

# NOTES

## NOTES FOR CHAPTER 2

<sup>1</sup> Santa Clara Basin Watershed Management Initiative, Watershed Characteristics Report (unabridged). Revised 2003. (Santa Clara Basin Watershed Management Initiative, Palo Alto, CA.) Chapter Four provides a more detailed discussion of influences on urban development patterns.

## NOTES FOR CHAPTER 3

<sup>1</sup> State of California, Governor's Office of Planning and Research (OPR). "Legislative Milestones in California's Planning Laws" in: *General Plan Guidelines*, 1998, 9.

<sup>2</sup> Ronald E. Bass, Albert I. Herson, and Kenneth M. Bogdan. 2001. *CEQA Deskbook. A step-by-step guide on how to comply with the California Environmental Quality Act*. 1999 (Second Edition, with 2001 supplement. (Solano Press Books, Point Arena, CA.), 6.

<sup>3</sup> SCBWMI, *Watershed Characteristics Report (unabridged)*, 2003, 3-4, 3-5.

<sup>4</sup> Wendell Cox. 1999. *The President's New Sprawl Initiative: A Program In Search Of A Problem*. Heritage Foundation, Washington, D.C. [www.heritage.org](http://www.heritage.org).

<sup>5</sup> Linda Bulkeley. "Economic and Tax Incentives in Watershed Management." Memorandum to SCVURPPP Management Committee. Approved by the SCBWMI Land Use Subgroup. April 10, 2002.

<sup>6</sup> Phil Serna. "Consumer Preference Survey Results and Analysis." Prepared for the Home Builders Association of Northern California. September 8, 2000. [www.hbanc.org](http://www.hbanc.org).

<sup>7</sup> Bulkeley, 4.

<sup>8</sup> Urban Ecology, *Blueprint for a Sustainable Bay Area*. Urban Ecology, Oakland, CA, 1996. [www.urbanecology.org](http://www.urbanecology.org)

<sup>9</sup> The 1991 Intermodal Surface Transportation Efficiency Act was reauthorized in 1998 as the Transportation Equity Act (TEA-21). It expires September 30, 2003. Information on reauthorization is at [www.dot.gov](http://www.dot.gov).

<sup>10</sup> An overview of utopian urbanism, including the influence of Howard, Le Corbusier, and Wright, appears in SCBWMI 2001, 4-4 to 4-6.

<sup>11</sup> Peter Calthorpe, *The Next American Metropolis*. Princeton Architectural Press, New York, 1993, 51.

<sup>12</sup> SCBWMI, *Watershed Characteristics Report (unabridged)*, 2003, 7-127.

<sup>13</sup> SCBWMI, *Watershed Characteristics Report (unabridged)*, 2003, 7-127.

<sup>14</sup> SCBWMI, *Watershed Characteristics Report (unabridged)*, 2003, 8-16.

<sup>15</sup> SCBWMI, *Watershed Characteristics Report (unabridged)*, 2003, Ch. 8.

<sup>16</sup> DOE. United States Department of Energy. “From Rooftop to River: Tulsa’s Approach to Floodplain and Stormwater Management.” Website. [www.sustainable.doe.gov/articles/rooftop/index.shtml](http://www.sustainable.doe.gov/articles/rooftop/index.shtml)

<sup>17</sup> Santa Clara County *General Plan*, 1994.

<sup>18</sup> San Jose *General Plan 2020*, 1994.

<sup>19</sup> San Jose, California. *Riparian Corridor Policy Study*. Consultants: Habitat Restoration Group and Jones and Stokes Associates, Inc. May 1994.

<sup>20</sup> California Legislature. Senate. “Santa Clara Valley Water District Act.” Bill 449, 2001 Legislative Session.

<sup>21</sup> OPR *General Plan Guidelines*, 11.

<sup>22</sup> OPR *General Plan Guidelines*, 13.

<sup>23</sup> California’s General Plan law requires that “General Law” cities maintain this consistency. Most “Charter” cities, such as San Jose, state this consistency as a local policy goal; i.e., land use decisions are intended to support the goals and policies of the General Plan.

<sup>24</sup> California, Governor’s Office of Planning and Research. 2000. *Planning, Zoning and Development Laws*, 56.

<sup>25</sup> California Environmental Quality Act. § 21083.

<sup>26</sup> Santa Clara County GRASS Project Advisory Committee, *Grazing Solutions: Grazing as a Positive Tool for Natural Resource Management*. (Santa Clara County Planning Office, April 2000).

