

# APPENDIXES

State of California  
The Resources Agency  
Department of Water Resources  
Southern District

## *WATER RESOURCES OF THE ARROYO GRANDE - NIPOMO MESA AREA*

*SOUTHERN DISTRICT REPORT  
2002*

Gray Davis  
Governor  
State of California

Mary D. Nichols  
Secretary for Resources  
The Resources Agency

Thomas M. Hannigan  
Director  
Department of Water Resources



## APPENDIXES

This Page Intentionally Blank

## **APPENDIX A SELECTED REFERENCES**



This Page Intentionally Blank

## APPENDIX A SELECTED REFERENCES

- Ahlroth, J., 1997, Santa Maria Valley Water Level Record, Memorandum: Santa Barbara County Flood Control & Water Conservation District and Water Agency.
- Alterman, I. B., McMullen, R. B., Cluff, L. S., and Slemmons, D. B., 1994, Seismotectonics of the Central Coast Ranges: Boulder, Colorado, Geological Society of America Special Paper 292.
- Arroyo Grande Soil Conservation District and San Luis Obispo County Flood Control and Water Conservation District, 1955, Watershed Work Plan for the Arroyo Grande Creek Watershed, San Luis Obispo County, California: *prepared* with assistance from U. S. Department of Agriculture, Soil Conservation Service and Forest Service.
- Arthur D. Little, 1997, Guadalupe Oil Field Remediation and Abandonment Project, Public Draft Environmental Report: *prepared for* the San Luis Obispo County Department of Planning and Building.
- Ayers, R. S., 1977, Quality of water for irrigation: Journal of the Irrigation and Drainage Division, Proceedings of the American Society of Civil Engineers, vol. 163, no. IR2, p. 135-154.
- Back, W., Rosenheim, J. S., and Seaber, P. R., eds., 1988, Hydrogeology: Boulder, Colorado, Geological Society of America, The Geology of North America v. O-2.
- Bachman, S., Hauge, C., Neese, K., Saracino, A., 1997, California Groundwater Management: Groundwater Resources Association of California, Sacramento, California.
- Bennion, D. W., and Griffiths, J. C., 1966, A stochastic model for predicting variations in reservoir rock properties: Transactions American Institute of Mining and Metallurgical Engineers, v. 237, no. 2, p. 9-16.
- Bentall, R., compiler, 1963a, Methods of Determining Permeability, Transmissibility and Drawdown: U. S. Geological Survey Water-Supply Paper 1536-I.
- , 1963b, Shortcuts and Special Problems in Aquifer Tests: U. S. Geological Survey Water-Supply Paper 1545-C.
- Blake, M. C., Jr., and 7 others, 1978, Neogene basin formation in relation to plate-tectonic evolution of the San Andreas fault system, California: American Association of Petroleum Geologists Bulletin, v. 62, no. 3, p. 344-372.

- Blaney, H. F., Nixon, P. R., Lawless, G. P., and Widman, E. J., 1963, Utilization of the waters of the Santa Ynez River Basin for agriculture in southern Santa Barbara County, California: U. S. Department of Agriculture, Agricultural Research Service, 53 p.
- Bredehoeft, J., 1997, Safe yield and the water budget myth: *Ground Water*, v. 35, no. 6, p. 929.
- Buchanan-Banks, J. M., Pampeyan, E. H., Wagner, H. C., McCulloch, D. S., 1978, Preliminary Map Showing Recency of Faulting in Coastal South-Central California: U.S. Geological Survey Miscellaneous Field Studies, Map MF-910, 3 sheets, scale 1:250,000.
- California Code of Regulations, 1995, Notice of proposed rulemaking for the recycling criteria (R-13-95): Title 22, Division 4, Chapter 3, Reclamation Criteria,.
- California Department of Fish and Game, 1976, Natural Resources of Pismo Dunes and Wetlands: p. 86-87.
- California Department of Public Works, Division of Water Resources, 1921, Investigation of Lopez Creek as a Source of Water Supply for the City of San Luis Obispo: 6 p.
- , 1934, South Coastal Basin Investigation - Geology and Ground Water Storage Capacity of Valley Fill: Bulletin No. 45.
- , 1945, Memorandum Report on Arroyo Grande Creek, San Luis Obispo County, California: 21 p.
- , 1953, Survey of Petroleum Industry Waste Disposal Practices, Arroyo Grande Oil Field, San Luis Obispo County: Water Quality Investigations, *prepared for* Central Coastal Regional Water Pollution Control Board, 14 p.
- , 1955, Hydrologic Balance - Coastal Area, San Luis Obispo County Investigation: unpublished field notes and data analysis.
- California Department of Water Resources, 1958, San Luis Obispo County Investigation: Bulletin No. 18, vols. I and II, *prepared for* State Water Resources Board and County of San Luis Obispo.
- , 1961, Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County: Bulletin 104, Appendix A, Ground Water Geology, attachment 2.
- , 1962a, Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County: Bulletin 104, Appendix B, Safe Yield Determinations.
- , 1962b, Investigation of Nitrates in the Ground Water, Grover City, San Luis Obispo County: *prepared for* Central Coastal Regional Water Pollution Control Board.

- , 1964, Water Quality Objectives, Santa Maria River Valley: *prepared for* Central Coastal Regional Water Pollution Control Board.
  - , 1965, Arroyo Grande Oil Field Investigation: *prepared for* Central Coastal Regional Water Pollution Control Board.
  - , 1966, Progress Report on Sea-Water Intrusion: Pismo-Oceano Area, San Luis Obispo County: Southern District Report.
  - , 1969, Memorandum Report on Present and Future Water Supply and Demand in the Central Coast Area.
  - , 1969, Water Quality Conditions: Coastal Conditions, San Luis Obispo County: Southern District Memorandum Report.
  - , 1970, Sea-Water Intrusion: Pismo - Guadalupe Area: Bulletin No. 63-3, 76 p.
  - , 1971a, Preliminary Evaluation of the Water Supply of the Arroyo Grande and Paso Robles Areas.
  - , 1971b, Water Well Standards, Arroyo Grande Basin, San Luis Obispo County: Bulletin No. 74-7, 35 p.
  - , 1975, California's Ground Water: Bulletin No. 118, p. 40-44.
  - , 1977, Paso Robles and the Arroyo Grande Area - A Water Resources Evaluation: Technical Information Record, 25 p.
  - , 1979, Ground Water in the Arroyo Grande Area: Southern District Report, 108 p.
  - , 1980, Ground Water Basins in California: Bulletin 118-80, p. 24-28.
  - , 1986, Crop Water Use in California: Bulletin 113-4, 116 p.
  - , 1986, San Luis Obispo County Master Water Plan Update: *prepared in cooperation with* San Luis Obispo County Flood Control and Water Conservation District.
  - , 1993, California Water Plan Update: Bulletin 160-93.
  - , 1998, California Water Plan Update: Bulletin 160-98.
  - , Draft 2002, California's Ground Water: Bulletin No. 118 Update.
- California State Water Resources Board, 1951, Water Resources of California: Bulletin No. 1.

- Cardwell, W. T., and Parsons, R. L., 1945, Average permeabilities of heterogeneous oil sands: Transactions American Institute of Mining and Metallurgical Engineers, v. 169, p. 34-42.
- Chipping Geological Services, 1994, Black Lake Canyon Geologic and Hydrologic Study, Draft: Los Osos, California.
- City of Arroyo Grande, 1990, Urban Water Management Plan Update.
- Clark, D. G., Slemmons, D. B., Caskey, S. J., and dePolo, D. M., 1994, Seismotectonics framework of coastal central California: *in* Alterman, I. B., et al., eds., 1994, Seismotectonics of the Central California Coast Ranges: Boulder, Colorado, Geological Society of America Special Paper 292, p. 9-30.
- Clark, D. H., Hall, N. T., Hunt, T. D., and Lettis, W. R., 1988, Style and timing of slip on the San Miguelito fault, San Luis Obispo County, California: Geological Society of America, Cordilleran Section, Abstracts with Programs, v. 20, no. 3, p. 150.
- Cleath & Associates, 1990, Water Levels at Nipomo Valley Speedling Corporation Project Site, San Luis Obispo County, Memorandum: San Luis Obispo, California.
- , 1994, Hilton Site Hydrogeologic Assessment Report: San Luis Obispo, California, *prepared for* South San Luis Obispo County Sanitation District, 6 p.
- , 1995, Groundwater supply management for the Bartleson Development Plan: *in* The Morro Group, Inc., 1996, Environmental Assessment of Water Resources Availability, Bartleson Development Plan, No.D930295D, Appendix B.
- , 1996a, USI, Water Resources Management Study for the Woodlands: San Luis Obispo, California, 55 p.
- , 1996b, USI, Status of Santa Maria Ground Water Basin: San Luis Obispo, California, 12 p.
- , 1996c, Ground Water Level Monitoring at Hilton Biosolids Application Site: San Luis Obispo, California, *prepared for* South San Luis Obispo County Sanitation District, 2 p.
- , 1998a, Modeling Data and Information for the Woodlands Project, Woodlands Specific Plan EIR: San Luis Obispo, California.
- , 1998b, Water Supply Study for Village Glen Project, Arroyo Grande Fringe, San Luis Obispo County, California: *prepared for* Mr. Gary Young, RA Roberts Development, July 3, 1998.
- Coastal San Luis Resource Conservation District, 1998, Arroyo Grande Creek.

- Coastal Valley Engineering, Inc., 1976, Nipomo Community Services District, Feasibility Report, Proposed Well, Storage, and Transmission Main Facilities: San Luis Obispo, California, *prepared for* Nipomo Community Services District.
- Davis, S. N., 1969, Porosity and permeability of natural materials: *in* De Wiest, R. J. M., ed., Flow Through Porous Media: New York, Academic Press, p. 54-89.
- , 1988, Sandstones and shales: *in* Back, W., Rosenheim, J. S., and Seaber, P. R., eds., Hydrogeology: Boulder, Colorado, Geological Society of America, The Geology of North America v. O-2, p. 323-332.
- Davis, S. N., and DeWiest, R. J. M., 1966, Hydrogeology: New York, John Wiley & Sons, 463 p.
- Denise Duffy & Associates, 1991, Draft Environmental Impact Report for the Rancho Grande Subdivision: Monterey, California, *prepared for* The City of Arroyo Grande.
- Dibblee, T. W. Jr., 1950, Geology of Southwestern Santa Barbara County, California: California Division of Mines and Geology Bulletin 150, 95 p.
- , 1989, Geologic Map of the Point Sal and Guadalupe Quadrangles, Santa Barbara County, California: Santa Barbara, California, Dibblee Geological Foundation, Map No. DF-25, scale 1:24,000.
- , 1994, Geologic Map of the Santa Maria and Twitchell Dam Quadrangles, Santa Barbara and San Luis Obispo Counties, California: Santa Barbara, California, Dibblee Geological Foundation, Map No. DF-51, scale 1:24,000.
- Domenico, P. A., and Schwartz, F. W., 1990, Physical and Chemical Hydrogeology: New York, John Wiley & Sons.
- Driscoll, F. G., Ph. D., 1986, Groundwater and Wells: St. Paul, Minnesota, Johnson Division, second edition.
- Eicher, D. L., 1976, Geologic time: Englewood Cliffs, N.J., Prentice-Hall, second edition.
- Envicom Corporation, 1975, Seismic Safety Element, San Luis Obispo County, California: Calabasas, California, *prepared for* the San Luis Obispo County Planning Department, p. 2.90.
- , 1982, Development Constraints Analysis, Black Lake Golf Course, San Luis Obispo County, California: Calabasas, California, *prepared for* San Luis Obispo County.
- Environmental Science Associates, 1996, Final Woodlands Specific Plan, Baseline Environmental Assessment and Constraints Analysis: Los Angeles, California.

