. 2002. Effects of freshwater flow on abundance of estuarine organisms: Physical effects or trophic linkages? *Marine Ecology Progress Series* 243: 39–55.
- Kimmerer, W.J. 2004. Open water processes of the San Francisco Estuary: From physical forcing to biological responses. *San Francisco Estuary and Watershed Science* (online serial)

- 2 (1), February, Article 1. Access online at <http://repositories.cdlib.org/jmie/sfews/vol2/iss1/art1>.
- Kimmerer, W.J. 2006. Response of anchovies dampens effects of the invasive bivalve *Corbula amurensis* on the San Francisco Estuary foodweb. *Marine Ecology Progress Series*. 324: 207–218
- Kimmerer, W.J. N.d.. Losses of Sacramento River Chinook salmon and Delta smelt to entrainment in water diversions in the Sacramento-San Joaquin Delta, San Francisco Estuary and Watershed Science. In press.
- Kimmerer, W.J., J. Burau, and B. Bennett. 1999. Tidally oriented vertical migration and position maintenance of zooplankton in a temperate Estuary. *Limnology and Oceanography* 43:1697–1709.
- Kimmerer, W.J., J.H. Cowan, L.W. Miller, and K.A. Rose. 2001. Analysis of an estuarine striped bass population: Effects of environmental conditions during early life. *Estuaries* 24:556–574.
- Kimmerer, W.J., and J.J. Orsi. 1996. Changes in the zooplankton of the San Francisco Bay Estuary since the introduction of the clam *Potamocorbula amurensis*. In: *San Francisco Bay: The Ecosystem*. J.T. Hollibaugh (ed.). Seventy-fifth Annual Meeting, Pacific Division, Amer. Assoc. Adv. Sci., San Francisco, California. pp. 403–425.
- Kinder Morgan. 2006. [http://www.kindermorgan.com/business/products\\_pipelines/concord.cfm](http://www.kindermorgan.com/business/products_pipelines/concord.cfm)
- Kishida, T., R.W. Boulanger, N.A. Abrahamson, M.W. Driller, and T.M. Wehling. 2008a. Site effects for the Sacramento-San Joaquin Delta, submitted for publication in *EERI Earthquake Spectra*.
- Kishida, T., R.W. Boulanger, N.A. Abrahamson, M.W. Driller, and T.M. Wehling. 2008b. Seismic response of levees in the Sacramento-San Joaquin Delta, submitted for publication in *EERI Earthquake Spectra*.
- Knowles, N., and D. Cayan. 2002. Potential impacts of climate change on the Sacramento/San Joaquin watershed and the San Francisco Estuary. *Geophys Res. Lett.* 29. DOI:10.1029/2001GL014339.
- Kotra, J.P., M.P. Lee, and N.A. Eisenburg. 1996. *Branch technical position on the use of expert elicitation in the high-level radioactive waste program*. U.S. Nuclear Regulatory Commission, Office of Nuclear Material Safety and Safeguards, Division of Waste Management; NUREG-1563. Washington, D.C.
- Kozlowski, T.T. 1997. Responses of woody plants to flooding and salinity. *Tree Physiology Monogr.* 1:1–29.
- Kozlowski, T.T. 2000. Responses of woody plants to human-induced environmental stresses: Issues, problems, and strategies for alleviating stress. In: *Critical Reviews in Plant Sciences* 19(2):91–170. Boca Raton: CRC Press.

- Krone, R.B. 1979. Sedimentation in the San Francisco Bay system. In: *San Francisco Bay—The Urbanized Estuary*, T.J. Conomos (ed.). pp. 85–96. Am. Assoc. Adv. Sci., Pacific Division, San Francisco, California.
- Krug, E.H., V.B. Cherven, C.W. Hatten, and J.C. Roth. 1992. Subsurface structure in the Montezuma Hills, southwestern Sacramento basin. In: V.B. Cherven and W.F. Edmondson (eds.). *Structural Geology of the Sacramento Basin: Volume MP-41*, Annual Meeting, Pacific Section, Society of Economic Paleontologists and Mineralogists. pp. 41–60.
- La Peyre, M.K., C.S. Bush Thom, C. Winslow, A. Caldwell, and J. A. Nyman. 2005. Comparison of seed bank size and composition in fringing, restored, and impounded marsh in Southwest Louisiana. *Southeastern Naturalist* 4(2):273–286.
- Lawrence, M., and E. Scherer. 1974. Behavioral responses of whitefish and rainbow trout to drilling fluids. *Canada Fisheries and Marine Service Technical Report 502*.
- LBNL (Lawrence Berkeley National Laboratory). 2006. *Valuing the environmental benefits of urban water conservation: Final report*. Prepared by K. Coughlin, C. Bolduc, P. Chan, C. Dunham-Whitehead, R. Van Buskirk, and W.M. Hanemann.
- Lee, D.P. 1999. The Sacramento-San Joaquin Delta largemouth bass fishery. *Interagency Ecological Program Newsletter*. Summer 2000. Available at: <http://www.iep.ca.gov/report/newsletter/2000summer/>
- Lee, G.F., and A. Jones-Lee. 2005. *Water quality issues that could influence aquatic life resources of the Delta*. Appendix A. Submitted to CALFED Science Program Sacramento, CA, by G. Fred Lee & Associates, El Macero, California. November 28.
- Lehman, P.W. 1998. Phytoplankton species composition, size structure and biomass and their possible effect on copepod food availability in the low salinity zone of the San Francisco Bay/Delta Estuary. *Interagency Ecological Program for the San Francisco Bay/Delta Estuary Technical Report 62*. August.
- Lehman, P.W. 2004. The influence of climate on mechanistic pathways that affect lower food web production in Northern San Francisco Bay Estuary. *Estuaries* 27:311–324.
- Leuliette, E.W., R.S. Nerem, and G.T. Mitchum, 2004: Calibration of TOPEX/Poseidon and Jason Altimeter Data to Construct a Continuous Record of Mean Sea Level Change. *Marine Geodesy* 27(1–2), 79–94.
- Liao, S.S.C., and K.Y. Lum. 1998. Statistical analysis and application of the magnitude scaling factor in liquefaction analysis. *Geotechnical Earthquake Engineering and Soil Dynamics* III. 1:410–421.
- Liao, S.S.C., D. Veneziano, and R.V. Whitman. 1988. Regression models for evaluating liquefaction probability. *Journal of Geotechnical Engineering* 114(4), 389–409.
- Lilhanand, K., and W.S. Tseng. 1988. Development and application of realistic earthquake time histories compatible with multiple-damping design spectra. In: *Proceedings of the 9<sup>th</sup> World Conference on Earthquake Engineering*, Tokyo-Kyoto, Japan. August.

- Lindley, S.T., R. Schick, B.P. May, J.J. Anderson, S. Greene, C. Hanson, A. Low, D. McEwan, R.B. MacFarlane, C. Swanson, and J.G. Williams. 2004. Population structure of threatened and endangered Chinook salmon ESUs in California's Central Valley basin. Public Review Draft, February 11, 2004. National Marine Fisheries Service, U.S. Dept. of Commerce.
- Lobell, D., G. Bala, and P.B. Duffy, 2006a. Biogeophysical impacts of cropland management on climate. *Geophys. Res. Lett.* L06708, doi:10.1029/2005GL025492.
- Lobell, D., G. Bala, C. Bonfils, and P.B. Duffy. 2006b. Potential bias of model projected greenhouse warming in irrigated regions. *Geophys. Res. Lett.* 33: L13709.
- Lobell, D., and C. Bonfils. 2006. The effect of irrigation on regional temperatures: An analysis of spatial and temporal trends in California: 1934–2002. *Journal of Climate* 21(10), 2063–2071.
- Loomis, J., and P. Kaval. 2003. *Updated outdoor recreation use values with emphasis on National Park recreation*. National Park Service. Project number IMDE-02-0070.
- Lopez, C.B., J.E. Cloern, T.S. Schraga, A.J. Little, L.V. Lucas, J.K. Thompson, and J.R. Burau. 2006. Ecological values of shallow-water habitats: Implications for the restoration of disturbed ecosystems. *Ecosystems* 9:422–440.
- Ludwig, Francis. 2006. Personal communication via phone between October and December 2006.
- Ludwig, F.L., J.M. Livingston, and R. M. Endlich, 1991. Use of mass conservation and critical dividing streamline concepts for efficient objective analysis of winds in complex terrain. *Journal of Applied Meteorology* 30:1490–1499.
- Ludwig, F.L., and D. Sinton. 1998. Evaluating an objective wind analysis technique with a long record of routinely collected data. *Journal of Applied Meteorology* 39:335–348.
- Lund, J., E. Hanak, W. Fleenor, R. Howitt, J. Mount, P. Moyle. 2007. *Envisioning Futures for the Sacramento-San Joaquin Delta*. Public Policy Institute of California (PPIC).
- Lund, J.R., R.E. Howitt, M.W. Jenkins, T. Zhu, S.K. Tanaka, M. Pulido, M. Tauber, R. Ritzema, and I. Ferriera. 2003. *Climate warming and California's water future*. Report 03-1. Center for Environmental and Water Resources Engineering, University of California, Davis. March, 2003. Available at: <http://cee.engr.ucdavis.edu/faculty/lund/CALVIN/ReportCEC/CECReport2003.pdf>
- Luthcke, S.B., H.J. Zwally, W. Abdalati, D.D. Rowlands, R.D. Ray, R.S. Nerem, F.G. Lemoine, J.J. McCathy, D.S. Chinn. 2006: Recent Greenland ice mass loss by drainage system from satellite gravity observations *Science* 314:1286–1289.
- Maas, E.V., and G.J. Hoffman. 1977. Crop tolerance—current assessment. *J. Irrig. and Drainage Dev.* ASCE 103(IRI:115–134).
- MacFarlane, R.B., and E.C. Norton. 2002. Physiological ecology of juvenile Chinook salmon (*Oncorhynchus tshawytscha*) at the southern end of their distribution, the San Francisco Estuary and Gulf of the Farallones, California. *Fish. Bull.* 100:244–257.