<sup>27</sup> Monterey Bay National Marine Sanctuary, Water Quality Protection Program, *Action Plan IV: Agriculture and Rural Lands* (October 1999), <http://montereybay.nos.noaa.gov>

**NOTES FOR CHAPTER 4**

<sup>28</sup> Ann Riley, *Restoring Streams in Cities: A Guide for Planners, Policymakers, and Citizens*. Washington, D.C.: Island Press, 1998, 129-140.

<sup>29</sup> Lucy A.J. Buchan and Paul Randall, *Stormwater Environmental Indicators Demonstration Project Technical Memorandum: Indicator #24, Growth*

*and Development (Imperviousness)*. Santa Clara Valley Urban Runoff Pollution Prevention Program, in association with the Water Environment Research Foundation, 2000.

<sup>30</sup> Tom Scheuler, “The Importance of Imperviousness.” Chapter 2 in *Site Planning for Urban Stream Protection*. Environmental Land Planning Series. Metropolitan Washington Council of Governments, 1994.

<sup>31</sup> Center for Watershed Protection, *Rapid Watershed Planning Handbook: A Comprehensive Guide for Managing Watersheds*. Center for Watershed Protection, Ellicott City, Maryland. 1998.

<sup>32</sup> Tom Richman and Associates, *Start at the Source: Design Guidance Manual for Stormwater Quality Protection*. Bay Area Stormwater Management Agencies Association, Oakland, CA. 1999, 47-53.

<sup>33</sup> *Start at the Source*, 18, 54-55.

<sup>34</sup> Stormwater Quality Task Force, *California Stormwater Best Management Practice Handbooks: Municipal, Industrial, and Construction Activity*, March 1993.

<sup>35</sup> WEF/ASCE (Water Environment Foundation/American Society of Civil Engineers), *Urban Runoff Quality Management*. WEF Manual of Practice No. 23, ASCE Manual and Report on Engineering Practice No. 87, 1998.

<sup>36</sup> Prince George’s County, Maryland, *Low-Impact Development Design Strategies: An Integrated Design Approach*. Department of Environmental Resources, Programs and Planning Division, June 1999.

<sup>37</sup> Buchan and Randall, 10.

<sup>38</sup> California Regional Water Quality Control Board for the San Francisco Bay Region. 2001. Order No. 01-119, NPDES Permit No. CAS 029718. Amendment Revising Provision C.3. of Order No. 01-024.

<sup>39</sup> California Department of Transportation (December 2001). *Stormwater Management Plan*

*Water Quality Practice Guidelines*. Appendix D, Section 5: Treatment BMPs.

<sup>40</sup> Rachel Luksic, “An Update of the 1999 Catch Basin Retrofit Feasibility Study Technical Memorandum,” Memorandum to the Santa Clara Valley Urban Runoff Program Management Committee, June 26, 2002.

<sup>41</sup> For example, as part of the 2000-2001 project to widen Sand Hill Road in Palo Alto.

<sup>42</sup> SCBWMI, *Watershed Characteristics Report (unabridged)*, 2003, Table 4-7 on p 4-43.

<sup>43</sup> SCVURPPP, “Performance Standard and Supporting Documents for Construction Inspection,” revised January 17, 2002.

<sup>44</sup> RWQCB, “Staff Recommendations for New and Redevelopment Controls for Stormwater Programs,” 1994.

<sup>45</sup> SCVURPPP, “Performance Standard and Supporting Documents for Planning Procedures,” 1996.

<sup>46</sup> RWQCB Staff Report, “Workshop on Tentative Order Amending the New and Redevelopment Performance Standard in Provision C 3 of the Santa Clara Valley Urban Runoff Pollution Prevention Program NPDES Permit.” File No. 2182.05. July 10, 2001.

<sup>47</sup> SCVURPPP, “Performance Standard and Supporting Documents for Rural Public Works Maintenance and Support Activities,” June 20, 2002.

<sup>48</sup> SCVURPPP. *Development Policies Comparison Project*, Draft, January 2003.

## NOTES FOR CHAPTER 5

<sup>1</sup> Riley, 133, 216.

<sup>2</sup> Peter B. Bayley, “Understanding Large River-Floodplain Ecosystems,” *Bioscience* 45:3, March 1995.

<sup>3</sup> Riley, 223

<sup>4</sup> FEMA (Federal Emergency Management Agency), “National Flood Insurance Program—Program Description,” August 2002.