- , 1998, Woodlands Specific Plan, Environmental Impact Report: Los Angeles, California.
- , 2001, Woodlands Specific Plan, Supplemental Environmental Impact Report: Los Angeles, California, *prepared for the San Luis Obispo County Department of Planning & Building*.
- Feigal, K. L., King, R. W., and Jordan, T. H., 1990, Geodetic measurement of tectonic deformation in the Santa Maria fold and thrust belt, California: *Journal of Geophysical Research*, v. 95, no. B3, p. 2679-2681.
- Ferguson, B. K., 1994, *Stormwater Infiltration*: Boca Raton, Florida, Lewis Publishers, CRC Press, Inc., 269 p.
- Fetter, C. W., 1988, *Applied Hydrogeology*: New York, Macmillan Publishing Company, 592 p.
- Firma, 1999, Village Glen Annexation Tract 2265 and Elementary School #12, Environmental Impact Report: *prepared for City of Arroyo Grande*.
- Frame, R. G., 1938, Santa Maria Valley Oil Field: California Department of Conservation, Division of Oil and Gas, v. 24, no. 2, p. 27-47.
- Freeze, R. A. and Cherry, J. A., 1979, *Groundwater*: Englewood Cliffs, New Jersey, Prentice-Hall Inc., 604 p.
- Gale, J. E., 1982, Assessing the permeability characteristics of fractured rock: *in* Narasimhan, T. N., ed., *Recent Trends in Hydrogeology*: Boulder, Colorado, Geological Society of America Special Paper 189, p. 163-181.
- Galehouse, J. S., 1967, Provenance and paleocurrents of the Paso Robles Formation: *Geological Society of America Bulletin*, v. 87, p. 951-978.
- Gawthrop, W. H., 1978, Seismicity and tectonics of the central California coastal region: *in* Silver, E. A. and Normark, W. R., *San Gregorio - Hosgri Fault Zone, California*: California Division of Mines and Geology Special Report 137, p. 45-56.
- Goss, R., and Reed, L., 1969, Geophysical Investigation of the Arroyo Grande Below the Lopez Dam and Reservoir, San Luis Obispo County, California: Department of Geological Sciences, University of California, Riverside: *prepared for San Luis Obispo County Flood Control and Water Conservation District*, 80 p.
- Hall, C. A., Jr., 1973, Geology of the Arroyo Grande 15' Quadrangle, San Luis Obispo County, California: California Division of Mines and Geology, Map Sheet 24, scale 1:48,000, 7 p.
- , 1978a, Origin and development of the Lompoc-Santa Maria pull-apart basin and its relation

- to the San Simeon-Hosgri strike-slip fault, western California: *in* Silver, E. A., and Normark, W. R., San Gregorio - Hosgri Fault Zone, California: California Division of Mines and Geology Special Report 137, p. 25-32.
- , 1978b, Geologic map of Twitchell Dam and parts of Santa Maria and Tepusquet Canyon quadrangles, Santa Barbara County, California: U. S. Geological Survey Miscellaneous Field Studies, Map MF-933, scale 1:24,000.
- , 1981, San Luis transform fault and middle Miocene rotation of the western Transverse Ranges, California: *Journal of Geophysical Research*, v. 86, no. B2, p. 1015-1031.
- , 1982, Pre-Monterey Subcrop and Structure Contour Maps, Western San Luis Obispo and Santa Barbara Counties, South-Central California: U. S. Geological Survey Miscellaneous Field Studies, Map MF-1384, 6 sheets, scale 1:62,500, 28 p.
- Hall, C. A., Jr., and Corbato, C. E., 1967, Stratigraphy and structure of Mesozoic and Cenozoic rocks, Nipomo Quadrangle, southern Coast Ranges, California: *Geological Society of America Bulletin*, v. 78, p. 559-582.
- Hall, C. A., Jr., and Surdam, R. C., 1967, The San Luis Obispo-Nipomo areas, San Luis Obispo County, California: Boulder, Colorado, Geological Society of America, Cordilleran Section 63rd Annual Meeting Guidebook, p. 1-26.
- Hall, C. A., Jr., Ernst, W. G., Prior, S. W., and Wiese, J. H., 1979, Geologic Map of the San Luis Obispo-San Simeon Region, California: U.S. Geological Survey Miscellaneous Investigation Series Map I-1097, scale 1:48,000.
- Hanson, K. L., Wesling, J. R., Lettis, W. R., Kelson, K. I., and Mezger, L., 1994, Correlation, ages and uplift rates of Quaternary marine terraces: south-central coastal California: *in* Alterman, I. B., et al., eds., 1994, *Seismotectonics of the Central California Coast Ranges*: Boulder, Colorado, Geological Society of America Special Paper 292, p. 45-71.
- Heasler, H. P., and Surdam, R. C., 1984, A thermally subsiding basin model for the maturation of hydrocarbons in the Pismo Basin, California: *in* Surdam, R. C., ed., 1984, *Stratigraphic, Tectonic, Thermal, and Diagenetic Histories of the Monterey Formation, Pismo and Huasna Basin, California*: Society of Economic Paleontologists and Mineralogists Guidebook No. 2, p. 69-74.
- Heath, R. C., 1983, Basic Ground-Water Hydrology: U. S. Geological Survey Water-Supply Paper 2220, 84 p.
- Hem, J. D., 1985, Study and Interpretation of the Chemical Characteristics of Natural Water: U. S. Geological Survey Water-Supply Paper 2254, 264 p.



- Hill, R. A., 1943, Discussion, Safe Yield of Groundwater Basins: from paper by Harold Conkling.
- Hoover & Associates, Inc., 1985a, Groundwater basin geology and hydrogeology: *in* Lawrance, Fisk & McFarland, Inc., 1985, Interim Report, Water Resources Management Program for Zone 3, San Luis Obispo County Flood Control and Water Conservation District, Phase I, Appendix B.
- , 1985b, Stream infiltration study, Arroyo Grande Creek, zone 3 conjunctive use study, San Luis Obispo County, California: *in* Lawrance, Fisk & McFarland, Inc., 1985, Phase II Progress Report on Computer Modeling, Water Resources Management Program for Zone 3, San Luis Obispo County Flood Control and Water Conservation District, Appendix B.
- Hornafius, J. S., 1985, Neogene tectonic rotation of the Santa Ynez Range, western Transverse Ranges, California, suggested by paleomagnetic investigation of the Monterey Formation: *Journal of Geophysical Research*, v. 90, no. B14, p. 12503-12522.
- Hughes, J. L., 1977, Evaluation of Ground-Water Quality in the Santa Maria Valley, California: U. S. Geological Survey Water-Resources Investigations 76-128, 72 p.
- Hughes, J. L., and Freckleton, J. R., 1976, Ground-Water Data for the Santa Maria Valley, California: U. S. Geological Survey Open-File Report.
- Isherwood, D., 1981, Geoscience data base handbook for modeling a nuclear waste repository: U. S. Nuclear Regulatory Commission, NUREG/CR-0912, vols. 1 and 2, 315 p. and 331 p.
- Izbicki, J. A., 1991, Chloride sources in a California coastal aquifer, *in* Peters, H., ed., Ground Water in the Pacific Rim Countries: American Society of Civil Engineers, IR Div/ASCE, Proceedings, p. 71-77.
- James M. Montgomery Consulting Engineers, Inc., 1982, Ground Water Availability for the Proposed Black Lake Golf Course Development Project: Pasadena, California, *prepared for* Plaza Builders, Incorporated.
- Jennings, C. W., 1958, Geologic Map of California, San Luis Obispo Sheet: California Division of Mines and Geology, Olaf P. Jenkins edition, scale 1:250,000.
- John L. Wallace & Associates, 1996, Draft Reclamation Study: San Luis Obispo, California, *prepared for* South San Luis Obispo County Sanitation District.
- , 2001, Water Recycling, Progress Report: San Luis Obispo, California, *prepared for* South San Luis Obispo County Sanitation District.

- Johnson, A. I., 1967, Specific Yield - Compilation of Specific Yields for Various Materials: U. S. Geological Survey Water-Supply Paper 1662-D, 74 p.
- Jones, Doug, 1997-1998 and 2000, personal communication.
- Jones, K., Lawrance, C., Ahlroth, J., and MacDonald, P., 1977, Final Report, Adequacy of the Santa Maria Groundwater Basin: Santa Barbara County Water Agency, 51 p.
- Kablanow, R. I., II, and Surdam, R. C., 1984, Diagenesis and hydrocarbon generation in the Monterey Formation, Huasna Basin, California: *in* Surdam, R. C., ed., 1984, Stratigraphic, Tectonic, Thermal, and Diagenetic Histories of the Monterey Formation, Pismo and Huasna Basin, California: Society of Economic Paleontologists and Mineralogists Guidebook No. 2, p. 53-68.
- Kazmann, R. G., 1956, "Safe yield" in ground-water development, reality or illusion?: Journal of the Irrigation and Drainage Division, Proceedings of the American Society of Civil Engineers, v. 82, no. IR3, p. 1103-1-1103-12.
- Keeney, D., 1986, Sources of nitrate to ground water: CRC Critical Reviews in Environmental Control, v. 16, issue 3, p. 257-304.
- Kennedy/Jenks Consultants, 1995, Southland Wastewater Treatment Facility Expansion Report: Palo Alto, California, *prepared for* Nipomo Community Services District.
- Kleiner, B., and Graedel, T. E., 1980, Exploratory data analysis in the geophysical sciences: Review of Geophysics and Space Physics, v. 18, no. 3, p. 699-717.
- La Rocque, G. A., Jr., and others, 1950, Wells and Water Levels in Principal Ground-Water Basins in Santa Barbara County, California: U. S. Geological Survey Water-Supply Paper 1068, part 2.
- Lawrance, Fisk, & McFarland, Inc., 1985a, Interim Report, Water Resources Management Program for Zone 3, San Luis Obispo County Flood Control and Water Conservation District, Phase I: Santa Barbara, California, *prepared for* San Luis Obispo County Engineering Department.
- , 1985b, Phase II Progress Report on Computer Modeling, Water Resources Management Program for Zone 3, San Luis Obispo County Flood Control and Water Conservation District: Santa Barbara, California, *prepared for* San Luis Obispo County Engineering Department.
- , 1985c, Progress Report on Computer Modeling and other Factors, Phase III Work, Water Resources Management Program for Zone 3, San Luis Obispo County Flood Control and Water Conservation District: Santa Barbara, California, *prepared for* San Luis Obispo

County Engineering Department.

- , 1993, Engineering Considerations of Groundwater Yields and Rights on the Nipomo Mesa Sub-area, San Luis Obispo County, California: *prepared for* Nipomo Community Services District.
- Lawrence, E. D., 1958, Arroyo Grande (Edna) Oil Field: California Department of Conservation, Division of Oil and Gas, v. 44, no.1, p. 41-45.
- , 1964, Guadalupe Oil Field: California Department of Conservation, Division of Oil and Gas, v. 50, no. 2, p. 71-77.
- Lettis, W. R., and Hall, N. T., 1994, Los Osos fault zone, San Luis Obispo County, California: *in* Alterman, I. B., et al., eds., 1994, Seismotectonics of the Central California Coast Ranges: Boulder, Colorado, Geological Society of America Special Paper 292, p. 73-102.
- Lettis, W. R., and Hanson, K. L., 1992, Quaternary tectonic influences on coastal morphology, south-central California: *Quaternary International*, v. 15/16, p. 135-148.
- Lettis, W. R., Kelson, K. I., Wesling J. R., Angell, M., Hanson, K. L., and Hall, N. T., 1994, Quaternary deformation of the San Luis Range, San Luis Obispo County, California: *in* Alterman, I. B., et al., eds., 1994, Seismotectonics of the Central California Coast Ranges: Boulder, Colorado, Geological Society of America Special Paper 292, p. 111-132.
- Lewis, L., Hubbard, P., Heath, E., Pace, A., eds., 1991, Southern Coast Ranges: Santa Ana, California, South Coast Geological Society Annual Field Trip Guidebook #19.
- Lipinski, P., 1985, Comparison of Two Methods for Estimating Ground-Water Recharge in 1978-80, Santa Maria Valley, California: U. S. Geological Survey Water-Resources Investigations Report 85-4129, *prepared in* cooperation with the Santa Barbara County Water Agency, 17 p.
- Lloyd, J. W., and Heathcote, J. A., 1985, Natural Inorganic Hydrochemistry in Relation to Groundwater, An Introduction: Oxford, England, Clarendon Press.
- Lohman, S. W., 1972, Ground-water Hydraulics: U. S. Geological Survey Professional Paper 708, 70 p.
- Luhdorff & Scalmanini, Consulting Engineers, 1997, Special Assessments for Ground-Water Management, Santa Maria Valley Water Conservation District, Special Improvement District No. 1: Engineer's Report, *prepared for* Santa Maria Valley Water Conservation District.