- MacWilliams, M.L., and E.S. Gross. 2007. Delta Risk Management Strategy – UnTRIM San Francisco Bay-Delta Calibration Report. Prepared for California Department of Water Resources. March, 2007.
- Malmud-Roam, K., S. Siegel, M. Goman, and L. Wells. 1995. Tidal marshes: the marginal landscapes of San Francisco Bay. In: Sangines, E.M. and Anderson, D.W. (eds.). *Geology and Hydrogeology of the South San Francisco Bay*, Pacific Section SEPM 1995.
- Mantua, N.J., and P.W. Mote. 2002. Uncertainty in Sequences of Human-caused Climate Change. Fisheries in a Changing Climate.
- Marchetti, M.P., P.B. Moyle, and R. Levine. 2004. Invasive species profiling? Exploring the characteristics of non-native fishes across invasion stages in California. *Freshwater Biology* 49:646–661.
- Marvin Jung and Associates, Inc. 2000. Revision of Representative De3lat Island Return Flow Quantity for DSM2 and DICU Model Runs. Prepared for the CALFED Ad-Hoc Workgroup To Simulate Historical Water Quality Conditions in the Delta. MWQI-CR#3. December.
- Matern, S.A, P.B. Moyle, and L.C. Pierce. 2002. Native and alien fishes in a California estuarine marsh: Twenty-one years of changing assemblages. *Transactions of the American Fisheries Society* 131:797–816.
- Maurer, E.P., and P.B. Duffy. 2005. Uncertainty in projections of streamflow changes due to climate change in California. *Geophys. Research. Let.* 32, DOI:10.1029/2004GL021462.
- Maurer, E.P., I.T. Stewart, C. Bonfils, P.B. Duffy, and D. Cayan. 2007. Detection, attribution, and sensitivity of trends toward earlier streamflow in the Sierra Nevada. *J. Geophys. Research* 112, doi:10.1029/2006JD008088.
- Maurer, E.P., A.W. Wood, J.C. Adam, D.P. Lettenmaier, and B. Nijssen. 2002. A long-term hydrologically-based data set of land surface fluxes and states for the conterminous United States. *J. Clim.* 15:3237–3251.
- May, R.M. 1974. Biological populations with non-overlapping generations: Stable points, stable cycles, and chaos. *Science* 186:645–47.
- Mayr, E. 1961. Cause and effect in biology. *Science* 134:1501–1506.
- McAuliffe, Jim. 2006. Rio Vista. Personal Communication.
- McElhinney, M.A. 1992, *Soil survey of San Joaquin County*. U.S. Department of Agriculture, Soil Conservation Service.
- McEwan, D.R. 2001. Central Valley steelhead. In: *Contributions to the biology of Central Valley salmonids*. Vol. 1. R.L. Brown (ed.). *Fish Bulletin* 179:1–43. California Department of Fish and Game, Sacramento, California.
- McGinn, N.A. 2002. Fisheries in a changing climate. American Fisheries Society Symposium 32. In: *Proceedings of a Sea Grant Symposium, Fisheries in a Changing Climate, Phoenix, Arizona, August 20–21, 2001*.

- McGuire, R.K., 2004. *Seismic hazard and risk analysis: EERI Monograph MNO-10*. Earthquake Engineering Research Institute, Oakland, California.
- Mearns, L.O., F. Giorgi, L. McDaniel, and C. Shield. 1995. Analysis of daily variability or precipitation in a nested regional climate model: Comparison with observations and doubled CO<sub>2</sub> results. *Global and Planetary Change* 10:55–78.
- Medellin, J., J. Harou, M. Olivares, J. Lund, R. Howitt, S. Tanaka, M. Jenkins, K. Madani, and Tinju Zhu. 2006. Climate warming and water supply management in California. A Report from: California Climate Change Center. CEC-500-2005-195-SF. Included as an appendix in the *Climate Action Team Final Report*, p. 822. March.
- Metropolitan Transportation Commission. 2004. *Regional goods movement study for the San Francisco Bay Area: Final summary report*. December. 20 p. HE199. C25, R4.
- Meyer, J. 2003. An overview of geoarchaeological research issues. In: *Archaeological research issues for the Point Reyes National Seashore – Golden Gate National Recreation Area*. S. Stewart and A. Praetzellis (eds.). 47 pp.
- MIG. 2007. Minnesota IMPLAN Group database, available from Minnesota IMPLAN GROUP Inc. Available at: <http://www.implan.com>.
- Miller, A.W., R.S. Miller, H.C. Cohen, and R.F. Schultze. 1975. *Suisun Marsh Study, Solano County, California*. U.S. Department of Agriculture, Soil Conservation Service. 186 pp.
- Miller, N.L., K.E. Bashford, and E. Strem. 2001. *Climate change sensitivity study of California hydrology – A report to the California Energy Commission*. LBNL Technical Report No. 49110. November 2001.
- Miller, J. 2005. Personal communications. *Cited in*: Bacher, D. 2005.
- Miller, R.L., L. Hastings, and R. Fujii. 2000. *Hydrologic treatments affect gaseous carbon loss from organic soils, Twitchell Island, California, October 1995–December 1997*. U.S. Geological Survey Water Resources Investigations Report 00-4042.
- Milly, P.C., R.T. Wetherald, K.A. Dunne, T.L. Delworth. 2002. Increasing risk of great floods in a changing climate. *Nature* 415(6871), 514–517. January 31.
- Minello, T.J., R.J. Zimmerman, and E.X. Martinez. 1987. Fish predation on juvenile brown shrimp, *Penaeus aztecus* Ives: Effects of turbidity and substratum on predation rates. *Fish. Bull.* 85:59–70.
- Minns, C.K., and J.E. Moore. 2003. Assessment of net change of productive capacity of fish habitats: The role of uncertainty and complexity in decision making. *Can. J. Fish. Aquat. Sci.* 60:100–116.
- Mirzadeh, Maria, Western Area Power Administration. 2006. Personal Communication.
- Mitchell, D.L., and W.W. Wade. 1991. Recreation Forecasts and Benefit Estimates for California Reservoirs: Recalibrating the California Travel Cost Model. Spectrum Economics Inc.
- Mitsch, W.J., and J.G. Gosselink. 1993. Wetlands, 2nd edition. New York: Van Nostrand Reinhold. In: *Suisun Marsh Ecological Workgroup (SEW) Brackish Marsh Vegetation Subcommittee Report 2001*.

- Mojave Water Agency. 2005. Urban Water Management Plan.
- Monismith, S.G., W. Kimmerer, J.B. Burau, and M.T. Stacey. 2002. Structure and flow-induced variability of the subtidal salinity field in northern San Francisco Bay, *Journal of Physical Oceanography* 32: 3003–3019.
- Morgan, G.M., and M. Henrion. 1990. *Uncertainty: A guide to dealing with uncertainty in quantitative risk and policy analysis*. Cambridge University Press.
- Moss, Richard. Pacific Gas and Electric Company. 2007. Personal Communication.
- Mote, P.W. 2003. Trends in snow water equivalent in the Pacific Northwest and their climatic causes. *Geophys. Res. Lett.* 30. DOI 10.1029/2003GL0172588.
- Mote, P.W., A. Hamlet, M.P. Clark, and D.P. Lettenmaier. 2005: Declining mountain snowpack in western North America. *Bull. Amer. Meteorological Soc.* DOI: 10.1175/BAMS-86-1-39.
- Mount, J., and R. Twiss. 2005. Subsidence, sea level rise, and seismicity in the Sacramento-San Joaquin Delta. *San Francisco Estuary and Watershed Science* 3, Article 5.
- Mount, J., R. Twiss, and R.M. Adams. 2006. *The role of science in the Delta Visioning Process: A report of the Delta Science Panel of the CALFED Science Program*. Available online at [http://science.calwater.ca.gov/pdf/CSP\\_delta\\_vision\\_process\\_Twiss\\_062306.pdf](http://science.calwater.ca.gov/pdf/CSP_delta_vision_process_Twiss_062306.pdf)
- Moyle, P.B. 2002. *Inland fishes of California*. Berkeley: University of California Press.
- Moyle, P.B., and J.A. Israel. 2005. Untested assumptions: effectiveness of screening diversions for conservation of fish populations. *Fisheries* 30:20–28.
- Munk, W. 2002: Twentieth century sea level: An enigma. *PNAS* 99:6550–6555.
- MWDSC (Metropolitan Water District of Southern California). 2005. Urban Water Management Plan.
- Myrick, C.A., and J.J. Cech. 2004. Temperature effects on juvenile anadromous salmonids in California's central valley: What don't we know? Reviews in *Fish Biology and Fisheries* 14:113–123.
- National Marine Fisheries Service. 1997. *Proposed recovery plan for the Sacramento River winter-run Chinook salmon*. NOAA NMFS Southwest Regional Office. August.
- National Research Council. 2000. *Risk analysis and uncertainty in flood damage reduction studies*. Washington: National Academy Press.
- NCEP (National Centers for Environmental Prediction). 2006. North American Regional Reanalysis Homepage. Accessed Oct.–Dec. 2006: Available at: <http://www.emc.ncep.noaa.gov/mmb/rrean/>
- Nelson, D.W., and L.E. Sommers. 1982. Total carbon, organic carbon and organic matter. In: *Methods of Soil Analysis*. A.L. Page (ed.). American Society of Agronomy, Soil Science Society of America, Madison, WI.
- Neter, J., and W. Wasserman. 1974. *Applied linear statistical models*. Homewood, Illinois: Richard D. Irwin, Inc.