<sup>5</sup> Riley, 259.

<sup>6</sup> FEMA (Federal Emergency Management Agency). *CRS Coordinator’s Manual*. 2002. www.fema.gov.

<sup>7</sup> SCVWD, “Community participation in the federal insurance program,” web page updated 2002, accessed March 2003 at www.valleywater.org.

<sup>8</sup> Federal Interagency Stream Restoration Work Group, *Stream Corridor Restoration: Principles, Processes, and Practices*, 1998, p. 2-57.

<sup>9</sup> Riley, 102-103.

<sup>10</sup> Robert Carnachan, “Technical Memorandum #18F: Recommended Stream Segmentation for Watershed Assessment.” Prepared for the SCBWMI Report Preparation Team by URS/Greiner/Woodward-Clyde. February 27, 2002, 5-6.

<sup>11</sup> City of San Jose, *Riparian Corridor Policy Study*.

<sup>12</sup> SCBWMI. 2001, 7-32.

<sup>13</sup> Dunne and Leopold 1978, *Water in Environmental Planning*, W.H. Freeman, San Francisco.

<sup>14</sup> City of San Jose, *Riparian Corridor Policy Study*, 13.

<sup>15</sup> City of Cupertino *General Plan 1993*, 5-12.

<sup>16</sup> City of Cupertino Municipal Code 18.52 (subdivisions)

<sup>17</sup> City of San Jose, *Riparian Corridor Policy Study*, 3,. Figure 12.

<sup>18</sup> City of San Jose, *Riparian Corridor Policy Study*, 31-32.

<sup>19</sup> City of San Jose, *Riparian Corridor Policy Study*, 13.

<sup>20</sup> Santa Clara County Interjurisdictional Trails Committee, *Uniform Interjurisdictional Trail Design, Use, and Management Guidelines*. In fulfillment of County General Plan Policy PR-TW(i) 6A), 1999.

<sup>21</sup> Santa Clara County Parks and Recreation Department, Santa Clara County Parks And Recreation System Strategic Plan, May 9, 2002. Discussion Draft (Version 3.3.8). Note: “This is a progress report. All information outlined herein is for planning purposes only and is subject to change.”

<sup>22</sup> SCVWD, Adopt-a-Creek web page, accessed through [www.valleywater.org](http://www.valleywater.org), 2002.

<sup>23</sup> SCVWD. *Stream Care Guide for Santa Clara County*, Undated.

**NOTES FOR CHAPTER 6**

<sup>1</sup> SCVWD (undated), “History of the Santa Clara Water District,” webpage accessed through [www.valleywater.org](http://www.valleywater.org).

<sup>2</sup> USGS, *Ground Water Atlas of the United States. California, Nevada HA 730-B*. “Santa Clara Valley,” [www.usgs.gov](http://www.usgs.gov). 1995.

<sup>3</sup> SCVWD (undated), “Where Your Water Comes From,” web pages. [www.valleywater.org](http://www.valleywater.org).

<sup>4</sup> USGS *Ground Water Atlas*, “Fresh Ground Water Withdrawals.”

<sup>5</sup> SCVWD, *Santa Clara Valley Water District Groundwater Management Plan*, July 2001, 16-17.

<sup>6</sup> USACE, SCVWD, and City of San Jose, *Final General Re-Evaluation and Environmental Report for Proposed Project Modifications, Guadalupe River Flood Control Project, San Jose, CA*. Chapter 6, Section 6.2.1.19, 2001.

<sup>7</sup> DWR Bulletin 160-98: California Water Plan. Chapter 2: Current Events in California Water Management, <http://rubicon.water.ca.gov/b16098/estxt/esch2.html>

<sup>8</sup> LeRoy Poff et al., “The Natural Flow Regime: A paradigm for river conservation and restoration.” *Bioscience* 47:11, 769-784, 1997.

<sup>9</sup> City of San Jose. 1999. *Clean Bay Strategy (South Bay Watershed Activities)*. Environmental Services Department. [www.ci.sj.ca.us/esd/PDFs/CBS-July%2099.pdf](http://www.ci.sj.ca.us/esd/PDFs/CBS-July%2099.pdf)

<sup>10</sup> SCVWD, *Groundwater Management Plan*, 25-27.

<sup>11</sup> SCVWD. *Integrated Water Resources Plan Implementation Plan*, 1999.

<sup>12</sup> Sheila Carolyn Creighton, (undated). “Learning to Plan for Integrated Water Resources Management in British Columbia.”