- Luyendyk, B. P., Kamerling, M. J., and Terres, R., 1980, Geometric model for Neogene crustal rotations in southern California: *Geological Society of America Bulletin*, v. 91, p. 211-217.
- Mann, J. F., Jr., 1961, Factors affecting the safe yield of ground-water basins: *Journal of the Irrigation and Drainage Division, Proceedings of the American Society of Civil Engineers*, v. 87, no. IR3, p. 63-69.
- Manning, J. C., 1987, *Applied Principles of Hydrology*: Columbus, Ohio, Merrill Publishing Co., 277 p.
- McCulley, B., 1979, Sources of nitrate in Arroyo Grande Basin, California: *EOS*, v. 60, no. 46, p. 827.
- McKee, J. E. and Wolfe, H. W., eds., 1963, *Water Quality Criteria*: California State Water Resources Control Board, Pub. No. 3-A, 548 p.
- Mezger, E. L., Hanson, K. L., Hall, N. T., and Hunt, T. D., 1987, Evidence for Quaternary faulting in the Los Osos Valley, San Luis Obispo County, California: *Geological Society of America Abstracts with Programs*, v. 19, no. 6, p. 432.
- Miller, G. A., and Evenson, R. E., 1966, Utilization of Ground Water in the Santa Maria Valley Area, California: U. S. Geological Survey Water-Supply Paper 1819-A, 24 p.
- Montgomery Watson, 1995, Conformed Set, Central Coast Water Authority Coastal Branch Phase II, State Water Facilities, California Aqueduct, Contract Documents: Pasadena, California, v. II - Drawings, p. 5C-1- 5C-13A.
- Namson, J., and Davis T. L., 1990, Late Cenozoic fold and thrust belt of the southern Coast Ranges and the Santa Maria Basin, California: *American Association of Petroleum Geologists Bulletin*, v. 74, no. 4, p. 467-492.
- National Academy of Sciences and National Academy of Engineering, 1973 [1974], *Water Quality Criteria 1972*: U. S. Environmental Protection Agency, EPA R3-73-033, 594 p.
- Nipomo Community Services District, 1995, A Groundwater Management Plan for the Nipomo Mesa (AB 3030): draft.
- Nitchman, S. P., 1988, Tectonic Geomorphology and Neotectonics of the San Luis Range, San Luis Obispo County, California [M. S. thesis]: Reno, University of Nevada.
- Nitchman, S. P., and Slemmons, D. B., 1994, The Wilmar Avenue fault: a late Quaternary reverse fault near Pismo Beach, California: *in* Alterman, I. B., et al., eds., 1994, *Seismotectonics of the Central California Coast Ranges*: Boulder, Colorado, Geological

Society of America Special Paper 292, p. 103-110.

Pacific Gas and Electric Company, 1988, Final Report of the Diablo Canyon Long-term Safety Program for the Diablo Canyon Power Plant: San Francisco, California, U. S. Nuclear Regulatory Commission, Docket Nos. 50-275, 50-323, p. 2-1 to 2-149.

Page, B. M., 1981, The southern Coast Ranges: *in* Lewis, L., et al., eds., 1991, Southern Coast Ranges: Santa Ana, California, South Coast Geological Society Annual Field Trip Guidebook #19, p. 63-151.

Peters, H. J., 1981, Groundwater basins: *in* Concepts of Groundwater Management, Notes for University of California, Davis Extension Course, section 3.

Pomeroy, R. D. and Orlob, G. T., 1967, Problems of Setting Standards and of Surveillance for Water Quality Control: California State Water Resources Control Board, Pub. No. 36, 123 p.

Richter, R. C., and Chun, R. Y. D., 1959, Artificial recharge of ground water reservoirs in California: American Society of Civil Engineers, v.85 (IR4), p. 1-27.

RRM Design Group, 1988, Los Robles Del Mar Specific Plan: *prepared for* The City of Pismo Beach, California, Administrative Draft.

San Luis Obispo County Department of Planning and Building, 1992, Land Use Element - Circulation Element, San Luis Obispo County General Plan, San Luis Bay - Coastal Area Plan: adopted by Board of Supervisors 1988, amended 1992.

----, 1994, Land Use Element-Circulation Element, San Luis Obispo County General Plan, South County Area Plan-Inland Area Plan.

----, 1995, Land Use Element-Circulation Element, San Luis Obispo County General Plan, Annual Resource Summary Report, 1994: Water Supply, p. 1-14; Water Systems, p. 1-13.

San Luis Obispo County Engineering Department, 1994 (revised), Standard Improvement Specifications and Drawings, sections 11-351.1100 & 11-352.1000.

Sanders, T. C., et al., 1983, Design of Networks for Monitoring Water Quality: Water Resources Publications, Littleton, CO, 328 p.

Santa Barbara County Flood Control and Water Conservation District and Water Agency, 1996, Annual Santa Barbara County 1996 Groundwater Resources Report.

Santa Barbara County Water Agency, 1994, Santa Maria Valley Water Resources Report, 114 p.

- Sedlock, R. L., and Hamilton, D. H., 1991, Late Cenozoic tectonic evolution of southwestern California: *Journal of Geophysical Research*, v. 96, no. B2, p. 2325-2351.
- Singer, J. A., and Swarzenski, W. V., 1970, Pumpage and Ground-Water Storage Depletion in Cuyama Valley, California, 1947-66: U. S. Geological Survey Open-file Report, 22 p.
- Sophocleous, M., 1997, Managing water resources systems: why "safe yield" is not sustainable: *Ground Water*, v. 35, no. 4, p. 561.
- South San Luis Obispo County Sanitation District, 1996, Draft Reclamation Study.
- Southern California Water Company, Water Resources Department, 1991, Water Management Program for Santa Maria District: San Dimas, California.
- Stanley, K. O., and Surdam, R. C., 1984, The role of wrench fault tectonics and relative changes of sea level on deposition of upper Miocene-Pliocene Pismo Formation, Pismo Syncline, California: *in* Surdam, R. C., ed., 1984, *Stratigraphic, Tectonic, Thermal, and Diagenetic Histories of the Monterey Formation, Pismo and Huasna Basin, California*: Society of Economic Paleontologists and Mineralogists Guidebook No. 2, p. 21-37.
- Steritz, J. W., and Luyendyk, B. P., 1994, Hosgri fault zone, offshore Santa Maria Basin: *in* Alterman, I. B., et al., eds., 1994, *Seismotectonics of the Central California Coast Ranges*: Boulder, Colorado, Geological Society of America Special Paper 292, p. 191-209.
- Stout, P. R., Burau, R. G., and Allardice, W. R., 1965, A Study of the Vertical Movement of Nitrogenous Matter from the Ground Surface to the Water Table in the Vicinity of Grover City and Arroyo Grande, San Luis Obispo County: A Research Report to Central Coastal Regional Water Pollution Control Board.
- Swift, D. J. P., and Palmer, H. D., eds., 1978, *Coastal sedimentation*: Stroudsburg, Pennsylvania, Dowden, Hutchinson, and Ross, 339 p.
- Sylvester, A. G., and Darrow, A. C., 1979, Structure and neotectonics of the western Santa Ynez fault system in southern California: *Tectonophysics*, v. 52, p. 389-405.
- The Morro Group, 1990, Appendix A, review of groundwater conditions in the northern Santa Maria Basin and scenarios for the evaluation of impacts of development on the water resources of Nipomo Mesa: *in* The Morro Group, 1991, *Final Environmental Impact Report, South County Area Plan Inland Portion*: prepared for the Office of the Environmental Coordinator, County of San Luis Obispo, p. A1-A59.
- , 1991, *Final Environmental Impact Report, South County Area Plan Inland Portion*: prepared for the Office of the Environmental Coordinator, County of San Luis Obispo.

- , 1996a, Environmental Assessment of Water Resources Availability, Bartleson Development Plan: *prepared for* the County of San Luis Obispo Department of Planning and Building.
- , 1996b, Draft Environmental Impact Report, Cypress Ridge Tract Map and Development Plan: *prepared for* the Office of the Environmental Coordinator, San Luis Obispo County.
- Theis, C. V., 1935, The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using ground-water storage: American Geophysical Union Transactions, pt. 2, p. 519-524.
- Thomasson, H. G., Jr., 1951, Surface-water resources: *in* Worts, G. F., 1951, Geology and Ground-Water Resources of the Santa Maria Valley Area, California: U. S. Geological Survey Water-Supply Paper 1000, p. 48-7..
- Thomasson, H. G., Jr., Olmstead, F. H., and LeRoux, E. F., 1960, Geology, Water Resources and Usable Ground-Water Storage Capacity of Part of Solano County, California: U. S. Geological Survey Water-Supply Paper 1464, p. 207-223.
- Toups Corporation, 1976, Santa Maria Valley Water Resources Study: Santa Ana, California, *prepared for* City of Santa Maria, 166 p.
- Tukey, J. W., 1977, Exploratory Data Analysis: Reading, Massachusetts, Addison-Wesley.
- U. S. Bureau of Reclamation, 1952, Santa Maria Project, Southern Pacific Basin, California: Appendix I, Hydrology of the Santa Maria Basin.
- , 1955, Santa Maria Project, California: Definite Plan Report, Hydrology Appendix.
- U.S. Department of Agriculture, 1942, Survey Report, Santa Maria River Watershed, California: Program for Runoff and Waterflow Retardation and Soil Erosion Prevention for Flood Control Purposes: *prepared under direction of the* Forest Service with the assistance of Soil Conservation Service and Bureau of Agricultural Economics, Berkeley, California.
- , 1951, Report of Survey, Santa Maria River Watershed, California: Program for Runoff and Waterflow Retardation and Soil Erosion Prevention for Flood Control Purposes: Appendices.
- U.S. Department of Agriculture, Soil Conservation Service, 1977, Soil Survey of San Luis Obispo County, California, Coastal Part: *prepared in cooperation with* University of California Agricultural Experiment Station.
- U. S. Geological Survey, 7.5' Quadrangles, scale 1:24, 000: Arroyo Grande NE Quadrangle, California - San Luis Obispo Co., 1965, photo revised 1978; Caldwell Mesa Quadrangle,

California, 1967; Guadalupe Quadrangle, California, 1959, photo revised 1982; Huasna Peak Quadrangle, California, 1967, photo revised 1974; Nipomo Quadrangle, California - San Luis Obispo Co., 1965; Oceano Quadrangle, California - San Luis Obispo Co., 1965, photo revised 1979; Pismo Beach Quadrangle, California - San Luis Obispo Co., 1965, photo revised 1978; Point Sal Quadrangle, California, 1958, photo revised 1974; Santa Margarita Lake Quadrangle, California, 1967; Santa Maria Quadrangle, California, 1959, photo revised 1982; Tar Spring Ridge Quadrangle, California - San Luis Obispo Co., 1967; Twitchell Dam Quadrangle, California, 1959, photo revised 1982.

----, 1981, Santa Maria River fault, California: *in* Geology and Hydrology Applied to Hazard Assessment and Environment: U. S. Geological Survey Professional Paper 1100, p. 267.

Upson, J. E., and Thomasson, H. G., Jr., 1951, Geology and Water Resources of the Santa Ynez River basin, Santa Barbara County, California: U. S. Geological Survey Water-Supply Paper 1107.

URS Corporation, 1986, San Miguel Project and Northern Santa Maria Basin Area Study, Final Environmental Impact Statement/Environmental Impact Report.