- Newcomb, T.W., and T.A. Flagg. 1983. Some effects of Mt. St. Helens ash on juvenile salmon smolts. *U.S. National Marine Fisheries Service Marine Fisheries Review* 45(2):8–12.
- Newcombe, C.P., and J.O.T. Jensen. 1996. Channel suspended sediment and fisheries: A synthesis for quantitative assessment of risk and impact. *N. Amer. J. Fish. Man.* 16:693–727.
- Newcombe, C.P., and D.D. MacDonald. 1991. Effects of suspended sediments on aquatic ecosystems. *N. Amer. J. Fish. Man.* 11:72–81.
- Newcombe, C.P., B. Shepherd, G. Hoyer, and M. Ladd. 1995. Documentation of a fish kill (juvenile rainbow trout: *Oncorhynchus mykiss*) in Bellevue Creek (near Mission, Kelowna, British Columbia, Canada), caused by silty water discharge. British Columbia Ministry of Environment, Lands and Parks, Habitat Protection Branch. Habitat Protection Occasional Report. Victoria.
- Newmark, N.M. 1965. Effects of earthquakes on dams and embankments. *Geotechnique* 15(2). June.
- Newton, E. 1986. Arboreal ruffraff or ultimate tree? *Audubon* 88:12–19.
- NHI (Natural Heritage Institute). 2005. *Flooded islands conceptual alternatives report*. Prepared for the California Department of Water Resources. May 1, 2005.
- Nichols, F.H., and M.M. Pamatmat. 1988. The ecology of the soft-bottom benthos of San Francisco Bay: A community profile. *U.S. Fish Wildl. Serv. Biol. Rep.* 85(7.19) 73 pp.
- NMFS (National Marine Fisheries Service). 2002. Green Sturgeon—Questions & Answers. Accessed on August 27, 2002. Available at: <http://www.nwr.noaa.gov/1salmon/salmesa/pubs/GreenSturgeonQA.html>
- NOAA (National Oceanographic and Atmospheric Administration). 2005. *Tides and currents: Historic tide data. San Francisco*. Available at: [http://tidesandcurrents.noaa.gov/data\\_menu.shtml?stn=9414290%20San%20Francisco,%20CA&type=Tide%20Data](http://tidesandcurrents.noaa.gov/data_menu.shtml?stn=9414290%20San%20Francisco,%20CA&type=Tide%20Data). Last revised November 23
- NOAA (National Oceanographic and Atmospheric Administration). 2006a. Central Library U.S. Daily Weather Maps Project. [http://docs.lib.noaa.gov/rescue/dwm/data\\_rescue\\_daily\\_weather\\_maps.html](http://docs.lib.noaa.gov/rescue/dwm/data_rescue_daily_weather_maps.html)
- NOAA (National Oceanographic and Atmospheric Administration). 2006b. Integrated Global Radiosonde Archive. <http://www.ncdc.noaa.gov/oa/climate/igra/index.php>
- NOAA (National Oceanographic and Atmospheric Administration). 2007. *Tides and currents: Historic tide data*. National Oceanographic and Atmospheric Administration, San Francisco. Available at: <http://tidesandcurrents.noaa.gov>. Last revised June 4, 2007.
- Nobriga, M.L., Z. Matica, and Z.P. Hymanson. 2004. Evaluating entrainment vulnerability to agricultural irrigation diversions: A comparison among open-water fishes. *American Fisheries Society Symposium* 39:281–295.

- Noggle, C.C. 1978. Behavioral, physiological and lethal effects of suspended sediment on juvenile salmonids. Master's thesis. University of Washington. Seattle.
- NRCS (Natural Resources Conservation Service). 2007. The PLANTS Database (<http://plants.usda.gov>, January 29, 2007). National Plant Data Center, Baton Rouge, Louisiana.
- O'Connell, D.R.H., J.R. Unruh, and L.V. Block. 2001. Source characterization and ground-motion modeling of the 1892 Vacaville-Winters earthquake sequence. *Bull. Seismol. Soc. Am.* 91:1,471–1,497.
- Oerlemans, J. 2001. *Glaciers and climate change*. A. A. Balkema, Lisse, The Netherlands, 148 pp.
- Oerlemans, J., and B.K. Reichert. 2000. Relating glacier mass balance to meteorological data by using a seasonal sensitivity characteristic. *J. Glaciol.* 46:1–6.
- Office of Habitat Conservation. 1999. *Essential fish habitat consultation guidance*. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Habitat Conservation, Silver Spring, MD. November 1999.
- Oros, D.R., and I. Werner. 2005. *Pyrethroid insecticides: An analysis of use patterns, distributions, potential toxicity and fate in the Sacramento-San Joaquin Delta and Central Valley*. White Paper for the Interagency Ecological Program. SFEI Contribution 415. San Francisco Estuary Institute, Oakland, California.
- Orr, M., S. Crooks, and P.B. Williams. 2003. Will restored tidal marshes be sustainable? In: *Issues in San Francisco Estuary Tidal Wetlands Restoration*. L.R. Brown (ed.). *San Francisco Estuary and Watershed Science* 1, Article 5.
- Orsi, J.J. 1999. Report on the 1980-1995 Fish, Shrimp, and Crab Sampling in the San Francisco Estuary, California. Available online: <http://www.Estuaryarchive.org/cgi/viewcontent.cgi?article=1050&context=archive>
- Orsi, J.J., and W.L. Mecum. 1996. Food limitation as the probable cause of long-term decline in the abundance of *Neomysis mercedis* the opossum shrimp in the Sacramento-San Joaquin Estuary. In: *San Francisco Bay: The Ecosystem*. J.T. Hollibaugh (ed.). Pacific Division of the Am. Assoc. Adv. Science. San Francisco, California. pp. 375–402.
- Otto-Bliesner, B.L., S.J. Marshall, J.T. Overpeck, G.H. Miller, and A. Hu. 2006. Simulating Arctic climate warmth and icefield retreat in the last interglaciation. *Science* 311(5768), 1751–1753. DOI: 10.1126/science.112080.
- Otwell, W.S., and J.V. Merriner. 1975. Survival and growth of juvenile striped bass, *Morone saxatilis*, in a factorial experiment with temperature, salinity and age. *Trans. Am. Fish. Soc.* 104:560–566.
- Overpeck, J.T., B.L. Otto-Bliesner, G.H. Miller, D.R. Muhs, R.B. Alley, and J.T. Kiehl. Paleoclimatic evidence for future ice-sheet instability and rapid sea-level rise. *Science* 311(5768), 1747–1750. DOI: 10.1126/science.1115159.

- Pacific Earthquake Engineering Research Center:  
[http://peer.berkeley.edu/products/strong\\_ground\\_motion\\_db.html](http://peer.berkeley.edu/products/strong_ground_motion_db.html)
- Palmdale Water District. 2005. Urban Water Management Plan.
- Palomares, Arsenio, Pacific Gas and Electric Company. 2007. Personal Communication.
- Park, J., J.P. Bazzurro, and J.W. Baker. 2007. Modeling spatial correlation of ground motion intensity measures for regional seismic hazard and portfolio loss estimation. *Applications of Statistics and Probability in Civil Engineering*. Kanda, Takada and Furuta (eds.). London: Taylor & Francis Group.
- Parker, N. 2004. *Using natural gas transmission pipeline costs to estimate hydrogen pipeline costs*. UCD-ITS-RR-04-35. Institute of Transportation Studies, University of California, Davis.
- Patterson, Leroy, Western Electric Coordinating Council. 2007. Personal Communication.
- PBS&J. 2006. Final Report, Task Order 16, Delta GIS Asset Inventory, prepared for California Department of Water Resources. July 20.
- Peterson, J.E., and A.H. Baldwin. 2004. Seedling emergence from seed banks of tidal freshwater wetlands: Response to inundation and sedimentation. *Aquatic Botany* 78:243–254.
- PFMC (Pacific Fishery Management Council). 1998. *Essential fish habitat coastal pelagic species*. Available at: <http://swr.nmfs.noaa.gov/hcd/cpsefh.pdf>
- PG&E (Pacific Gas and Electric Company). 2005. Gas Transmission and Storage 2005 Rate Case Testimony, Chapter 5, Line 57C. Reliability Project.
- Prescott, W.H., and R.O. Burford. 1976. Slip on the Sargent fault. *Bull. Seismol. Soc. Am.* 66:1013–1016.
- Prescott, W.H., J.C. Savage, J.L. Svarc, and D. Manaker. 2001. Deformation across the Pacific-North American plate boundary near San Francisco, California: *Journal of Geophysical Research* 106:6673–6682.
- Prokopovitch, N.P. 1985. Subsidence of peat in California and Florida, *Bulletin of the Association of Engineering Geologists* 22:395–420.
- Quinn, T.P. 2005. *The behavior and ecology of Pacific salmon and trout*. Seattle: University of Washington Press.
- Radtke, L.D., and J.L. Tuner. 1967. High concentrations of total dissolved solids block spawning migration of striped bass, *Roccus saxatilis*, in the San Joaquin River, California. *Transactions of the American Fisheries Society* 96:405–407.
- Rahmstorf, S. 2006. A semi-empirical approach to projecting future sea-level rise. *Science* 315: 368–370. Published online 14 December 2006. Available at: [www.sciencexpress.org](http://www.sciencexpress.org), 14 December 2006/Page 1/10.1126/science.1135456.
- Raleigh, R.F., T. Hickman, R.C. Solomon, and P.C. Nelson. 1984. Habitat suitability information: Rainbow trout. *U.S. Fish and Wildl. Serv. FWS/OBS* 82(10.60). 64 pp.