<sup>13</sup> SCVWD. “Where Your Water Comes From.”

<sup>14</sup> SCVWD. *Integrated Water Resources Plan*, , prepared by the IWRP Project Team under the direction of Scott J. Akin, Sr. Project Manager; James M. Fiedler, Executive Project Manager; Stanley M. Williams, General Manager; January 1997.

<sup>15</sup> *ibid*.

<sup>16</sup> USGS News Release, “USGS Report Signals Trend: More People Using Less Water,” October 14, 1998.

<sup>17</sup> California Urban Water Conservation Council. Webpage, [www.cuwcc.org](http://www.cuwcc.org)

<sup>18</sup> City of San Jose web page, “What is Wet?” [www.slowtheflow.com/whatswet.html](http://www.slowtheflow.com/whatswet.html)

<sup>19</sup> SCVWD web page, “Water Efficient Technologies (WET) program” [www.valleywater.org/Water/Water\\_conservation/In\\_business/WET\\_Program/](http://www.valleywater.org/Water/Water_conservation/In_business/WET_Program/)

<sup>20</sup> California Water Code 13050.

<sup>21</sup> California Water Code 13550.

<sup>22</sup> 2002 Recycled Water Task Force, SWRCB data summarized in a web page, “Recycled Water Task Force Background Information,” [www.owue.water.ca.gov](http://www.owue.water.ca.gov).

- <sup>23</sup> California Water Code 13577.
- <sup>24</sup> California Assembly Bill 337, 2001 Legislative Session.
- <sup>25</sup> 2002 Water Recycling Task Force web page was accessed March 2003 at [www.owue.water.ca.gov/recycle/taskforce/taskforce.cfm](http://www.owue.water.ca.gov/recycle/taskforce/taskforce.cfm)
- <sup>26</sup> 2002 Recycled Water Task Force, "White Paper of the Public Information, Education, and Outreach Workgroup on Better Public Involvement in the Recycled Water Decision Process." Draft, February 4, 2003, [www.owue.ca.gov](http://www.owue.ca.gov).
- <sup>27</sup> "Recycled Water Saves California Farms, *Biocycle* April 2001, p. 28, [www.jgpress.com/biocycle.htm](http://www.jgpress.com/biocycle.htm)
- <sup>28</sup> National Research Council, Water Science and Technology Board, Committee to Evaluate the Viability of Augmenting Potable Water Supplies with Reclaimed Water, *Issues in Potable Reuse: The Viability of Augmenting Drinking Water Supplies with Reclaimed Water*, (Washington DC: National Academy Press, 1998).
- <sup>29</sup> National Research Council, Water Science and Technology Board, Committee on Groundwater Recharge, *Ground Water Recharge Using Waters of Impaired Quality*, (Washington, DC: National Academy Press, 1994).
- <sup>30</sup> Elizabeth M. Sloss, et al., *Groundwater Recharge with Reclaimed Water: Birth Outcomes in Los Angeles County, 1982-1993*. (Arlington, VA: Rand Corporation). [www.rand.org/publications/MR/MR1077/](http://www.rand.org/publications/MR/MR1077/)
- <sup>31</sup> City of San Jose, web page, "Program Status," [www.ci.san-jose.ca.us/sbwr/SBAbout.htm](http://www.ci.san-jose.ca.us/sbwr/SBAbout.htm)
- <sup>32</sup> California Administrative Code, Title 24, Part 5. Appendix G: Graywater Systems.
- <sup>33</sup> U.S. Water News Online, September 1996. "Gray Water Use Studied in California Homes."
- <sup>34</sup> The Santa Clara County Health Department website states: "When used as a supplemental source of domestic water for non-potable uses, graywater can create nuisance conditions, and, in certain situations, has the potential to be a

source of waterborne disease. Nevertheless, it is clear that water shortages do result in use by the public of alternative sources of water, including graywater, as an emergency backup to regular domestic supplies. It is for those persons who intend to use graywater, despite the potential for problems that such use entails, that the following cautionary information is provided."