Vittori, E., Nitchman, S. P., and Slemmons, D. B., 1994, Stress pattern from late Pliocene and Quaternary brittle deformation in coastal central California: *in* Alterman, I. B., et al., eds., 1994, Seismotectonics of the Central California Coast Ranges: Boulder, Colorado, Geological Society of America Special Paper 292, p. 31-43.

Waring, G. A., 1915, Springs of California: U. S. Geological Survey Water-Supply Paper 338, p. 68-69.

Warren, J. E., and Price, H. S., 1961, Flow in heterogeneous porous media: *Journal of Society of Petroleum Engineers*, v. 1, p. 153-169.

Water Advisory Committee, 1991, Long-Term Water Management Plan: Report to the City Council of the City of Santa Maria.

Weber and Associates, 1990, Geology: *in* Denise Duffy & Associates, 1991, Draft Environmental Impact Report for the Rancho Grande Subdivision: Monterey, California, prepared for City of Arroyo Grande, p. 9.

Weber, G. E., Lettis, W. R., and Hanson, K. L., 1987, Late Pleistocene uplift rates along the central California coast, Cape San Martin to Santa Maria Valley: *Geological Society of America Abstracts with Programs*, v. 19, no. 6, p. 462.

Wenzel, L. K., 1942, Methods for Determining Permeability of Water-Bearing Materials, with Special Reference to Discharging-Well Methods: U. S. Geological Survey Water-Supply Paper 887.



- Whitaker, R. W., 1950, Report on Preliminary Investigation, Arroyo Grande Valley, San Luis Obispo County, California.
- Winograd, I. J., 1975, Hydrogeology of ash-flow tuff: A preliminary statement: *Water Resources Research*, v. 7, no. 4, p. 994-1006.
- Winograd, I. J., and Thordarson, W., 1975, Hydrogeologic and Hydrochemical Framework, South-Central Nevada - California, with Special Reference to the Nevada Test Site: U. S. Geological Survey Professional Paper 712C, 126 p.
- Wood, W. W., and Fernandez, L. A., 1988, Volcanic rocks: *in* Back, W., Rosenheim, J. S., and Seaber, P. R., eds., 1988, *Hydrogeology: Boulder, Colorado*, Geological Society of America, *The Geology of North America* v. O-2, p. 353-365.
- Woodring, W. P., and Bramlette, M. N., 1950, Geology and Paleontology of the Santa Maria District, California: U. S. Geological Survey, Professional Paper 222, 142 p.
- Worts, G. F., 1951, Geology and Ground-Water Resources of the Santa Maria Valley Area, California: U. S. Geological Survey Water-Supply Paper 1000, 169 p.
- Yates, E. B., and Wiese, J. H., 1988, Hydrogeology and Water Resources of the Los Osos Valley Ground-water Basin, San Luis Obispo County, California: U. S. Geological Survey Water Resources Investigations Report 88-4081.
- Yates, E. B., and Van Konyenburg, K. M., 1998, Hydrogeology, Water Quality, Water Budgets, and Simulated Responses to Hydrologic Changes in Santa Rosa and San Simeon Creek Ground-water Basins, San Luis Obispo County, California: U. S. Geological Survey Water Resources Investigations Report 98-4061.

**APPENDIX B**  
**BASE HYDROLOGIC PERIOD**  
**AND PRECIPITATION DATA**

This Page Intentionally Blank

## **APPENDIX B**

### **BASE HYDROLOGIC PERIOD**

The base period should be representative of long-term hydrologic conditions, encompassing dry, wet, and average years of precipitation. It must be contained within the historical record and should include recent cultural conditions to assist in determining projected basin operations. To minimize the amount of water in transit in the zone of aeration, the beginning and end of the base period should be preceded by comparatively similar rainfall quantities.

#### **Precipitation**

Figures B1, B2, and B3 depict cumulative departure from mean precipitation for the period of record for California State Polytechnic University at San Luis Obispo, Nipomo 2NW, and Santa Maria City stations, respectively. Figure B1 shows a distinct three-cycle pattern of wet and dry years, with the ending of the fourth cycle impending. These cycles correspond to time periods 1884-1900, 1901-1934, and 1935-1966. A fourth cycle appears to have begun in 1967; however, the ending of the cycle cannot be determined from present data. Similar wet and dry trends, corresponding to those in approximately the same time frame as in Figure B1, may be seen in Figures B2 and B3.

Based on the data in Figures B1-B3 and criteria described above, water years 1984-1995 were selected as the base period for this study. This 12-year span includes the most recent pair of wet and dry trends, begins and ends after a series of wet years, lies within the period of available data, and encompasses recent cultural conditions. Water year 1994 for each of the three stations was classified as a dry year. However, the assumption is that the amount of vadose water in the zone of aeration at the beginning and end of the base period, 1984-1995, is not considered significant. The base period mean precipitation at California State Polytechnic University at San Luis Obispo, Nipomo 2NW, and Santa Maria City, 21.66 inches, 16.26 inches, and 11.52 inches, respectively, corresponds closely to the long-time period through 1995 mean precipitation of 22.00 inches, 16.29 inches, and 13.41 inches, respectively.

#### **Streamflow**

A study of river and creek discharge records is desirable to ascertain if the selected base period is representative of long-term river discharge, as well as of long-term precipitation. Data from 10 river discharge stations were supplied by the County of San Luis Obispo and the United States Geological Survey. Data for each of the discharge stations are included in Appendix D. Several years of record were obtained from Balance Hydrologics, Inc. for the Pismo Creek watershed.

Analysis of the San Luis Obispo County and USGS data showed that the stations at Arroyo Grande Creek at Arroyo Grande and at Sisquoc River near Garey were representative of nearby

river discharge based on the length of record available, proximity to the study area, and reliability of the data.

Figures B4 and B5 show annual discharge and long-term mean discharge for the period of record for the stations at Arroyo Grande Creek at Arroyo Grande and at Sisquoc River near Garey. The 12-year base period mean discharge of Arroyo Grande Creek at Arroyo Grande (1984-1995), which amounts to 5,851 AF, is about half of the long-term period mean discharge (1940-1995) of 12,727 acre-feet (Figure B6). There should be a better correlation between long-term period mean discharge and the 12-year base period mean discharge; however, the operation of Lopez Reservoir and mechanical failure of the recording gage may account for the discrepancy.

Mean discharge of the Sisquoc River near Garey for 1984-1995 amounted to 42,955 AF, compared to the long-term period mean discharge (1942-1995) of 34,209 AF (Figure B7). There should be a better correlation between long-term mean period discharge and the 12-year base period mean discharge; however, the operation of Twitchell Reservoir and mechanical failure of the recording gage may account for this discrepancy.

The base period and long-term period mean discharges for the stations at Arroyo Grande Creek at Arroyo Grande and at Sisquoc River near Garey differ by 46 percent and 80 percent, respectively.

Figure B8 depicts Pismo Creek station discharge for water years 1990-1992. Precipitation at the A. B. Cunningham at Oak Park station for water years 1990, 1991, and 1992 amounted to 8.10, 17.31 and 22.12 inches, respectively. Pismo Creek discharge shown on Figure B8 correlates well with the A. B. Cunningham at Oak Park precipitation data.