- Raleigh, R.F., W.J. Miller, and P.C. Nelson. 1986. Habitat Suitability Index Models and Instream Flow Suitability Curves: Chinook Salmon. *U.S. Fish & Wildl. Serv. Biological Report* 82(10.122). 64 pp. (Also Cited as USFWS 1986).
- Ramillien, G., S. Bouhours, A. Lombard, A. Cazenave, F. Flechtner, and R. Schmidt. 2008. Land water storage contribution to sea level from GRACE geoid data over 2003–2006. *Global and Planetary Change* 60(3–4), 381–392.
- Reasenber, P.A., T.C. Hanks, and W.H. Bakun. 2003. An empirical model for earthquake probabilities in the San Francisco Bay region, California. 2002–2031. *Bull. Seismol. Soc. Am.* 93(1) 1–13. DOI: 10.1785/0120020014.
- Redding, J.M., and C.B. Schreck. 1982. Mount St. Helens ash causes sublethal stress responses in steelhead trout. In: *Mt. St. Helens: Effects on water resources*. Washington State University, Washington Water Research Center, Report 41, Pullman. 300–307.
- Reed, D.J. 2002. Understanding tidal marsh sedimentation in the Sacramento-San Joaquin Delta, California. *Journal of Coastal Research Special Issue* 36:605–611.
- Regan, D.M., T.L. Wellborn, Jr., and R.G. Bowker. 1968. Striped bass: Development of essential requirements for production. *U.S. Fish Wildl. Serv. Bur. Sport Fish. Wildl. Div. Fish Hatcheries*, Atlanta, Georgia. 133 pp.
- Regan, H.M., M. Colyvan, and M.A. Burgman. 2002. A taxonomy and treatment of uncertainty for ecology and conservation biology. *Ecological Applications* 12(2), 618–628.
- Richter, A., and S.A. Kolmes. 2005. Maximum temperature limits for Chinook, Coho, and Chum salmon, and steelhead trout in the Pacific Northwest. Reviews in *Fisheries Science* 13:23–49.
- RMA (Resource Management Associates, Inc.). 2004. Technical Memo: Initial Modeling of Levee Breaches. Prepared for: Delta Levees Risk Assessment Team. January 2004.
- RMA (Resource Management Associates, Inc.). 2005a. Delta Levees Seismic Risk Assessment Modeling 30 and 50 Breach Sequences. March 2005. Final Report.
- RMA (Resource Management Associates, Inc.). 2005b. Flooded Islands Pre-Feasibility Study: RMA Delta Model Calibration Report. Project report prepared for California Department of Water Resources for submittal to California Bay-Delta Authority.
- Roberson, M. 2007. Email correspondence.
- Roessig, J.M., C.M. Woodley, J.J. Cech, Jr., and L.J. Hansen. 2004. Effects of global climate change on marine and estuarine fishes and fisheries. Reviews in *Fish Biology and Fisheries* 14:251–275.
- Rogers, T.H. 1966. *San Jose sheet, geologic map of California*. California Division of Mines and Geology 2° sheet, 1:250,000 scale.
- Rojstazcer, S.A., and S.J. Deverel. 1995. Land subsidence in drained histosols and highly organic mineral soils of California Soil. *Science Society of America Journal* 59:1162–1167.

- Rojstaczer, S.A., R.E. Hamon, S.J. Deverel, and C.A. Massey. 1991. *Evaluation of selected data to assess the causes of subsidence in the Sacramento-San Joaquin Delta, California*. U.S. Geological Survey Open File Report 91-193.
- Romesburg, H.C. 2004. *Cluster analysis for researchers*. Lulu Press. Available at: [www.lulu.com](http://www.lulu.com).
- Roos, M. 1991. A trend of decreasing snowmelt runoff in Northern California. In: *Proceedings, 59<sup>th</sup> Western Snow Conference*, Juneau, Alaska. pp. 29–36.
- Roos, M. 2007. California floods: A half century of watching. *DWR News/People*. Summer.
- Rosenfeld, D. 2000. Suppression of rain and snow by urban and industrial air pollution. *Science* 287:1793.
- Rosenfield, J.R. 2002. Pattern and process in the geographical ranges of freshwater fishes. Sacramento and San Joaquin River Basins, Comprehensive Study. *Global Ecology & Biogeography* 11:323–332. December.
- Rosenfield, J.A., and R.D. Baxter. 2007. Population dynamics and distribution patterns of longfin smelt in the San Francisco Estuary. *Trans. Am. Fish. Society* 136:1577–1592.
- Rosidi, D., R. Arulnathan., S. Salah-Mars, S. Logeswaran, M. Forrest, T. Sandhu, and M.W. Driller. 2004. Seismic risk assessments of In-Delta Levees. *11th International Conference on Soil Dynamics & Earthquake Engineering*, Berkeley, California. January.
- Rubin, D.M., and D.S. McCulloch. 1979. The movement and equilibrium of bedforms in Central San Francisco Bay. In: *San Francisco Bay—The Urbanized Estuary*. T.J. Conomos (ed.). Pacific Division, Amer. Assoc. Advance. Sci., San Francisco, California. pp. 97–113.
- Rudnick, D.A., K. Hieb, K.F. Grimmer, and V.H. Resh. 2003. Patterns and processes of biological invasion: The Chinese mitten crab in San Francisco Bay. *Basic and Applied Ecology* 4:249–262.
- Ruff, L., and Kanamori, H. 1983. Seismic coupling and uncoupling at subduction zones. *Tectonophysics* 99:99–117.
- Ruhl, C.A., D.H. Schoellhamer, R.P. Stumpf, and C.L. Lindsay. 2001. Combined use of remote sensing and continuous monitoring to analyze the variability of suspended-sediment concentrations in San Francisco Bay, California. *Estuarine, Coastal and Shelf Science* 53:801–812.
- Ruygt, J. 1994. *Ecological studies and demographic monitoring of soft bird's beak (Cordylanthus mollis ssp. mollis), a California rare plant species, and habitat recommendations*. Report to the Endangered Plant Program, California Department of Fish and Game.
- Sacramento County. 2007. Summary of Positions. Available at: <http://www.saccounty.net/budget/information-announcements/fy2005-2006/2005-06-proposed-budget/docs/Section-C-Proposed-Summary-of-Positions.pdf>
- SafeLevee Web Site. 2007. Available at: <http://www.escalera.com/safelevee/index.htm>. Accessed on May 7, 2007.

- Salah-Mars, Said, Vice President and Engineering Division Manager, URS Corporation. 2006. Personal communication.
- Salah-Mars, S., R. Arulnathan, M. Forrest, R. Kulkarni. 2007. Delta Risk Management, Levee Vulnerability. USSD Annual Conference, Philadelphia. March 7.
- Salah-Mars, S., R. Arulnathan, M. Forrest, K. Thangalingam, S. Logeswaran, R. Kulkarni, and R. Svetich. 2007. Fragility Analysis of the Sacramento-San Joaquin Delta Levees. SAME/ASCE 2007 Levee Conference, Sacramento. July 24–26.
- Salah-Mars, S., R. Arulnathan, R. Kulkarni, S. Logeswaran, K. Tangalingam, R. Svetich, and S. Bagheban. 2008. Seismic Vulnerability of the Sacramento-San Joaquin Delta Levees. Geotechnical Earthquake Engineering and Soil Dynamics (GEESD IV) International Conference, Sacramento. May 18–23.
- Salah-Mars, S., R. Arulnathan, W. Roth, and E. Dawson. 2004. Seismic evaluation of wharf and embankment at the Port of Oakland, California. In: *Proceedings of 11th International Conference on Soil Dynamics and Earthquake Engineering, Berkeley, California*. January.
- Salah-Mars, S., R. Kulkarni., D. Rosidi, M. Forrest, R. Arulnathan, and J. Arrich. 2006. Seismic risk analysis of Delta levees. 8<sup>th</sup> U.S. Conference on Earthquake Engineering, San Francisco. April 18–22.
- San Bernardino Valley Municipal Water District. 2005. Urban Water Management Plan.
- San Gabriel Valley Municipal Water District. 2005. Urban Water Management Plan.
- San Joaquin Council of Governments. 2006. Planning Research Projections.
- Santa Clara Valley Water District. 2005. Urban Water Management Plan.
- Savy, J.B., and W. Foxall. 2002. Lawrence Livermore National Laboratory site seismic safety program: Summary of findings. UCRL-LR-53674 Rev. 2.
- Sawyer, T.L., and J.R. Unruh. 2002a. *Paleoseismic investigation of the Holocene slip rate on the Greenville fault, eastern San Francisco Bay area, California*. Final technical report submitted to the U.S. Geological Survey, Award No. 00HQGR005.
- Sawyer, T.L., and J.R. Unruh. 2002b. Holocene slip rate constraints for the northern Greenville fault, eastern San Francisco Bay Area, California: Implications for the Mt. Diablo restraining stepover model: *EOS (Transactions, American Geophysical Union)*, vol. 83, Fall Meeting supplement. p. F1300.
- Schoellhamer, D.H. 2002. Variability of suspended-sediment concentration at tidal to annual time scales in San Francisco Bay, USA. *Continental Shelf Research* 22:1857–1866.
- Schorthorst, C.J. 1977. Subsidence of low moor peat soil in the western Netherlands. *Institute of Land and Water Management Research Technical Bulletin 102*, Wageningen, The Netherlands, 265–291.
- Schremp, Gordon, California Energy Commission. 2006. Personal Communication.
- Schremp, Gordon, California Energy Commission. 2007. Personal Communication.
- Schultz, H.B., A.B. Carlton, and F. Lory. 1963. Interpolating methods for wind erosion protection in San Joaquin asparagus. *California Agriculture*. September.