#### NOTES FOR CHAPTER 7

- <sup>1</sup> John Harte, "Defining the "B" Word," *Defenders* (Spring 1996).
- <sup>2</sup> SCBWMI *Watershed Characteristics Report (unabridged)*, 2003, Table 4-4.
- <sup>3</sup> SCBWMI 2001. *Watershed Characteristics Report (unabridged)*, 2003, Table 4-2. A map of protected lands in Santa Clara County can be viewed at [www.greeninfo.org/HTML/clients/cl\\_scosa.htm](http://www.greeninfo.org/HTML/clients/cl_scosa.htm).
- <sup>4</sup> Bay Area Open Space Council, web page (undated). <http://maps.openspacecouncil.org/lands.html>.
- <sup>5</sup> California Public Resources Code 35100 et seq.
- <sup>6</sup> SCBWMI *Watershed Characteristics Report (unabridged)*, 2003, Table 7-3.
- <sup>7</sup> *FR* 66:49 14626, March 13, 2001.
- <sup>8</sup> Proposed Rule *FR* 65:176 54896 September 11, 2000.
- <sup>9</sup> USFWS, *Recovery Plan for Serpentine Soil Species of the San Francisco Bay Area*. Portland, Oregon, 1998.
- <sup>10</sup> Southwest Center for Biological Diversity v. Bruce Babbitt, *et al.*, CIV 99-3202 SC.
- <sup>11</sup> *66 FR* 83: 21450 [www.r1.fws.gov/news/pdf/BCB-FR%20Final.pdf](http://www.r1.fws.gov/news/pdf/BCB-FR%20Final.pdf)
- <sup>12</sup> Salt marsh harvest mouse characteristics and habitat description adapted from Howard Shellhamer, "A marsh is a marsh is a marsh... but not always to a salt marsh harvest mouse," USFWS web page, 1998. <http://desfbay.fws.gov/mouse98.html>

<sup>13</sup> Goals Project, *Baylands Ecosystem Habitat Goals*. A report of habitat recommendations prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. (Oakland, CA: U.S. Environmental Protection Agency, San Francisco, Calif./S.F. Bay Regional Water Quality Control Board, 1999).

<sup>14</sup> Thomas Reid Associates, "San Bruno Mountain: Preservation of an Ecological Island." Undated web page at <http://thecity.sfsu.edu/users/HCP/#Introduction>

<sup>15</sup> Gregory A. Thomas, *Where Property Rights and Biodiversity Converge: Lessons from Experience in Habitat Conservation Planning*. Berkeley, CA: Natural Heritage Institute, March 2000, [www.n-h-i.org](http://www.n-h-i.org)

<sup>16</sup> California Fish and Game Code Chapter 10, Section 2800, *et seq.* Accessed October 7, 2002 at [http://info.sen.ca.gov/pub/bill/sen/sb\\_0101-0150/sb\\_107\\_bill\\_20020204\\_chaptered.html](http://info.sen.ca.gov/pub/bill/sen/sb_0101-0150/sb_107_bill_20020204_chaptered.html)

<sup>17</sup> Hanson Environmental/Beveridge and Diamond. "Santa Clara County HCP/NCCP Conservation Planning Strategies Report," March 26, 2002.

<sup>18</sup> USFWS, *Biological Opinion, Interim Water Contract Renewals, March 1, 2002- February 29, 2004, Central Valley Project*. February 28, 2002 File Number 1-1-02-F-0070. In making its effects analysis and jeopardy findings, USFWS assumed this HCP/NCCP would be prepared, 1-26.

<sup>19</sup> California Fish and Game Code Chapter 10, Division 3, Section 2820.

<sup>20</sup> David Lewis, Executive Director, Save the Bay. Perspective, *San Jose Mercury News*, April 2, 2002.

**NOTES FOR CHAPTER 8**

<sup>1</sup> R.L. Vannote, et al, "The River Continuum Concept." *Can.J.Fish.Aquat.Sci.* 37:130-37 (1980).

<sup>2</sup> SCBWMI, *Watershed Characteristics Report (unabridged)*. 2003. Chapter 7, "Natural Setting."

<sup>3</sup> E.W. Lane. "The Importance of Fluvial Morphology in Hydraulic Engineering."

*Proceedings of the American Society of Civil Engineers*, Volume 81, No. 745 (1955).

<sup>4</sup> The presentation of stream equilibrium concepts is adapted from Ann Riley, *Restoring Streams in Cities: A Guide for Planners, Policymakers, and Citizens*.

<sup>5</sup> SCVWD. *Draft Environmental Impact Report and Stream Maintenance Program Report for the Multi-Year Stream Maintenance Program*. (2001).

<sup>6</sup> ABAG. Association of Bay Area Governments, "Joint Aquatic Resources Permit Application Pilot Project." (Feb. 1999) Webpages accessed at <http://jarpa.abag.ca.gov> (May 13, 2002)

<sup>7</sup> RWQCB. San Francisco Bay Regional Water Quality Control Board, Executive Officer's Report, July 14, 1999.