FIGURE B1 - CUMULATIVE DEPARTURE FROM MEAN PRECIPITATION  
CALIFORNIA POLYTECHNIC UNIVERSITY, SAN LUIS OBISPO

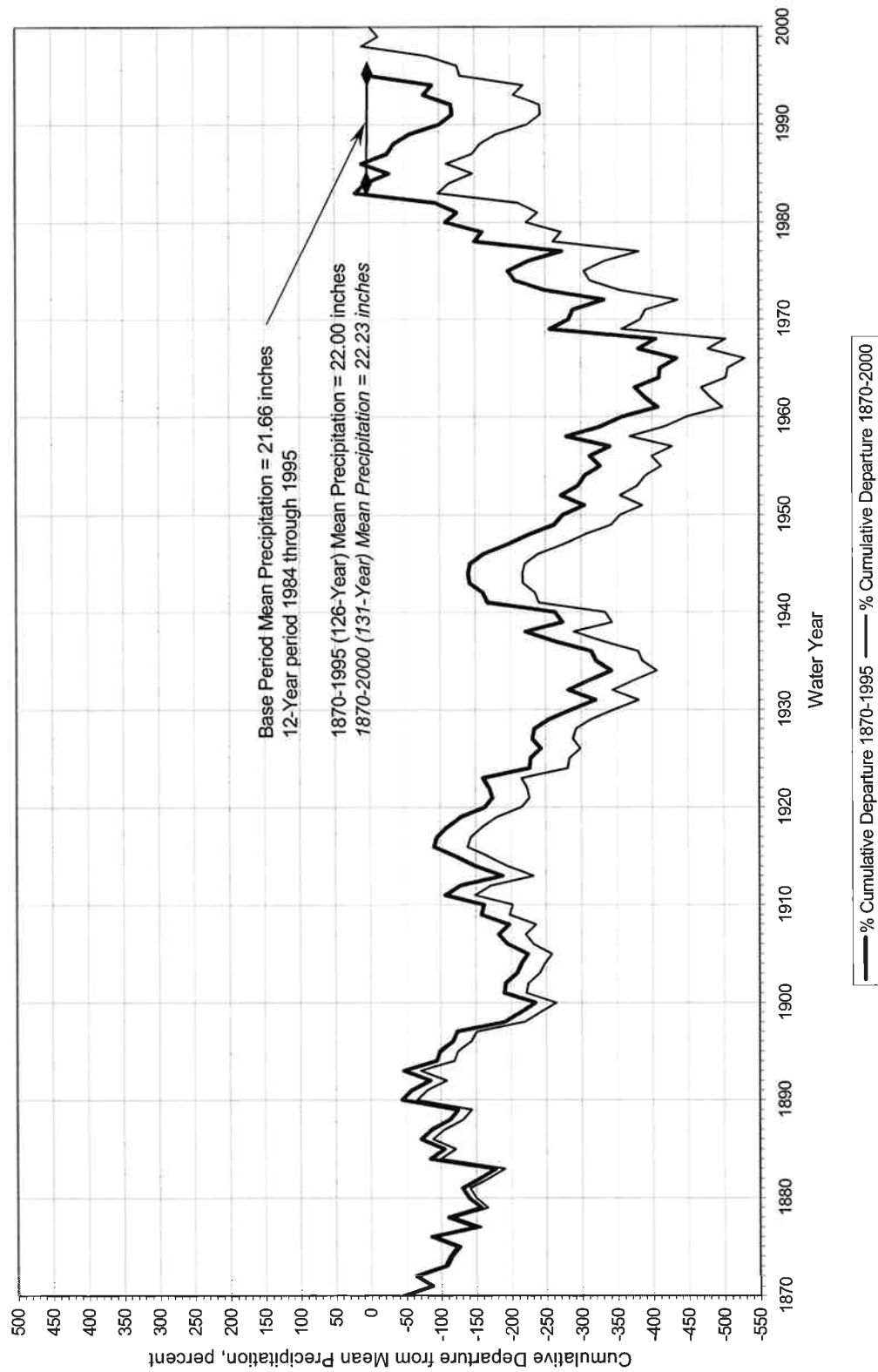


FIGURE B2 - CUMULATIVE DEPARTURE FROM MEAN PRECIPITATION  
NIPOMO 2NW

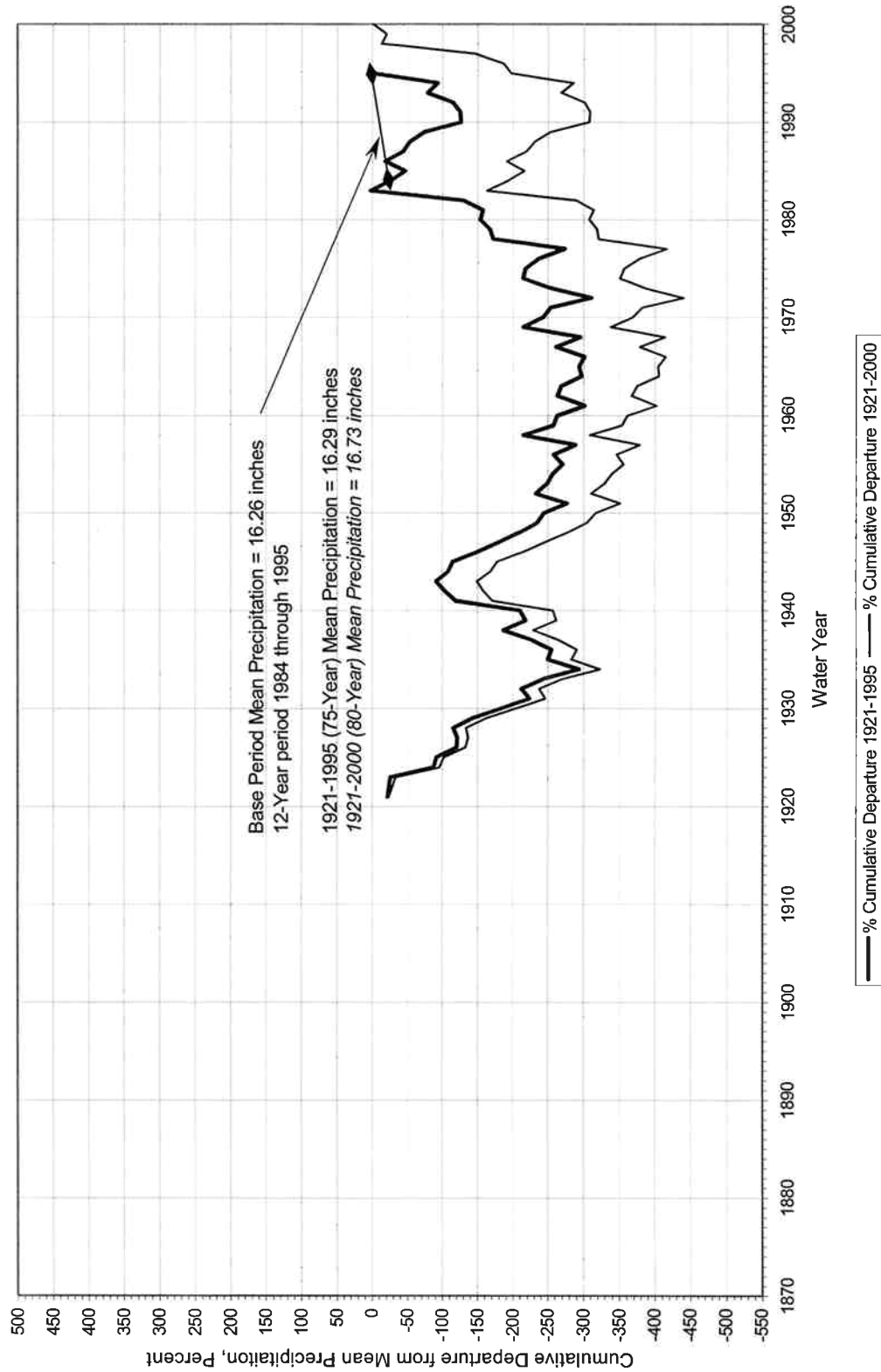


FIGURE B3 - CUMULATIVE DEPARTURE FROM MEAN PRECIPITATION  
CITY OF SANTA MARIA

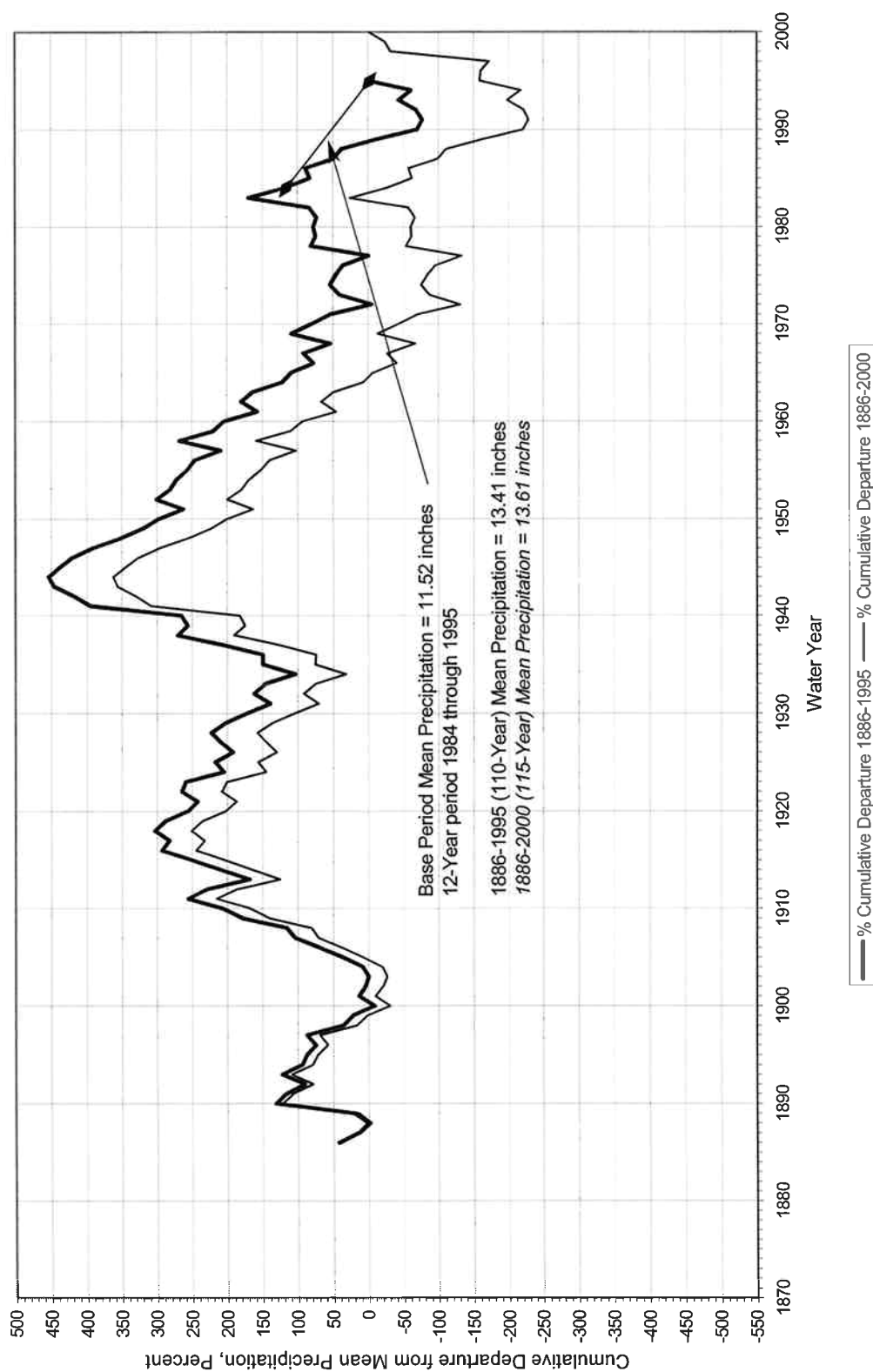




FIGURE B4 - ANNUAL DISCHARGE, ARROYO GRANDE CREEK AT ARROYO GRANDE AND PRECIPITATION AT HUASNA VALLEY AND LOPEZ DAM STATIONS