- SDFP (South Delta Fish Facilities Forum). 2003. Meeting Summary and Action Items. May 16, 2003.
- Seed, H.B. 1979. Soil liquefaction and cyclic mobility evaluation for level ground during earthquakes. *Journal of the Geotechnical Engineering Division*, ASCE, 105(GT2), 201–255.
- Seed, H.B., and I.M. Idriss. 1970. Soil moduli in damping factors for dynamic response analysis. Report No. EERC 70-10. University of California, Berkeley. December.
- Seed, R.B., K.O. Cetin, R.E.S. Moss, A. Kammerer, J. Wu, J. Pestana, M. Riemer, R.B. Sancio, J.D. Bray, R.E. Kayen, and A. Faris. 2003. *Recent advances in soil liquefaction engineering: A unified and consistent framework*. Report No. EERC 2003-06, (originally presented at 26<sup>th</sup> Annual ASCE Los Angeles Geotechnical Spring Seminar, Keynote Presentation, H.M.S. Queen Mary, April 30, 2003, Long Beach, California), Earthquake Engineering Research Center, University of California, Berkeley, June.
- Seed, R.B., and L.F. Harder. 1990. SPT-based analysis of cyclic pore pressure generation and undrained residual strength. In: *Proceedings of the H. Bolton Seed Memorial Symposium*, University of California, Berkeley, May 10-11. 351–376.
- Servizi, J.A. 1990. Sublethal effects of dredged sediments on juvenile salmon. In: *Proceedings of the Workshop on the Effects of Dredging on Anadromous Pacific Coast Fishes*. C.A. Simenstad (ed.). Washington Sea Grant Program. Seattle. 57–63.
- Servizi, J.A., and D.W. Martens. 1992. Sublethal responses of Coho salmon (*Oncorhynchus kisutch*) to suspended sediments. *Canadian Journal of Fisheries and Aquatic Sciences* 49:1389–1395.
- SEW (Suisun Marsh Ecological Workgroup). 2001. *Managing freshwater discharge to the San Francisco Bay/Sacramento–San Joaquin Delta Estuary: The scientific basis for an estuarine standard*. Suisun Marsh Ecological Workgroup (SEW) Brackish Marsh Vegetation Subcommittee Report.
- SFPUC (San Francisco Public Utilities Commission). 2005. Urban Water Management Plan.
- Shlemon, R.J., and E.L. Begg. 1975. Late Quaternary evolution of the Sacramento-San Joaquin Delta, California. In: R.P. Sugate and M.M. Cresswell (eds.). *Quaternary Studies* (Bulletin 13). The Royal Society of New Zealand, Wellington, New Zealand. 259–266.
- Shultz, H.B., and A.B., Carlton. 1959. Field windbreaks for row crops. *California Agriculture*. November.
- Shvidchenko, A.B., R.C. MacArthur, and B.R. Hall. 2004. Historic sedimentation in Sacramento-San Joaquin Delta. *Interagency Ecological Program for the San Francisco Estuary (IEP) Newsletter* 17(3), 21–30.
- Sigler, J.W., T.C. Bjornn, and F.H. Everest. 1984. Effects of chronic turbidity on density and growth of steelheads and Coho salmon. *Transactions of the American Fisheries Society* 113:142–150.

- Silva, P.C. 1979. The benthic algal flora of Central San Francisco Bay. In *San Francisco Bay—The Urbanized Estuary*. T.J. Conomos (ed.). Am. Assoc. Adv. Sci., Pacific Division, San Francisco, California. 287–345.
- Simenstad, C., J. Toft, H. Higgins, J. Cordell, M. Orr, P. Williams, L. Grimaldo, Z. Hymanson, and D. Reed. 2000. Preliminary Report: Sacramento-San Joaquin Delta Breached Levee Wetland Study (BREACH). School of Fisheries, University of Washington, Seattle.
- Sims, J.D., K.F. Fox, Jr., J.A. Bartow, and E.J. Helley. 1973. *Preliminary geologic map of Solano County and parts of Napa, Contra Costa, Marin, and Yolo counties, California*. U.S. Geological Survey Miscellaneous Field Investigations Map MF-484, 5 sheets.
- Skaoropowski, Gene, Capital Corridors. 2006. Personal Communication.
- Skinner, J.E. 1973. Evaluation testing program report for Delta Fish Protective Facility, State Water Facilities, California Aqueduct, North San Joaquin Division Memorandum Report. California Resources Agency. 121 pp.
- Skrel, Jenny, Ironhouse Sanitation District. 2006. Personal Communication.
- Slater, D.W. 1963. Winter-run Chinook salmon in the Sacramento River, California, with notes on water temperature requirements at spawning. U. S. Fish and Wildlife Service.
- Sommer, T., C. Armor, R. Baxter, R. Breuer, L. Brown, M. Chotkowski, S. Culberson, F. Feyrer, M. Gingras, B. Herbold, W. Kimmerer, A. Mueller-Solger, M. Nobriga, and K. Souza. 2007. The collapse of pelagic fishes in the Upper San Francisco Estuary. *Fisheries* 32(6), 270–277.
- Sowers, J.M., J.S. Noller, and J.R. Unruh. 1992. Quaternary deformation and blind-thrust faulting on the east flank of the Diablo Range near Tracy, California. In: *Proceedings of the Second Conference on Earthquake Hazards in the Eastern San Francisco Bay Area*. (G. Borchardt et al. eds.) California Department of Conservation, Division of Mines and Geology Special Publication 113:377–383.
- SSHAC (Senior Seismic Hazard Analysis Committee). 1997. Recommendations for probabilistic seismic hazard analysis—guidance on uncertainty and use of experts: U.S. Nuclear Regulatory Commission NUREG/CR-6327. Variously paginated.
- State of California. 2007. Governors Budget 2007–2008. Department Index by Name. Available at: <http://www.ebudget.ca.gov/deptIndex.html>
- Stearns, S.C. 1992. *The evolution of life histories*. Oxford: Oxford University Press.
- Stephens, J.C., L.H. Allen, and E. Chen. 1984. Organic soil subsidence. In: *Man-induced land subsidence: Reviews in engineering geology*. T.L. Holzer (ed.). Geological Society of America, Boulder, Colorado.
- Stephens, P.A., and W.J. Sutherland. 1999. Consequences of the Allee effect for behaviour, ecology, and conservation. *Trends in Ecology and Evolution* 14:401–405.
- Sterling, R. 1992. Intersection of the Stockton and Vernalis faults, southern Sacramento Valley, California. In: *Structural Geology of the Sacramento Basin*. V.B. Chervon, and W.F. Edmondson (eds.). American Association of Petroleum Geologists Miscellaneous Publication 41, Pacific Section. 143–151.

- Stevens, D.E., and L.W. Miller. 1983. Effects of river flow on abundance of young Chinook salmon, American shad, longfin smelt, and Delta smelt in the Sacramento-San Joaquin River system. *North American Journal of Fisheries Management* 3:425–437.
- Stevenson, J.C., M.S. Kearney, and E.W. Koch. 2002. Impacts of Sea Level Rise on Tidal Wetlands and Shallow Water Habitats: A Case Study from Chesapeake Bay. *American Fisheries Society Symposium* 32:23–36.
- Stewart, I.T., D.R. Cayan, and M.D. Dettinger. 2005. Changes toward earlier streamflow timing across western North America. *Journal of Climate* 18:1136–1155.
- Stewman, C.J. 2007. Personal Communication.
- Stober, Q.J. et al. 1981. *Effects of suspended volcanic sediment on Coho and Chinook salmon in the Toutle and Cowlitz rivers*. University of Washington. Fisheries Research Institute, Technical Completion Report FRI-UW-8124. Seattle.
- Strayer, D.L., N.F. Caraco, J.J. Cole, S. Findlay, and M.L. Pace. 1999. Transformation of freshwater ecosystems by bivalves. *BioScience* 49(1), 19–27. January.
- Streeter, V.L., and E.B. Wylie. 1979. *Fluid mechanics*. New York: McGraw-Hill Book Company.
- Stuber, R.J., G. Gebhart, and O.E. Maughan. 1982. *Habitat Suitability Index Models: Largemouth Bass*. U.S. Fish & Wildlife Service Biological Report 82(10.16). 32 pp. (Also cited as USFWS 1982).
- Sutherland, W.J. 1996. *From individual behaviour to population ecology*. Oxford: Oxford University Press.
- Swanson, C., T. Reid, P.S. Young, and J.J. Cech Jr. 2000. Comparative environmental tolerances of threatened Delta smelt (*Hypomesus transpacificus*) and introduced wakasagi (*H. nipponensis*) in an altered California Estuary. *Oecologia* 123:384–390.
- SWRCB (State Water Resources Control Board). 2000. Revised Water Rights Decision 1641. March 15.
- Tanaka, S.K., T. Zhu, J.R. Lund, R.E. Howitt, M.W. Jenkins, M.A. Pulido, M. Tauber, R.S. Ritzema, and I.C. Ferreira. 2006. Climatic Warming and Water Management Adaptation for California. *Climatic Change* 76(3–4):361–387.
- TAW (Technical Advisory Committee for Water Retaining Structures). 2002. Technical Report—Wave Run-up and Overtopping at Dikes. Technical Advisory Committee on Flood Defense. The Netherlands, May.
- Terzaghi, K., and R.B. Peck. 1967. *Soil mechanics in engineering practice*. New York: Wiley.
- The Bay Institute. 1998. *The Sierra to the sea: The ecological history of the San Francisco Bay-Delta watershed*. Available at: <http://www.bay.org/news.htm>
- The Mark Group Engineers & Geologists, Inc. 1992. Geological/Geotechnical and Seismic Studies, Old River Facility, Los Vaqueros Project.
- Thibodeaux, L.J., and L. Aguilar. 2005. Kinetics of peat soil dissolved organic carbon release to surface water. Part 2: A chemodynamic process model. *Chemosphere* 60:1190–1196.