<sup>8</sup> ACOE. *U.S. Army Corps of Engineers. Final General Re-evaluation and Environmental Report for Proposed Project Modifications, Guadalupe River Project, Downtown San Jose, California*.

<sup>9</sup> GCRCD states: "The viability of the redesigned Contract 3 section is extremely questionable. At the entrance to the bypass culverts at I-280 the river has been over widened and this area will become a depositional zone and will likely fill with sediment. There is also a good chance the main channel will become clogged with debris. Where the bypasses feed back into the river, severe erosion will be caused as sediment hungry, high velocity flows will be dumped into an already eroding and unstable area. The Contract 1 and 2 areas continue to erode violating CEQA, the CWA, and project permits and adversely impacting water quality and most beneficial uses. One of the main problems in the Contract 1 and 2 areas is the deliberate effort to deprive the river of its floodplain. High berms and log crib walls have been constructed on the west bank, at great cost, in a futile attempt to keep the river from accessing its floodplain. The upland vegetation planted outside the riparian zone in a bypass corridor is being claimed as riparian mitigation but it is not doing well, as the clay layer is keeping roots from accessing needed water. The secondary irrigation ditch is serving to heat up water and elevate critical river temperatures.

“The geomorphic functions were not returned to lower Guadalupe Creek. Very little channel modification was made to the creek, contrary to project consultant recommendations. Almost 8 million dollars was spent on about a 1.7 miles project, which installed structures where structures were not needed and did not install them where they were needed. Although numerous small sapling plants were installed they will take 10 to twenty years to grow enough to shade the creek, if they survive at all. The worst part is fish can't normally access the creek as the project does not go all of the way down to the river confluence. The 1.2 million dollar drop structure only leads salmonids to an inhospitable environment, Lake Almaden, a warm lake filled with predators. Dave Rosgen indicated he could restore the creek's proper form and fluvial geomorphic function from Camden Ave. to the river confluence, about 2.5 miles, including removal of the Masson Dam for well under 1 million dollars. Dave Derrick, ACOE, stated that 8 million dollars for the Guadalupe Creek project was absurd and the project was not achieving its goal. The Masson Dam replacement project was another 1.3 million dollar project that will cause more problems than it will solve.”

<sup>10</sup> USACE. U.S. Army Corps of Engineers. *Guadalupe River Project, Downtown San Jose, California Mitigation and Monitoring Plan*. February 2001, (JSA F023) Sacramento, CA.

<sup>11</sup> SCVWD. Santa Clara Valley Water District. *Draft Environmental Impact Report and Stream Maintenance Program Report for the Multi-Year Stream Maintenance Program*, (March 28, 2001).

<sup>12</sup> SCVWD, *Draft Stream Maintenance Program*, March 2001. Appendix E, “Programmatic Impact Assessment and Mitigation for Routine Bank Protection Activities, (February 14, 2001).

<sup>13</sup> J.L. Plafkin, et al., *Rapid bioassessment protocols for use in streams and rivers: Benthic macroinvertebrates and fish*. (Washington, DC: U.S. Environmental Protection Agency, Office of Water Regulations and Standards, 1989).

<sup>14</sup> M.T. Barbour, et al., *Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates and Fish,*

*Second Edition*. (Washington, DC: Environmental Protection Agency Office of Water, 1999).

<sup>15</sup> J.R. Karr and E.W. Chu, *Restoring life in running waters: Better biological monitoring*. (Washington, DC: Island Press, 1999).

<sup>16</sup> Federal Interagency Stream Restoration Working Group, *Stream Corridor Restoration: Principles, Processes, and Practices*.

<sup>17</sup> Gary Flosi et al., *California Salmonid Stream Habitat Restoration Manual, Third Edition*. (California Department of Fish and Game, 1999).

<sup>18</sup> Dave Rosgen, *Applied River Morphology*. (Pagosa Springs, CO: Wildland Hydrology, 1996).

<sup>19</sup> Mark M. Brinson, et al., *A Guidebook for Application of Hydrogeomorphic Assessments to Riverine Wetlands*. (Vicksburg, MS: U.S. Army Corps of Engineers Waterways Experiment Station, 1995)

<sup>20</sup> SCBWMI. “Framework for Conducting Watershed Assessment (Part B),” 2000.