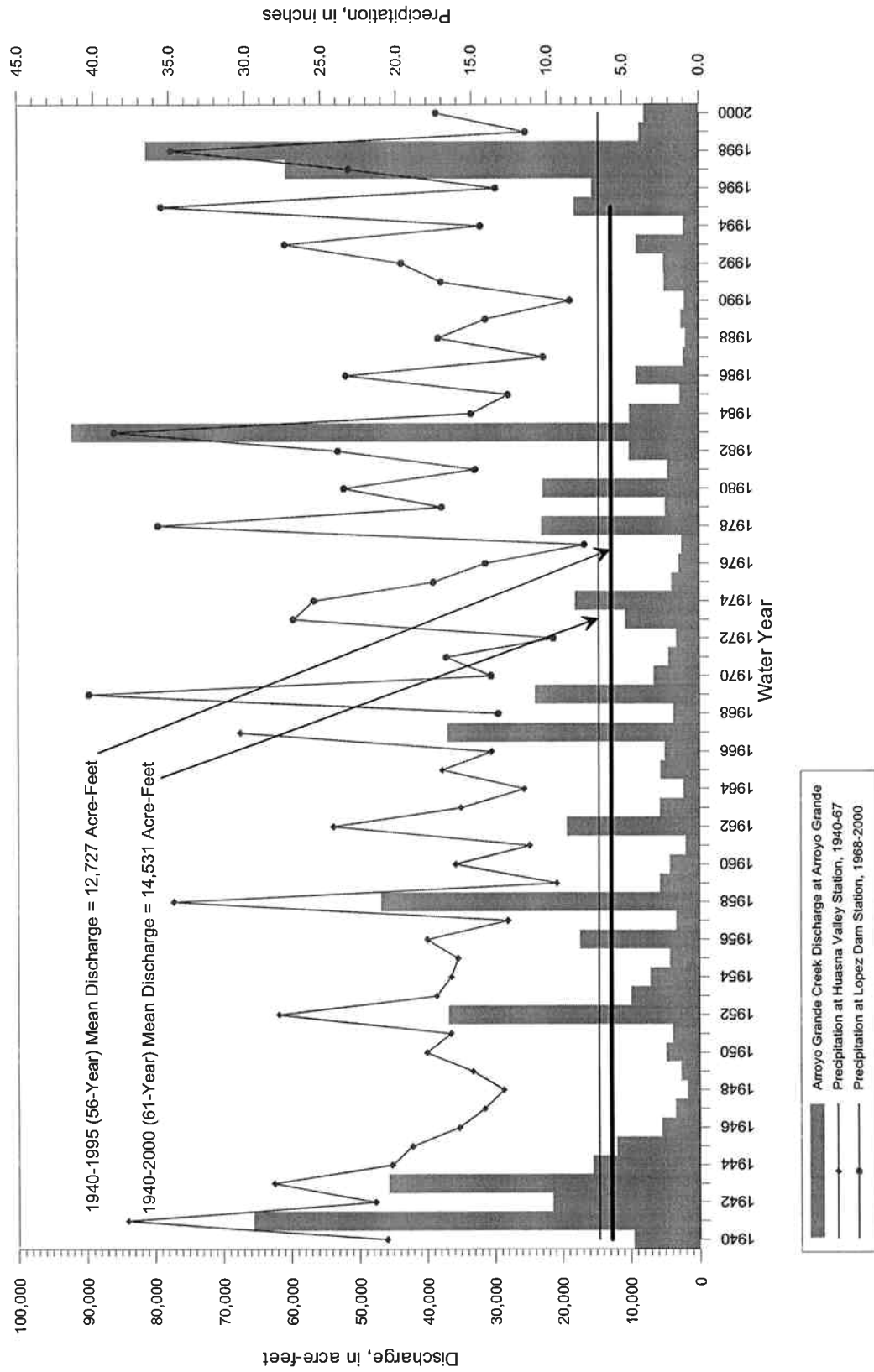


FIGURE B5 - ANNUAL DISCHARGE, SISQUOC RIVER NEAR GAREY AND  
PRECIPITATION AT SANTA MARIA CITY STATION

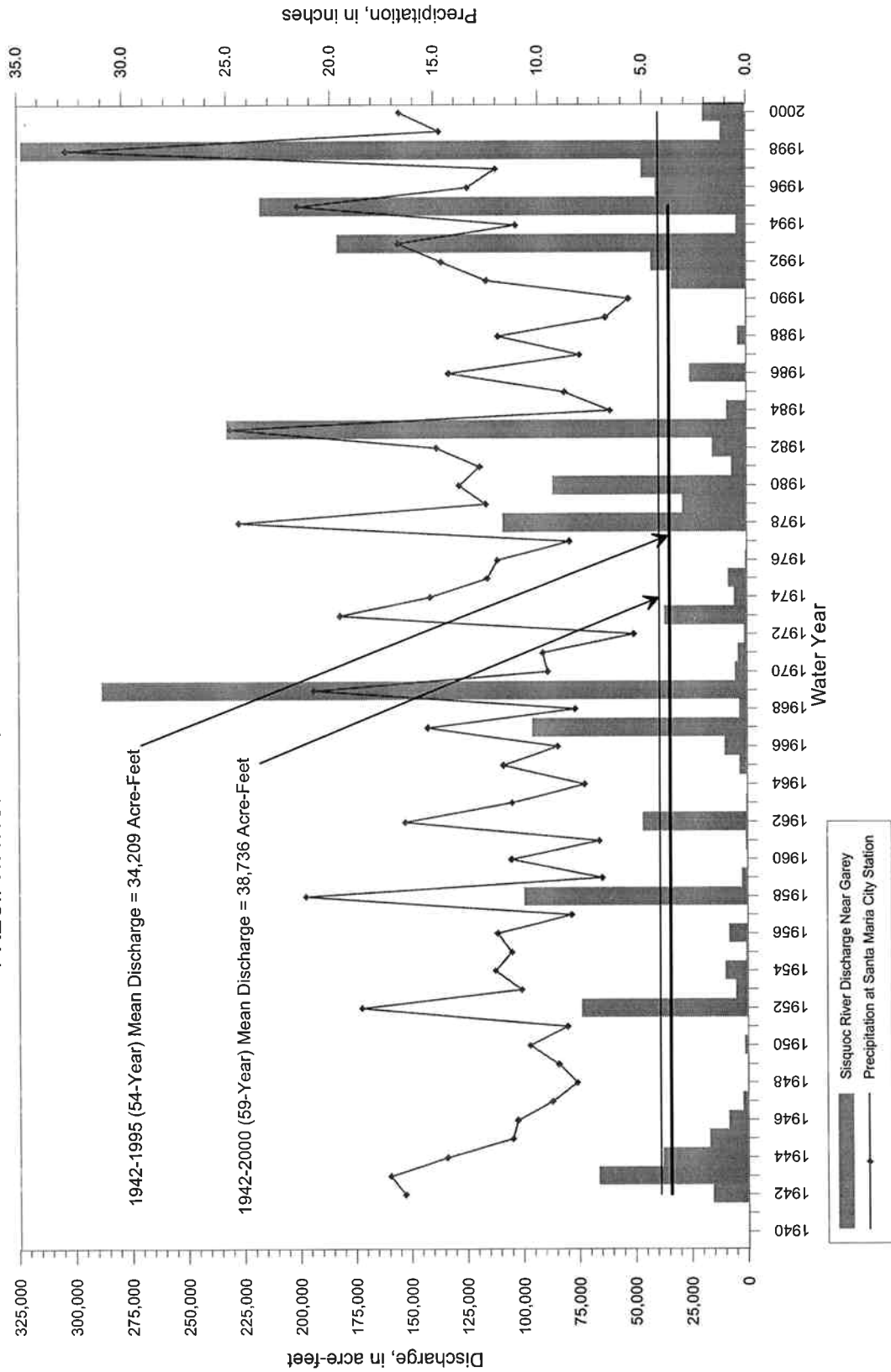


FIGURE B6 - CUMULATIVE DEPARTURE FROM MEAN DISCHARGE  
ARROYO GRANDE CREEK AT ARROYO GRANDE

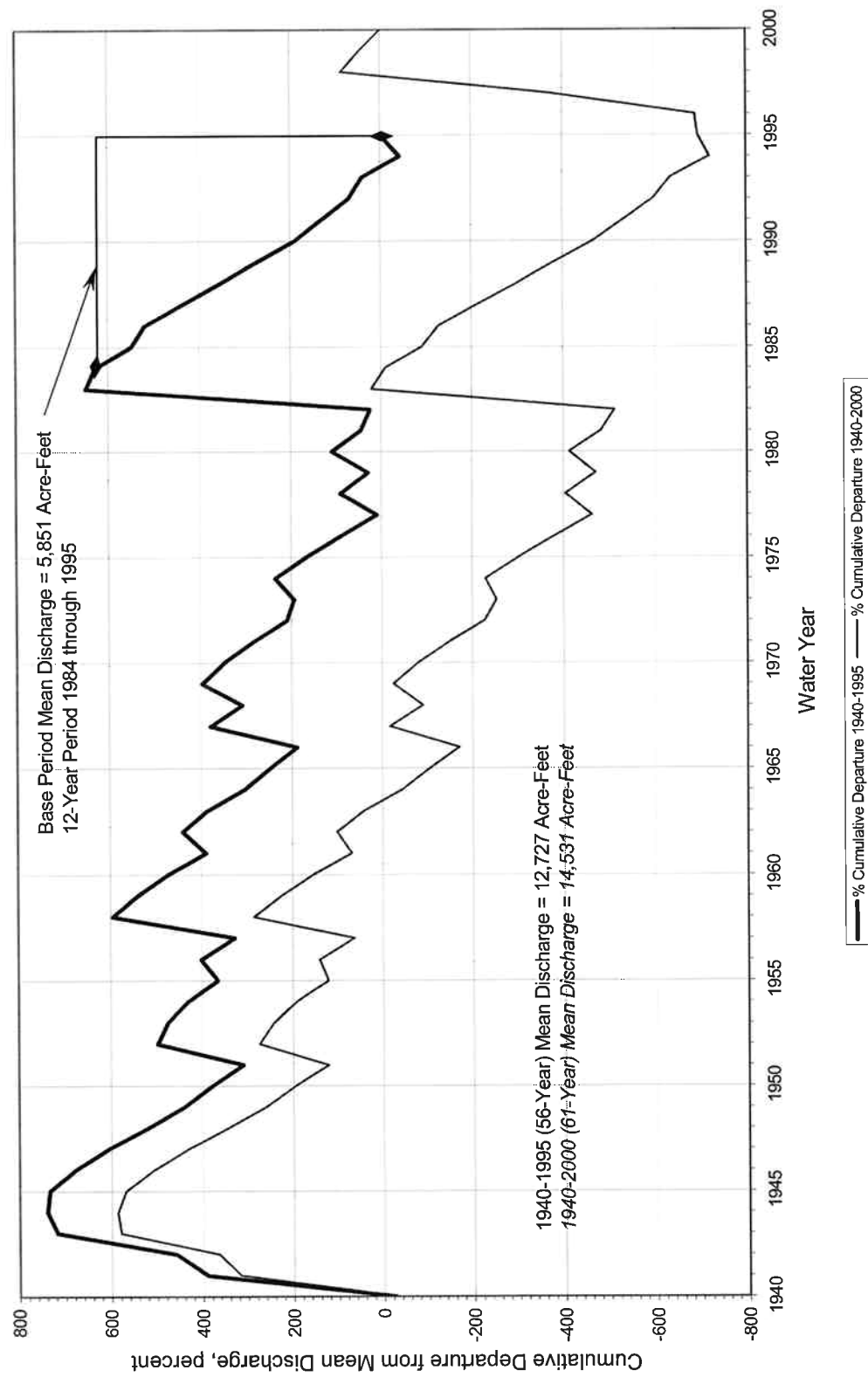
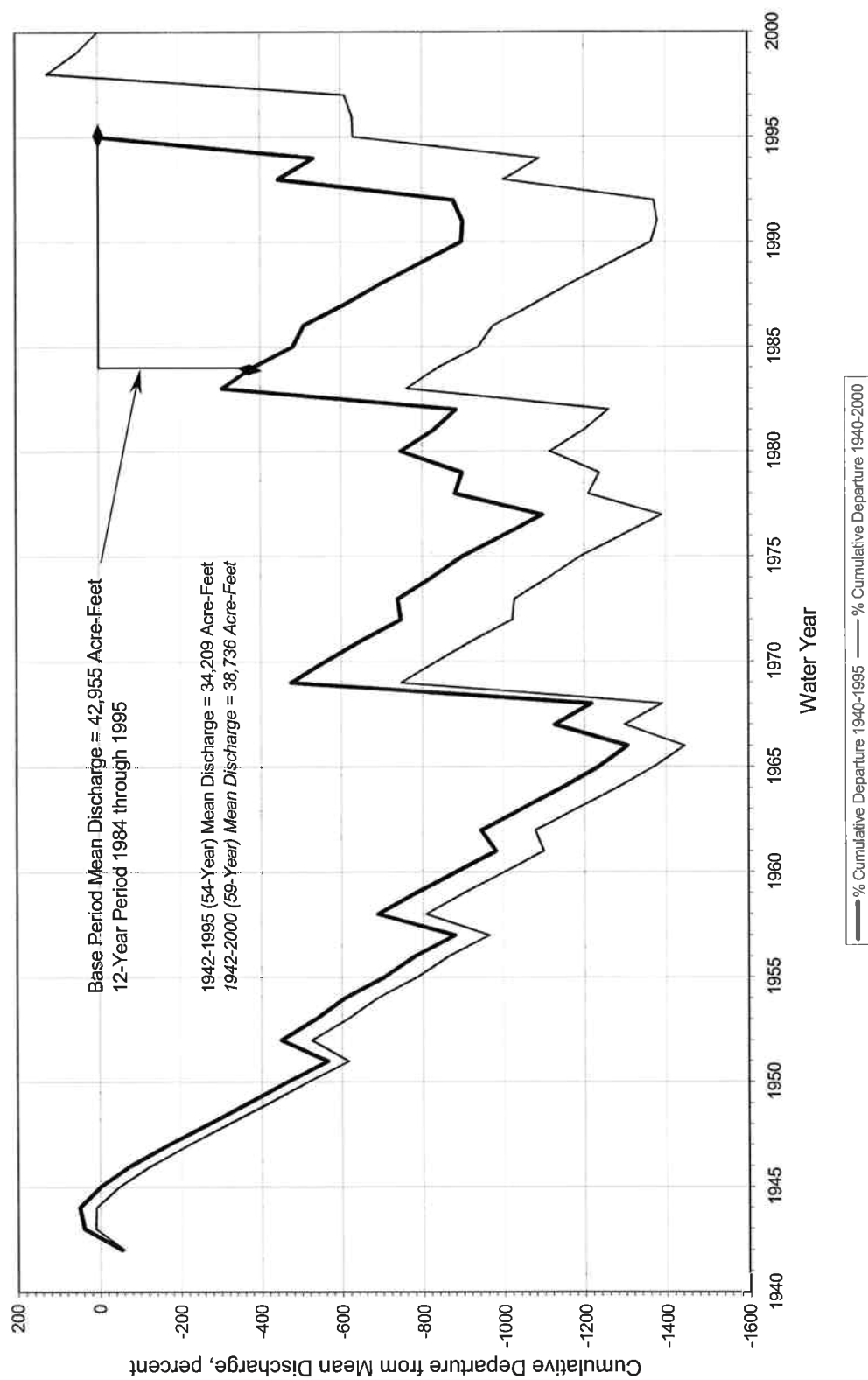
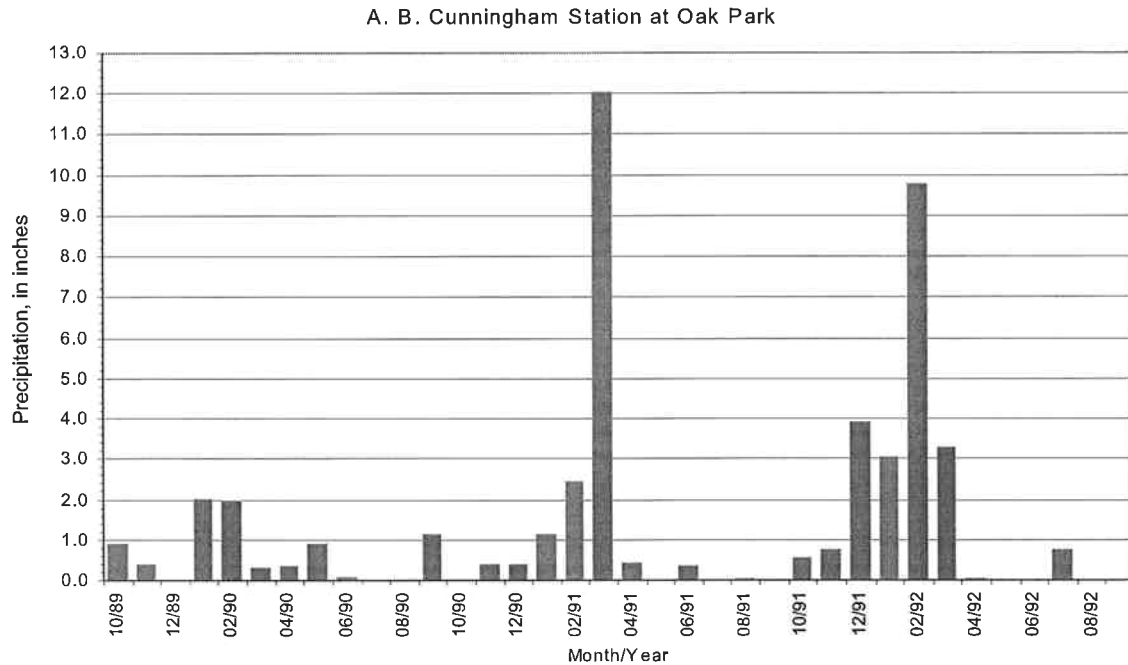
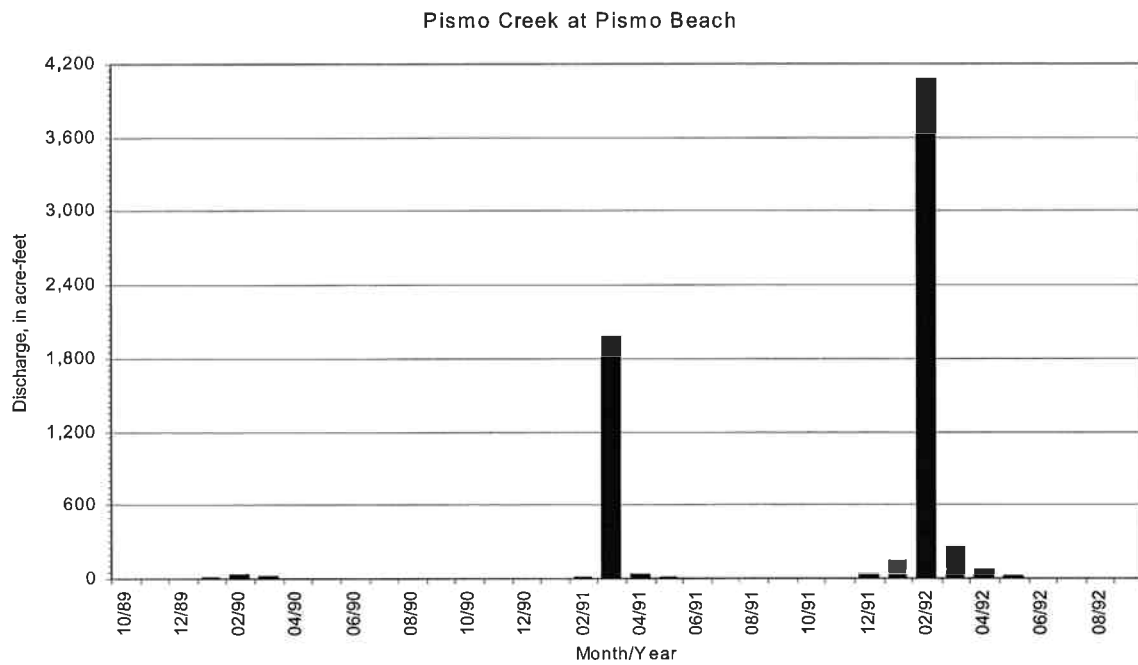