- Thompson, B., S. Lowe, and M. Kellogg. 2000. Results of the Benthic Pilot Study, 1994–1997. Part 1. Macrobenthic Assemblages of the San Francisco Bay-Delta and Their Responses to Abiotic Factors. San Francisco Estuary Institute, San Francisco, California.
- Thompson, B., and H. Peterson. 1998. Benthic macrofaunal assemblages of San Francisco Bay and Delta. *Interagency Ecological Program Newsletter* 11(2), 19–23.
- Thompson, J. 1958. The settlement geography of the Sacramento-San Joaquin Delta, California [Ph.D. Dissertation]. Stanford University.
- Thompson, J. 1982. *The people of the Sacramento Delta*. Golden Notes, Sacramento Historical Society.
- Thrust Fault Subgroup. 1999. Report to the Working Group on Northern California Earthquake Probabilities. 15 pages, plus tables.
- Thumerer, T., A.P. Jones, and D. Brown. 2000. A GIS-based coastal management system for climate change associated flood risk assessment on the east coast of England. *International Journal of Geographical Information Science* 14(3), 265–281.
- Tioga Group, Inc., Railroad Industries, Inc., and Cambridge Systematics, Inc. 2006a. California Inter-Regional Intermodal System (CIRIS), Implementation Plan Final Report. Prepared for San Joaquin Council of Governments.
- Tioga Group, Inc., Economic & Planning Systems, Meyer, Mohaddes Associates, and Jock O’Connell. 2006b. SACOG Regional Goods Movement Study Phase One, Executive Summary. Prepared for Sacramento Area Council of Governments.
- Titus, J.G., M.C. Barth, M.J. Gibbs, J.S. Hoffman, and M. Kenney. 1984. An overview of the causes and effects of sea level rise. In: *Greenhouse Effect and Sea Level Rise: A Challenge for This Generation*. M.C. Barth and J.G. Titus (eds.). Van Nostrand Reinhold Company Inc. Produced for the EPA and available at: <http://yosemite.epa.gov/oar/globalwarming.nsf/content/ResourceCenterPublicationsSLRChallenge.html>
- Tom, B. 2004. Methodology for flow and salinity estimates in the Sacramento-San Joaquin Delta and Suisun Marsh. Chapter 10: *Development of Tidal Analysis Routines in 25th Annual Progress Report*. October.
- Toprak, S., T.L. Holzer, M.J. Bennett, J.C. Tinsley. 1999. CPT- and SPT-based probabilistic assessment of liquefaction potential. In: *Proceedings of 7<sup>th</sup> U.S.-Japan Workshop on Earthquake Resistant Design of Lifeline Facilities and Countermeasures against Liquefaction, Seattle, Washington, August 15–17, 1999*.
- Traut, B.H. 2005. The role of coastal ecotones: A case study of the salt marsh/upland transition zone in California. *Journal of Ecology* 93:279–290.
- Trenberth, K.E. 1999. Conceptual Framework for Changes of Extremes of the Hydrological Cycle with Climate Change. *Climatic Change* 42(1) May (DOI 10.1023/A:1005488920935). 327–339.
- Trexler, J.C., W.F. Loftus, and K.C. Tarboton. *Fish habitat suitability index*. Chapter 6: pp. 85–92. Available at: [http://stwmnd.gov/org/pld/nsm/reg\\_appl/hsi.html](http://stwmnd.gov/org/pld/nsm/reg_appl/hsi.html)

- Tugel, A.J. 1993. *Soil survey of Sacramento County*. U.S. Department of Agriculture, Soil Conservation Service.
- Uncles, R.J., and D.H. Peterson. 1995. A computer model of long-term salinity in San Francisco Bay: Sensitivity to mixing and inflows. *Environmental International* 21(5), 647–656.
- Ungar, I.A. 1991. *Ecophysiology of vascular halophytes*. Boca Raton: CRC Press. 209 pp.
- University of California Davis. 2006. *Delta Island GIS agricultural land use tables*. Received from Dr. R. Howitt, 11/1/06. Derived from a GIS overlay of California Department of Water Resources (DWR) land use mapping with Delta Islands.
- Unruh, J.R., and S.T. Hector. 1999. *Subsurface characterization of the Potrero-Ryer Island thrust system, western Sacramento-San Joaquin Delta, Northern California*. Final Technical Report. William Lettis and Associates, Inc., U.S. Geological Survey, National Earthquake Hazards Reduction Program Award No. 1434-HQ-96-GR-02724.
- Unruh, J.R., and K.I. Kelson. 2002. *Critical evaluation of the northern termination of the Calaveras fault, eastern San Francisco Bay area, California*. Final Technical Report. U.S. Geological Survey National Earthquake Hazard Reduction Program, Award No. 00-HQ-GR-0082.
- Unruh, J.R., and T.L. Sawyer. 1997. Assessment of blind seismogenic sources, Livermore Valley, eastern San Francisco Bay region: Final Technical Report. USGS NEHRP Award 1434-95-G-2611.
- URS (URS Corporation). 2003a. In-Delta Storage Program Seismic Analysis. Prepared for Department of Water Resources. April.
- URS (URS Corporation). 2003b. In-Delta Storage Program Embankment Design Analysis. Prepared for Department of Water Resources. April.
- URS (URS Corporation). 2003c. In-Delta Storage Program Flooding Analysis. Prepared for Department of Water Resources. April.
- URS (URS Corporation). 2003d. Earthwork Construction Cost Estimates. Prepared for Department of Water Resources. June.
- URS (URS Corporation). 2003e. In-Delta Storage Program. Risk Analysis Report. Prepared for Department of Water Resources. May.
- URS (URS Corporation). 2005. In-Delta Storage Program, Risk Analysis, Draft Report. May 31.
- URS (URS Corporation). 2006. 100-Year Flood Plain GIS Land Use Tables.
- URS (URS Corporation). 2007. Status and Trends of the Delta-Suisun Services.
- URS/JBA (URS Corporation/Jack R. Benjamin & Associates, Inc.). 2007a. Delta Risk Management Strategy, Phase 1, Seismology Technical Memorandum.
- URS/JBA (URS Corporation/Jack R. Benjamin & Associates, Inc.). 2007b. Delta Risk Management Strategy (DRMS), Phase 1, Risk Analysis Report (Draft). Prepared for California Department of Water Resources. June.
- URS/JBA (URS Corporation/Jack R. Benjamin & Associates, Inc.). 2007c. Delta Risk Management Strategy, Phase 1, Geomorphology Technical Memorandum.

- URS/JBA (URS Corporation/Jack R. Benjamin & Associates, Inc.). 2007d. Delta Risk Management Strategy, Phase 1, Subsidence Technical Memorandum.
- URS/JBA (URS Corporation/Jack R. Benjamin & Associates, Inc.). 2007e. Delta Risk Management Strategy, Phase 1, Water Analysis Module (WAM) Technical Memorandum.
- URS/JBA (URS Corporation/Jack R. Benjamin & Associates, Inc.). 2007f. Delta Risk Management Strategy, Phase 1, Impact to Infrastructure Technical Memorandum.
- URS/JBA (URS Corporation/Jack R. Benjamin & Associates, Inc.). 2007g. Delta Risk Management Strategy, Phase 2, Carbon Sequestration Report. Draft. Prepared for Department of Water Resources, March.
- URS/JBA (URS Corporation/Jack R. Benjamin & Associates, Inc.). 2008a. Delta Risk Management Strategy, Phase 1, Flood Hazard Technical Memorandum.
- URS/JBA (URS Corporation/Jack R. Benjamin & Associates, Inc.). 2008b. Delta Risk Management Strategy, Phase 1, Climate Change Technical Memorandum.
- URS/JBA (URS Corporation/Jack R. Benjamin & Associates, Inc.). 2008c. Delta Risk Management Strategy, Phase 1, Levee Vulnerability Technical Memorandum.
- URS/JBA (URS Corporation/Jack R. Benjamin & Associates, Inc.). 2008d. Delta Risk Management Strategy, Phase 1, Emergency Response and Repair Technical Memorandum.
- URS/JBA (URS Corporation/Jack R. Benjamin & Associates, Inc.). 2008e. Delta Risk Management Strategy, Phase 1, Impact to Ecosystem Technical Memorandum.
- URS/JBA (URS Corporation/Jack R. Benjamin & Associates, Inc.). 2008f. Delta Risk Management Strategy, Phase 1, Economic Consequences Technical Memorandum.
- URS/JBA (URS Corporation/Jack R. Benjamin & Associates, Inc.). 2008g. Delta Risk Management Strategy, Phase 1, Wind-Wave Hazard Technical Memorandum.
- URS/JBA (URS Corporation/Jack R. Benjamin & Associates, Inc.). 2008h. Delta Risk Management Strategy, Phase 1, Risk Analysis Report. Draft 4. July.
- USACE (U.S. Army Corps of Engineers). 1956. *Investigation of Underseepage, Lower Mississippi River Levees, Technical Memorandum 3-424*. U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.
- USACE (U.S. Army Corps of Engineers). 1984. *Shore Protection Manual*. Washington, D.C. Vol. 1.
- USACE (U.S. Army Corps of Engineers). 1986 (rev. 1993). *Engineering and Design, Seepage Analysis and Control for Dams*. U.S. Army Corps of Engineers Engineering Manual, EM 1110-2-1901 (Change 1, April 30, 1993).
- USACE (U.S. Army Corps of Engineers). 1987. *Sacramento-San Joaquin Delta Levees - Liquefaction Potential*. Geotechnical Branch, Sacramento Corps of Engineers, USACE.
- USACE (U.S. Army Corps of Engineers). 1989. *Pajaro River – Santa Cruz County, Levee Investigation*. Prepared by David A. Ricketts, Geotechnical Branch, Sacramento Corps of Engineers, USACE.