<sup>21</sup> SCBWMI. 2002. Watershed Assessment Report. Chapter Two, “Implications of Assessment for Next Phases of WMI.” Draft distributed to stakeholders on April 15, 2002.

<sup>22</sup> Lucy A.J. Buchan and Paul Randall, *Assessment of Stream Ecosystem Functions for the Coyote Creek Watershed*. Coyote Creek Watershed Integrated Pilot Assessment Draft Report. (Sunnyvale, CA: Santa Clara Valley Urban Runoff Pollution Prevention Program, November 8, 2002).

<sup>23</sup> Lucy A.J. Buchan, et al., *Aquatic Resource Characterization of Western Mt. Hamilton Stream Fisheries*. (EOA, Inc. in association with USEPA, 1999).

<sup>24</sup> FEMAT (Federal Ecosystem Management Assessment Team). *Forest ecosystem management: an ecological, economic, and social assessment*. USDA Forest Service, U.S. Fish and Wildlife Service, National Marine Fisheries Service, National Park Service, Bureau of Land Management, and Environmental Protection Agency. 1993.

<sup>25</sup> Holling, C.S., ed., 1978. Adaptive environmental assessment and management. John Wiley and Sons, New York.

<sup>26</sup> Riley, Ann, (1998), 47, 217, 227-229.

**NOTES FOR CHAPTER 9**

<sup>1</sup> Parts of the presentation on the history of San Francisco Bay water pollution are adapted from Wil Bruhns, “50 Years of Protecting Bay Area Waters,” San Francisco Bay Regional Water Quality Control Board, 2000. Accessed at [www.swrcb.ca.gov/~rwqcb2/news\\_items/50.doc](http://www.swrcb.ca.gov/~rwqcb2/news_items/50.doc)

<sup>2</sup> James Cloern et al., “San Francisco Bay Program: Lessons Learned for Managing Coastal Resources.” USGS Fact Sheet FS-053-95, 1997. Accessed May 19, 2002 at <http://water.usgs.gov/wid/html/sfb.html>.

<sup>3</sup> *ibid.*

<sup>4</sup> The industrial pretreatment programs implemented USEPA regulations (40 CFR 403 *et seq.*) promulgated in 1978.

<sup>5</sup> Michelle Hornberger et al., “Linkage of bioaccumulation and biological effects to changes in pollutant loads in South San Francisco Bay.” *Environmental Science and Technology* 34 (2000): 2401-2409.

<sup>6</sup> Andrew N. Cohen and James T. Carlton. “Nonindigenous Aquatic Species in a United States Estuary: A Case Study of the Biological Invasions of the San Francisco Bay and Delta.” Report for USFWS and the National Sea Grant College Program, 1995.

<sup>7</sup> CDFG. California Department of Fish and Game. Chinese Mitten Crab: Life and History. Undated. Accessed May 21, 2002 at [www.delta.dfg.ca.gov/mittencrab/life\\_hist.html](http://www.delta.dfg.ca.gov/mittencrab/life_hist.html)

<sup>8</sup> Tetra Tech, Inc., et al., *Task 10: Copper Action Plan*. Sponsored by the City of San Jose and the Copper Development Association, Inc., Final Report, June 2000, Revised February 2001

<sup>9</sup> According to federal regulations, a municipal separate storm sewer system “means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains...)”

<sup>10</sup> SCVURPPP. *Urban Runoff Management Plan*. (Sunnyvale, CA: Santa Clara Valley Urban Runoff Pollution Prevention Program, 1997).

<sup>11</sup> EPA’s August 1996 “Interim Permitting Approach for Water Quality-Based Effluent Limitations in Stormwater Permits” states: “Due to the nature of stormwater discharges, and the typical lack of information on which to base numeric water quality-based effluent limitations (expressed as concentration and mass), EPA ... uses best management practices (BMPs) in first-round stormwater permits, and expanded or better-tailored BMPs in subsequent permits, where necessary, to provide for the attainment of water quality standards.” *FR* 61:216, 57425, November 6, 1996.

<sup>12</sup> Information on the Regional Monitoring Program for Trace Substances is at [www.sfei.org/rmp/index.html](http://www.sfei.org/rmp/index.html)

<sup>13</sup> Information on the Clean Estuary Partnership is at [www.cleanestuary.com](http://www.cleanestuary.com)

<sup>14</sup> SCVURPPP. *Metals Control Measures Plan*, Final, February 12, 1997.

<sup>15</sup> SCVURPPP, *Urban Runoff Management Plan*, Chapter 2.