FIGURE B7 - CUMULATIVE DEPARTURE FROM MEAN DISCHARGE  
SISQUOC RIVER NEAR GAREY



**FIGURE B8 - DISCHARGE OF PISMO CREEK AT PISMO BEACH AND  
PRECIPITATION AT A. B. CUNNINGHAM, OAK PARK**



**Precipitation Data, In Inches**

STATION NAME: CA. ST. POLYTECHNIC U.

BASE &amp; MERIDIAN: MOUNT DIABLO

LONGITUDE: 120-39-47

LOCATION: SAN LUIS OBISPO

TOWNSHIP: 30 SOUTH

LATITUDE: 35-18-20

GAGE NO: 1.0

RANGE: 12 EAST

RECORD BEGAN: 1870

ELEVATION: 300 FEET

SECTION: 23D

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1870	0.84	0.66	0.78	0.71	4.85	0.74	2.40	0.85	0.00	0.00	0.00	0.00	11.83
1871	0.68	0.38	2.90	1.51	4.43	0.00	2.79	0.28	0.00	0.00	0.00	0.00	12.97
1872	0.00	2.40	13.93	5.16	3.45	0.71	1.37	0.00	0.00	0.00	0.00	0.00	27.02
1873	0.00	0.00	6.00	5.00	1.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.79
1874	0.00	0.00	7.96	4.29	4.04	3.23	1.00	0.00	0.00	0.00	0.00	0.00	20.52
1875	4.28	2.05	0.48	12.10	0.28	0.50	0.00	0.00	0.00	0.00	0.00	0.00	19.69
1876	0.00	6.20	2.20	9.87	5.29	5.30	1.26	0.00	0.00	0.00	0.00	0.00	30.12
1877	1.16	0.00	0.00	4.83	0.42	1.74	0.00	0.00	0.00	0.00	0.00	0.00	8.15
1878	0.00	1.42	3.90	7.88	11.91	2.74	2.75	0.00	0.00	0.00	0.00	0.00	30.60
1879	0.00	1.50	2.58	1.78	2.15	1.60	1.80	0.25	0.00	0.00	0.00	0.00	11.66
1880	0.75	1.40	3.03	1.75	7.23	2.36	8.78	0.52	0.00	0.00	0.00	0.00	25.82
1881	0.00	0.48	13.35	4.71	1.90	1.40	1.85	0.00	0.00	0.00	0.00	0.40	24.09
1882	1.65	0.25	2.00	0.85	3.40	6.75	1.73	0.00	0.00	0.00	0.00	0.00	16.63
1883	0.69	2.95	0.44	1.50	1.60	4.88	1.10	3.85	0.00	0.00	0.00	0.00	17.01
1884	0.00	0.00	3.56	10.57	10.21	12.41	3.39	0.00	2.26	0.00	0.00	0.00	42.40
1885	2.17	0.13	8.85	2.25	0.00	0.94	3.15	0.10	0.00	0.00	0.00	0.00	17.59
1886	0.04	12.90	3.67	5.78	0.79	2.37	3.75	0.00	0.00	0.00	0.00	0.00	29.30
1887	0.25	1.25	1.06	1.10	9.60	1.29	1.56	0.36	0.07	0.02	0.00	2.05	18.61
1888	0.25	1.40	3.15	7.02	0.28	3.84	0.14	0.16	0.04	0.00	0.00	0.00	16.28
1889	0.00	4.48	3.36	1.50	2.08	7.51	0.61	0.00	0.00	0.00	0.00	0.00	19.54
1890	9.19	2.46	11.37	7.27	4.67	3.07	0.29	0.41	0.00	0.00	0.00	0.82	39.55
1891	0.00	0.42	6.04	0.88	7.14	1.97	1.96	0.13	0.15	0.00	0.00	0.27	18.96
1892	0.00	0.20	5.15	0.70	2.88	4.25	0.60	2.23	0.05	0.00	0.00	0.00	16.06
1893	0.15	2.76	6.57	4.02	6.35	9.33	1.14	0.08	0.00	0.00	0.00	0.03	30.43
1894	0.82	0.45	1.64	1.83	2.31	0.79	0.41	1.32	0.21	0.05	0.00	1.81	11.64
1895	1.71	0.35	5.45	8.05	1.82	2.44	0.67	0.47	0.00	0.00	0.00	0.00	20.96
1896	1.80	1.56	0.68	8.23	0.00	3.16	2.22	0.10	0.00	0.04	0.20	0.00	17.99
1897	1.44	3.02	3.04	5.22	4.40	3.17	0.18	0.04	0.00	0.00	0.00	0.07	20.58
1898	0.79	0.07	0.65	1.37	2.20	0.91	0.06	1.04	0.04	0.00	0.00	0.20	7.33
1899	0.39	0.08	0.64	5.56	0.28	7.62	1.54	0.10	0.92	0.00	0.00	0.00	17.13
1900	3.92	1.94	4.51	2.13	0.16	2.18	0.98	1.38	0.01	0.00	0.00	0.00	17.21
1901	1.93	8.01	0.26	11.21	5.89	0.58	2.83	0.69	0.00	0.00	0.18	0.10	31.68
1902	2.58	1.58	0.12	1.46	8.79	4.68	2.44	0.03	0.00	0.00	0.00	0.00	21.68
1903	2.00	1.52	1.48	3.67	3.18	4.98	1.66	0.00	0.00	0.00	0.00	0.00	18.49
1904	0.02	0.48	0.32	1.08	6.79	5.13	2.97	0.20	0.00	0.00	0.06	3.54	20.59
1905	1.00	0.13	1.72	2.35	7.51	4.19	0.77	2.26	0.03	0.03	0.00	0.00	19.99
1906	0.00	1.97	0.32	6.37	3.48	10.86	0.71	4.22	0.16	0.00	0.03	0.04	28.16
1907	0.00	1.08	5.14	8.78	2.45	6.79	0.34	0.11	0.02	0.00	0.00	0.07	24.78
1908	3.23	0.01	3.33	6.69	3.59	0.79	0.14	0.21	0.00	0.00	0.00	0.84	18.83
1909	0.59	0.73	1.70	17.00	6.44	4.04	0.03	0.00	0.00	0.00	0.00	0.02	30.55
1910	0.54	2.24	10.09	3.48	0.43	3.81	0.23	0.00	0.00	0.00	0.00	0.41	21.23
1911	0.30	0.27	0.95	14.31	4.86	11.92	1.32	0.08	0.00	0.00	0.00	0.02	34.03
1912	0.12	0.46	3.72	2.80	0.02	5.65	2.27	2.09	0.00	0.00	0.00	0.04	17.17
1913	0.00	0.79	0.24	3.48	1.66	0.96	0.52	0.30	0.09	0.00	0.91	0.07	9.02
1914	0.00	3.97	5.73	15.03	3.31	1.24	0.68	0.06	0.22	0.00	0.00	0.00	30.24
1915	0.08	0.12	6.01	7.11	9.51	0.95	2.47	1.91	0.01	0.01	0.00	0.00	28.18
1916	0.00	0.34	3.58	18.25	2.38	2.12	0.21	0.04	0.00	0.00	0.00	1.94	28.86
1917	1.82	0.38	9.26	1.59	7.01	0.44	0.11	0.49	0.00	0.01	0.00	0.00	21.11
1918	0.09	0.47	0.14	0.55	9.63	7.12	0.04	0.01	0.00	0.00	0.01	0.73	18.79
1919	0.81	4.00	1.92	1.51	5.48	3.35	0.09	0.19	0.00	0.00	0.00	0.42	17.77
1920	0.12	0.14	4.52	0.82	2.36	4.78	1.65	0.00	0.05	0.00	0.03	0.00	14.47
1921	1.23	1.64	3.85	6.18	2.16	2.29	0.57	1.32	0.00	0.00	0.00	0.40	19.64
1922	0.16	0.16	7.22	4.48	6.49	3.46	0.27	0.72	0.00	0.00	0.00	0.00	22.96

**Precipitation Data, In Inches**

STATION NAME: CA. ST. POLYTECHNIC U.