- USACE (U.S. Army Corps of Engineers). 1992a. *Sacramento-San Joaquin Delta, California, Special Study: Hydrology*. U.S. Army Corps of Engineers, USCE-RTS-S-022.10, February.
- USACE (U.S. Army Corps of Engineers). 1992b. *Guidelines for Risk and Uncertainty Analysis in Water Resources Planning*. Volume I: Principles with Technical Appendices. Report 92-R-1, Institute for Water Resources.
- USACE (U.S. Army Corps of Engineers). 1998. *HEC-FDA Flood Damage Reduction Analysis, User's Manual*, Version 1.0, January.
- USACE (U.S. Army Corps of Engineers). 1999a. *Sacramento and San Joaquin River Basins, California, Post Flood Assessment*. USACE, Sacramento District, March.
- USACE (U.S. Army Corps of Engineers). 1999b. *Risk-Based Analysis in Geotechnical Engineering for Support of Planning Studies*. USACE Engineering Technical Letter, ETL 1110-2-556.
- USACE (U.S. Army Corps of Engineers). 2002. *Sacramento and San Joaquin River Basin Comprehensive Study*. Technical Studies Documentation. December. All dollar values updated to 2005 dollars.
- USACE (U.S. Army Corps of Engineers). 2003. *Coastal Engineering Manual*. Washington, D.C. Part II, Chapter 2.
- USACE (U.S. Army Corps of Engineers). 2004. *Framework for Assessment of Potential Effects of Dredging on Sensitive Fish Species in San Francisco Bay. Final Report*. August 5, 2004, 001-09170-00. Prepared for the U.S. Army Corps of Engineers by Levine and Fricke.
- USBR (United States Bureau of Reclamation). 1986. *Comparison of Estimated Maximum Flood Peaks with Historic Floods*. U.S. Bureau of Reclamation. January.
- USBR (United States Bureau of Reclamation). 1999. *Dam Safety Risk Analysis Methodology*. Version 3.3. September.
- USBR (United States Bureau of Reclamation). 2005. *2004 Water Accounting Reports*. Federal-State Operations. Central Valley Project. U.S. Department of the Interior. January. Online at: <http://www.usbr.gov/mp/cvo/pmdoc.html>
- USBR (United States Bureau of Reclamation). N.d. *Dataweb: Dams and Reservoirs. Statistics*. U.S. Bureau of Reclamation. Available at: <http://www.usbr.gov/dataweb/dams/>
- U.S. Census Bureau. 2003. American Community Survey. Ranking Tables 2003. Median Monthly Housing Costs for Renter-occupied Housing Units (In 2003 Inflation-adjusted Dollars). Specified renter-occupied housing units (Place level) <http://www.census.gov/acs/www/Products/Ranking/2003/R16T160.htm>
- U.S. Census Bureau. 2008. Available at: <http://www.census.gov/population/www/socdemo/daytime/daytimepop.html>. Accessed on April 14, 2008.
- USDA (U.S. Department of Agriculture). 2007. The PLANTS Database. Available at: <http://plants.usda.gov>. (29 January 2007). National Plant Data Center, Baton Rouge, LA. NRCS, 70874-4490.

- USDC (U.S. Department of Commerce). 2002. Natural Gas Liquid Extraction 2002. 2002 Economic Census. Mining Industry Series. EC02-211-211112. November.
- USDC (U.S. Department of Commerce). 2003. American Community Survey, Ranking Tables. Housing Costs for Renter-Occupied Housing Units, County Level. Ranking Tables 2001. Washington.
- USDC (U.S. Department of Commerce). 2006. Statistical Abstract of the United States. Table 769. Manufacturing, Mining and Trade Corporations – Profits and Stockholder’s Equity by Industry: 2003 and 2004.
- U.S. Dept. of Commerce, BEA (Bureau of Economic Analysis). 2008. Local Area Personal Income. Available at: [http://www.bea.gov/newsreleases/news\\_release\\_sort\\_regional.htm](http://www.bea.gov/newsreleases/news_release_sort_regional.htm). Downloaded April 2008.
- USFWS (U.S. Fish and Wildlife Service). 1982. *Species profiles: Life histories and environmental requirements of coastal fishes and invertebrates*. U.S. Fish Wildl. Serv. Biol. Rep. 82(11). TR EL-82-4.
- USFWS (U.S. Fish and Wildlife Service). 1995. National Wetland Inventory (NWI) based on 1985 aerial photographs mapped at 1:124,000 scale.
- USFWS (U.S. Fish and Wildlife Service). 2003a. 2001 National Survey Fishing, Hunting, and Wildlife Associated Recreation, California.
- USFWS (U.S. Fish and Wildlife Service). 2003b. Net Economic Values for Wildlife Related Recreation in 2001.
- USGS (U.S. Geological Survey). 1982. Guidelines for Determining Flood Flow Frequency. Revised September 1981, corrected March 1982.
- USGS (U.S. Geological Survey). 2000. Delta Subsidence in California: The Sinking Heart of the State. FS-005-00. April.
- USGS (U.S. Geological Survey). N.d. National Water Information System: U.S. Geological Survey. Available at: <http://waterdata.usgs.gov/nwis>
- U.S. Nuclear Regulatory Commission. 1996. *Branch technical position on the use of expert elicitation in the high-level radioactive waste program*. Prepared by P. Kotra, M.P. Lee, N.A. Eisenberg, A.R. DeWispelare. NUREG-1563.
- van der Valk, A.G. 1986. The impact of litter and annual plants on recruitment from the seed bank of a lacustrine wetland. *Aquat. Bot.* 24:13–26.
- van Oldenborgh, Geert Jan, and Gerrit Burgers. 2005. Searching for decadal variations in ENSO precipitation teleconnections. *Geophysical Research Letters* 32(15): 115701.1–L15701.5.
- Van Rheenen, N.T., A.W. Wood, R.N. Palmer, and D.P. Lettenmaier. 2004. Potential implications of PCM climate change scenarios for Sacramento - San Joaquin River Basin hydrology and water resources. *Climatic Change* 62(1–3), 257–281.
- Van’t Woudt, B.D., and R.H. Hagan. 1957. Land drainage in relation to soils and crops. In: *Drainage of Agricultural Lands*. J.N. Luthin (ed.). American Society of Agronomy, Madison, Wisconsin.

- Vayssieres, M. Department of Water Resources. 2006. Personal communication via e-mail.
- Velicogna, I., and J.M. Wahr. 2005. Ice mass balance in Greenland from GRACE. *Geophys. Res. Lett.* 32:18. L18505.
- Velicogna, I., and J.M. Wahr. 2006a. Measurements of time-variable gravity show mass loss in Antarctica. *Science* 311:1754–1758.
- Velicogna, I., and J.M. Wahr. 2006b. Acceleration of Greenland ice mass loss in spring 2004. *Nature* 443:329.
- Vicuna, S. 2006. Predictions of Climate Change Impacts on California Water Resources Using CalSim II: A Technical Note. A Report from: California Climate Change Center. CEC-500-2005-200-SF. Included as an appendix in the Climate Action Team Final Report, p. 1099. February 2006.
- Virginia Department of Emergency Management. 2003. Emergency Management Update, Hurricane Isabel Special Issue. November 5. Available at: [http://www.vdem.state.va.us/emupdate/03\\_emupdate/031105.htm](http://www.vdem.state.va.us/emupdate/03_emupdate/031105.htm)
- Vucetic, M., and R. Dobry. 1991. Effect of soil plasticity on cyclic response. *Journal of Geotechnical Engineering*. American Society of Civil Engineers (ASCE). 117(1).
- Wade, W.W., G.M. McCollister, R.J. McCann, and G.M. Johns. 1989. *Recreation benefits for California reservoirs: A multisite facilities-augmented gravity travel cost model*. Spectrum Economics, San Francisco, California. Water Docket DCN 14,781.
- WAFO Group. 2000. *WAFO – A MatLab toolbox for analysis of random waves and loads*. Lund Institute of Technology. Lund, Sweden.
- Wagner, D.L., E.J. Bortugno, and R.D. McJunkin. 1991. Geologic map of the San Francisco–San Jose quadrangle: California Division of Mines and Geology, Regional Geologic Map Series, 1:250,000 scale.
- Wagner, D.L., C.W. Jennings, T.L. Bedrossian, and E.J. Bortugno. 1981. Geologic map of the Sacramento Quadrangle: California Division of Mines and Geology Regional Geologic Map Series, 1:250,000 scale.
- Waisel, Y. 1972. *Biology of Halophytes*. New York: Academic Press. 395 pp.
- Wang, J.C.S. 1986. *Fishes of the Sacramento-San Joaquin Estuary and adjacent waters, California: A guide to the early life histories*. Interagency Ecological Study Program for the Sacramento–San Joaquin Estuary. 9.
- Wang, K., R. Wells, S. Mazzotti, R.D. Hyndman, T. Sagiya. 2003. A revised dislocation model of the Cascadia subduction zone. *Journal of Geophysical Research* 108:ETG 9-1–9-13.
- Warrick, A.W., and D.R. Nielsen. 1980. Spatial variability of soil physical properties in the field. In: *Applications of Soil Physics*. D. Hillel (ed.). Academic Press.
- Water Studies Pty Ltd. 1996. A predictive flood damage model for Victoria – Report No. 1: Flood damage survey, November 1995 floods. Geelong and Traralgon. Report prepared for the Victorian Department of Natural Resources and Environment.