<sup>16</sup> Tetra Tech, Inc., et al. *Task 2: Impairment Assessment Report for Copper and Nickel in Lower South San Francisco Bay*. Final Report, June 2000. Prepared for the Copper/Nickel TMDL Work Group. Sponsored by the City of San Jose. <sup>17</sup> Tetra Tech, Inc., et al., *Task 10*.

<sup>18</sup> Tetra Tech, Inc., et al., *Task 10: Nickel Action Plan*. Sponsored by the City of San Jose and the Copper Development Association, Inc. 60+pp. Final Report, August 23, 2000, Revised February 2001.

<sup>19</sup> RWQCB, 2000, Order 00-109.

<sup>20</sup> RWQCB, 2001, Order 01-024.

<sup>21</sup> RWQCB. 2002. *Staff Report on Proposed Site-Specific Water Quality Objectives and Water Quality Attainment Strategy for Copper and Nickel for San Francisco Bay South of the Dumbarton Bridge*, Final Staff Report, May 15, 2002.

<sup>22</sup> RWQCB. 2002. Resolution R2-2002-0061, adopted May 22, 2002.  
www.swrcb.ca.gov/rwqcb2/Agenda/  
05-22-02/05-22-02-6finalres.doc

<sup>23</sup> RWQCB. 2001. "Water Quality Attainment Strategy for Mercury in San Francisco Bay." Made available to the Mercury Council in November 2001.

<sup>24</sup> Based on the FDA limit for fish, a bioaccumulation factor of 10 and a safety factor of 2.

<sup>25</sup> RWQCB staff states: "There are still unremediated debris fields on County owned property that are clearly identifiable from aerial photographs readily available on the web and easily verified by site inspection. The debris fields appear to discharge pollutants into waters of the State at Randoll Creek, which drains into Alamitos Creek below Almaden Reservoir."

<sup>26</sup> RWQCB (San Francisco Regional Water Quality Control Board), State Water Resources Control Board, and California Department of Fish and Game. *Contaminant Levels in Fish Tissue from San Francisco Bay: Final Report*. (Oakland, CA: Regional Water Quality Control Board for the San Francisco Bay Region, 1995).

<sup>27</sup> R. Fairey, et al., "Organochlorines and other environmental contaminants in muscle tissues of sport fish collected from San Francisco Bay." *Marine Pollution Bulletin* 34 (1997) (12):1058-1071.

<sup>28</sup> Richard McMurtry, *PCBs and Clams in Creeks: The Results of an Environmental Partnership. Clean Streams/Clean Bay Project Final Phase II Monitoring Report*. (San Jose, CA: Silicon Valley Toxics Coalition, 2001).

<sup>29</sup> San Francisco Estuary Institute. *Contaminant Concentrations in Fish from San Francisco Bay, 1997*. (Richmond, CA: San Francisco Estuary Institute, 1999).

<sup>30</sup> Tom Mumley and Revital Katznelson, *Diazinon in Surface Waters of the San Francisco Bay Area: Occurrence and Potential Impact*, (Hayward, CA: Alameda County Clean Water Program, 1997).

<sup>31</sup> Agendas and notices for the Urban Pesticide Committee are posted on the Sacramento River Watershed Program website at [www.sacriver.org](http://www.sacriver.org).

<sup>32</sup> Jay A. Davis, et al., *Technical Report of the Sources, Pathways, and Loadings Workgroup. Regional Monitoring Program for Trace Substances*. San Leandro, CA: San Francisco Estuary Institute, March 2001.

<sup>33</sup> Betsy Elzufon, "WMI Regulatory Survey." Memorandum to SCBWMI Regulatory Subgroup. August 3, 1999, Issue #1.

## NOTES FOR CHAPTER 10

<sup>1</sup> Sheila Tucker, *Stormwater Environmental Indicators Demonstration Project Technical Memorandum, Indicators #17: Public Attitude Surveys and #20: User Perception*. (Sunnyvale, CA: Santa Clara Valley Urban Runoff Pollution Prevention Program, 2000).

<sup>2</sup> Information is at [www.watershedwatch.net/](http://www.watershedwatch.net/)

<sup>3</sup> Janet O'Hara, "Status Report on Santa Clara Valley Urban Runoff Pollution Prevention Program and its 2000-2001 Annual Report." Report to Loretta Barsamian, Executive Officer, Regional Water Quality Control Board for the San Francisco Bay Region, March 20, 2002.