- WDFW (Washington Department of Fish and Wildlife). 2004. Levee modification and removal. In: *Stream Restoration Guidelines*. Available at: [http://wdfw.wa.gov/hab/ahg/shrg/08-shrg\\_levee\\_modification\\_and\\_removal.pdf](http://wdfw.wa.gov/hab/ahg/shrg/08-shrg_levee_modification_and_removal.pdf)
- Weber-Band, J. 1998. Neotectonics of the Sacramento–San Joaquin Delta area, east-central Coast Ranges, California. Unpublished Ph.D., University of California, Berkeley. 216 pp.
- Wehling, T.M., R.W. Boulanger, R. Arulnathan, L.F. Harder Jr., and M.W. Driller. 2003. Nonlinear dynamic properties of a fibrous organic soil. *Journal of Geotechnical and Geoenvironmental Engineering*. ASCE, 129(10), 929–939.
- Weinstein, M.P. 1986. *Habitat suitability index models: Inland silverside*. U.S. Fish Wild. Ser. Biol. Rep. 82(10.120). 25 pp.
- Weir, W.W. 1950. Subsidence of peat lands of the Sacramento–San Joaquin Delta, California. *Hilgardia* 20:27–56.
- Wells, D.L., and K.J. Coppersmith. 1994. New empirical relationships among magnitude, rupture length, rupture width, rupture area, and surface displacement. *Bull. Seismol. Soc. Amer.* 84:974–1002.
- Werner, E.E. 1994. Individual behavior and higher-order species interactions. In: *Behavioral Mechanisms in Evolutionary Ecology*. L. Real (ed.). Chicago: University of Chicago. 297–326.
- WGCEP (Working Group for California Earthquake Probabilities). 2003. *Earthquake probabilities in the San Francisco Bay Area: 2002–2031*. U.S. Geological Survey, Open-File Report 03-214.
- WGNCEP (Working Group on Northern California Earthquake Potential). 1996. *Database of potential sources for earthquakes larger than magnitude 6 in Northern California*. U.S. Geological Survey, Open-File Report 96-705.
- Whetton, P.H., A.M. Fowler, M.R. Haylock, and A.B. Pittock. 1993. Implications of climate change due to the enhanced greenhouse effect on floods and droughts in Australia, *Climatic Change* 25:3–4. December 1993 (DOI 10.1007/BF01098378), 289–317.
- Wickersham, Dave. Union Pacific Railroad Company. 2006. Personal Communication.
- Wilber, D.H., and D.G. Clarke. 2001. Biological effects of suspended sediments: A review of suspended sediment impacts on fish and shellfish with relation to dredging activities in estuaries. *North American Journal of Fisheries Management* 21(4):855–875.
- Wilcove, D.S., D. Rothstein, J. Dubrow, A. Phillips, and E. Losos. 1998. Quantifying threats to imperiled species in the United States. *Bioscience* 48:607–615.
- Wilde, J. California Department of Water Resources. 2006. Personal Communication. July.
- Williams, J.G. 2006. Central Valley salmon: A perspective on Chinook and steelhead in the Central Valley of California. *San Francisco Estuary and Watershed Science* 4(3). Available at: <http://repositories.cdlib.org/jmie/sfews/vol4/iss3/art2>

- Williams, P.B. 1989. The impacts of climate change on the salinity of San Francisco Bay. In: *The Potential Effects of Global Climate Change on the United States*. 3–1 to 3–29. United States Environmental Protection Agency.
- Wong, I., and M. Dober. 2007. Screening/scoping level probabilistic seismic hazard analysis for Buckhorn Dam, California. Unpublished report prepared for U.S. Bureau of Reclamation by URS Corporation.
- Wong, I.G., R.W. Ely, and A.C. Kollman. 1988. Contemporary seismicity and tectonics of the northern and central Coast Ranges-Sierran block boundary zone, California. *Journal of Geophysical Research* 93:7813–7833.
- Wood, A.W., L.R. Leung, V. Sridhar, and D.P. Lettenmaier. 2004. Hydrologic implications of dynamical and statistical approaches to downscaling climate model outputs. *Climatic Change* 62:189–216.
- Wood, A.W., E.P. Maurer, A. Kumar, and D.P. Lettenmaier. 2002. Long range experimental hydrologic forecasting for the eastern U.S. *J. Geophys. Res.* 107(D20) 4429.
- Wood, R.K., D.F. Boesch, and V.S. Kennedy. 2002. Future consequences of climate change for the Chesapeake Bay ecosystem and its fisheries. *American Fisheries Society Symposium* 32:171–184.
- Woods and Poole Economics. 2006. 2006 State Profile. State and County Projections to 2030. Washington, DC.: Woods. & Poole Economics Inc.
- Wright, S.A., and D.H. Schoellhamer. 2004. Trends in the sediment yield of the Sacramento River, California, 1957–2001. *San Francisco Estuary and Watershed Science*, vol. 2, Article 2, 14 pp.
- Wright, S.G. 1992. UTEXAS3. A Computer Program for Slope Stability Calculations. Austin, Texas, May 1990, revised July 1991 and 1992.
- WSCC (Western Systems Coordinating Council). 1996. *Western Systems Coordinating Council disturbance report for the power system outage that occurred on the western interconnection August 10, 1996. 1548 PAST*. Approved by the WSCC Operations Committee on October 18, 1996. Available on the Internet at <http://www.wsc.com/outages.htm>
- Yates, D., D. Purkey, A. Huber-Lee, H. Galbraith, J. West, and S. Herrod-Julius. 2007. A physically-based, water resource planning model of the Sacramento Basin, California, USA. *ASCE Journal of Water Resource Management*.
- Ying Sun, S. Solomon, Ague Dai, and R.W. Portmann. 2005. How often does it rain? *Journal of Climate* 916–934.
- Yolo Bypass Working Group, Yolo Basin Foundation, and Jones and Stokes. 2001. *A framework for the future: Yolo Bypass management strategy*. Prepared for CALFED Bay-Delta Program. August.
- Youd, T.L., and S.K. Noble. 1997. Liquefaction criteria based on statistical and probabilistic analyses. *Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils*. December 31, 1997. 201–205.

- Young, P.S., and J.J. Cech Jr. 1996. Environmental tolerances and requirements of splittail. *Transactions of the American Fisheries Society* 125:664–678.
- Youngs, R.R., S.-J. Chiou, W.J. Silva, and J.R. Humphrey. 1997. Strong ground motion attenuation relationships for subduction zone earthquakes. *Seismological Research Letters* 68:58–73.
- Youngs, R.R., K.J. Coppersmith, C.L. Taylor, M.S. Power, L.A. Di Silvestro, M.L. Angell, N.T. Hall, J.R. Wesling, and L. Mualchin. 1992. A comprehensive seismic hazard model for the San Francisco Bay region. In: *Proceedings of the Second Conference on Earthquake Hazards in the Eastern San Francisco Bay Area*. G. Borchardt, S.E. Hirschfeld, J.J. Lienkaemper, P. McClellan, P.L. Williams, and I.G. Wong (eds.). California Division of Mines and Geology Special Publication 113:431–441.
- Zabel, R.W., M.D. Scheuerell, M.M. McClure, and J.G. Williams. 2006. The interplay between climate variability and density dependence in the population viability of Chinook salmon. *Conservation Biology* 20:190–200.
- Zedler, J. B., H.N. Morzaria-Luna, and K. Ward. 2003. The challenge of restoring vegetation on tidal, hypersaline substrates. *Plant and Soil* 253(1), 259–273.
- Zhu, T., M.W. Jenkins, and J.R. Lund. 2005. Estimated impacts of climate warming on California water availability under twelve future climate scenarios. *J. American Water Resources Assoc.* October.
- Zuo, Z., and J. Oerlemans. 1997. Contribution of glacial melt to sea level rise since AD 1865: A regionally differentiated calculation. *Clim. Dyn.* 13:835–845.
- Zwally, H.J., M.B. Giovinetto, J. Li, H.G. Cornejo, M.A. Beckley, A.C. Brenner, J.L. Saba, D. Yi. 2005. Mass changes of the Greenland and Antarctic ice sheets and shelves and contributions to sea-level rise: 1992–2002. *J. Glaciol.* 51:509–527.