BASE &amp; MERIDIAN: MOUNT DIABLO

LONGITUDE: 120-39-47

LOCATION: SAN LUIS OBISPO

TOWNSHIP: 30 SOUTH

LATITUDE: 35-18-20

GAGE NO: 1.0

RANGE: 12 EAST

RECORD BEGAN: 1870

ELEVATION: 300 FEET

SECTION: 23D

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1923	0.47	5.30	6.64	4.51	1.36	0.38	4.57	0.01	0.04	0.00	0.00	0.70	23.98
1924	0.16	0.32	0.73	1.46	0.44	4.05	0.33	0.00	0.00	0.00	0.04	0.00	7.53
1925	0.94	0.89	2.04	2.78	4.32	4.21	2.68	3.58	0.15	0.00	0.03	0.06	21.68
1926	0.37	0.05	3.00	3.32	7.29	0.33	4.31	0.06	0.00	0.00	0.00	0.00	18.73
1927	0.66	8.24	1.41	2.78	7.78	2.10	1.54	0.05	0.12	0.00	0.00	0.00	24.68
1928	2.54	3.04	4.93	0.34	3.89	5.65	0.51	0.43	0.00	0.00	0.00	0.00	21.33
1929	0.00	3.51	5.42	1.96	2.90	1.78	1.39	0.00	0.34	0.00	0.00	0.05	17.35
1930	0.00	0.00	0.33	6.07	3.32	3.15	0.67	1.21	0.17	0.00	0.00	0.14	15.06
1931	0.04	1.98	0.63	6.22	1.92	0.54	0.48	2.52	0.16	0.00	0.06	0.00	14.55
1932	0.09	2.88	14.99	4.95	5.92	0.88	0.40	0.18	0.00	0.04	0.02	0.05	30.40
1933	0.33	0.31	1.81	8.87	0.33	1.03	0.17	0.93	1.88	0.00	0.00	0.00	15.66
1934	0.95	0.00	7.11	0.05	4.80	0.07	0.00	0.38	1.61	0.00	0.00	0.07	15.04
1935	2.28	3.91	2.84	6.01	0.93	4.59	5.35	0.01	0.00	0.00	0.71	0.00	26.63
1936	0.74	1.94	2.72	2.53	12.00	1.49	1.55	0.14	0.20	0.14	0.00	0.11	23.56
1937	1.69	0.00	8.29	7.98	9.25	5.56	0.22	0.00	0.05	0.00	0.00	0.00	33.04
1938	0.09	0.73	7.51	2.70	11.96	6.79	1.12	0.09	0.00	0.00	0.00	0.54	31.53
1939	0.53	0.48	1.08	3.39	1.97	1.92	0.26	0.13	0.00	0.02	0.00	0.59	10.37
1940	1.34	1.07	1.92	9.29	6.41	1.89	2.37	0.01	0.00	0.00	0.00	0.00	24.30
1941	0.78	0.25	9.68	7.80	9.85	8.60	5.23	0.73	0.00	0.02	0.02	0.00	42.96
1942	1.14	0.95	10.18	2.80	1.93	2.33	3.94	0.30	0.00	0.00	0.01	0.00	23.58
1943	0.54	1.34	3.35	10.83	2.01	6.94	1.04	0.00	0.00	0.00	0.00	0.00	26.05
1944	1.15	0.42	4.57	1.77	9.45	2.61	2.22	0.24	0.01	0.00	0.00	0.00	22.44
1945	0.14	6.10	2.18	0.16	6.48	5.91	0.12	0.10	0.09	0.00	0.03	0.11	21.42
1946	1.14	0.83	7.36	0.63	2.26	4.20	1.24	0.19	0.00	0.04	0.02	0.00	17.91
1947	0.55	6.64	2.68	0.44	1.15	2.04	0.20	0.27	0.24	0.00	0.04	0.00	14.25
1948	1.40	0.12	1.47	0.06	2.17	5.25	4.14	0.89	0.00	0.00	0.00	0.00	15.50
1949	0.39	0.02	3.50	1.94	2.41	5.68	0.11	0.00	0.00	0.00	0.00	0.00	14.05
1950	0.00	2.23	3.85	4.89	3.88	1.41	2.53	0.17	0.00	0.46	0.00	0.03	19.45
1951	2.12	2.38	3.25	3.42	1.31	1.03	1.48	0.13	0.00	0.00	0.04	0.05	15.21
1952	0.93	1.96	8.39	9.53	0.63	6.65	1.05	0.04	0.03	0.05	0.00	0.00	29.26
1953	0.00	3.55	7.28	2.37	0.00	1.40	1.99	0.15	0.04	0.00	0.00	0.00	16.78
1954	0.00	3.45	0.42	6.10	3.50	4.90	1.28	0.09	0.03	0.00	0.00	0.00	19.77
1955	0.00	2.77	3.10	5.60	1.96	0.18	2.67	0.99	0.01	0.00	0.01	0.00	17.29
1956	0.00	1.93	10.88	6.51	1.46	0.01	3.51	0.85	0.00	0.00	0.00	0.00	25.15
1957	0.65	0.00	0.49	4.64	3.92	1.17	3.30	1.57	0.24	0.00	0.00	0.00	15.98
1958	1.68	0.55	4.23	3.78	8.97	8.40	6.51	0.23	0.00	0.00	0.00	0.95	35.30
1959	0.00	0.32	0.18	2.69	6.60	0.00	0.95	0.07	0.00	0.00	0.00	0.73	11.54
1960	0.00	0.00	0.60	4.23	6.85	1.52	1.94	0.04	0.00	0.00	0.00	0.00	15.18
1961	0.22	3.76	1.67	1.97	0.91	1.74	0.49	0.33	0.04	0.01	0.00	0.01	11.15
1962	0.00	4.60	2.14	2.88	13.96	2.16	0.13	0.04	0.06	0.00	0.00	0.00	25.97
1963	1.52	0.04	2.73	3.56	8.08	4.61	3.84	0.33	0.09	0.00	0.00	0.19	24.99
1964	1.94	4.08	0.15	3.01	0.12	2.10	1.69	1.03	0.37	0.02	0.00	0.10	14.61
1965	1.43	3.79	5.78	4.10	0.42	2.29	3.91	0.00	0.00	0.00	0.00	0.00	21.72
1966	0.00	7.80	4.12	2.13	1.15	0.29	0.12	0.00	0.01	0.15	0.00	1.11	16.88
1967	0.00	4.40	7.70	6.04	0.58	6.38	6.90	0.36	0.13	0.00	0.00	1.20	33.69
1968	0.00	3.83	3.05	2.43	2.07	3.70	1.31	0.35	0.00	0.00	0.00	0.01	16.75
1969	3.08	2.10	3.92	24.63	15.16	1.88	3.72	0.00	0.03	0.00	0.00	0.10	54.62
1970	0.62	0.89	1.73	7.28	1.42	4.11	0.18	0.00	0.07	0.00	0.00	0.00	16.30
1971	0.11	6.02	8.51	1.89	0.42	0.73	1.56	1.22	0.00	0.00	0.00	0.19	20.65
1972	0.36	2.00	7.03	1.03	0.86	0.00	0.89	0.06	0.00	0.04	0.00	0.00	12.27
1973	2.72	6.79	2.00	13.83	9.67	4.94	0.00	0.02	0.00	0.00	0.00	0.07	40.04
1974	2.18	4.18	4.90	8.17	0.43	8.97	2.81	0.00	0.02	0.02	0.00	0.00	31.68
1975	1.96	0.74	4.93	0.26	8.35	5.90	2.00	0.00	0.00	0.00	0.00	0.02	24.16

**Precipitation Data, In Inches**

STATION NAME: CA. ST. POLYTECHNIC U.

BASE &amp; MERIDIAN: MOUNT DIABLO

LONGITUDE: 120-39-47

LOCATION: SAN LUIS OBISPO

TOWNSHIP: 30 SOUTH

LATITUDE: 35-18-20

GAGE NO: 1.0

RANGE: 12 EAST

RECORD BEGAN: 1870

ELEVATION: 300 FEET

SECTION: 23D

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1976	2.23	0.36	0.18	0.01	4.17	2.54	0.88	0.00	0.03	0.00	1.41	3.87	15.68
1977	0.50	1.03	2.49	2.01	0.08	2.13	0.06	3.29	0.00	0.00	0.00	0.03	11.62
1978	0.05	0.28	8.49	15.76	10.71	8.09	4.37	0.00	0.07	0.00	0.00	1.18	49.00
1979	0.00	2.46	2.24	4.62	5.99	4.03	0.24	0.00	0.00	0.00	0.00	0.20	19.78
1980	1.28	1.21	4.84	9.22	11.91	3.47	0.70	0.43	0.00	0.29	0.00	0.00	33.35
1981	0.00	0.01	2.10	6.40	2.15	7.48	0.34	0.00	0.00	0.00	0.00	0.00	18.48
1982	1.59	2.97	2.04	5.87	1.65	8.89	4.12	0.01	0.17	0.00	0.11	1.19	28.61
1983	1.74	6.28	4.97	10.05	10.53	8.61	3.30	0.61	0.00	0.00	0.91	0.15	47.15
1984	2.47	6.54	6.72	0.18	0.97	1.02	0.82	0.00	0.00	0.00	0.08	0.00	18.80
1985	1.27	3.61	3.76	0.72	1.94	3.04	0.30	0.02	0.00	0.04	0.02	0.04	14.76
1986	1.05	4.39	2.03	2.65	11.79	7.26	0.16	0.00	0.00	0.01	0.00	1.14	30.48
1987	0.00	0.28	1.51	2.48	2.90	6.62	0.19	0.06	0.00	0.00	0.00	0.00	14.04
1988	2.76	1.49	4.95	2.87	2.67	1.29	3.44	0.20	0.18	0.02	0.00	0.00	19.87
1989	0.00	1.85	8.08	0.98	1.66	1.99	0.76	0.12	0.00	0.00	0.00	1.70	17.14
1990	1.62	0.55	0.00	4.15	2.98	0.70	0.48	1.42	0.00	0.00	0.00	0.56	12.46
1991	0.00	0.36	0.43	0.81	2.34	12.82	0.43	0.00	0.80	0.00	0.07	0.00	18.06
1992	0.44	0.58	4.49	3.43	9.84	3.15	0.10	0.00	0.04	0.44	0.00	0.00	22.51
1993	1.29	0.00	5.45	10.51	8.61	4.03	0.25	0.23	0.09	0.00	0.00	0.00	30.46
1994	0.22	1.89	2.20	2.93	5.97	1.43	1.46	0.86	0.00	0.00	0.00	2.38	19.34
1995	0.89	2.51	1.15	16.03	2.25	16.48	1.12	0.76	0.76	0.00	0.00	0.00	41.95
<i>For 1870-1995 Water Years</i>													
Sum	110.96	247.78	490.08	613.91	539.62	460.84	198.24	57.13	12.70	1.97	5.05	33.91	2772.19
N	126	126	126	126	126	126	126	126	126	126	126	126	126
Mean	0.88	1.97	3.89	4.87	4.28	3.66	1.57	0.45	0.10	0.02	0.04	0.27	22.00
<i>Mean for 1984-95</i>													
Water Years*	1.00	2.00	3.40	3.98	4.49	4.99	0.79	0.31	0.16	0.04	0.01	0.49	21.66
Max	9.19	12.90	14.99	24.63	15.16	16.48	8.78	4.22	2.26	0.46	1.41	3.87	54.62
Min	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.33
STD	1.19	2.22	3.19	4.32	3.59	3.08	1.61	0.80	0.32	0.06	0.18	0.63	8.72
1996	0.02	0.40	3.55	4.68	9.73	1.78	1.90	1.05	0.00	0.00	0.00	0.00	23.11
1997	2.23	4.43	10.88	13.31	0.46	0.00	0.05	0.00	0.00	0.05	0.01	0.00	31.42
1998	0.00	5.84	5.32	6.86	15.07	3.79	2.56	3.41	0.05	0.00	0.00	0.35	43.25
1999	0.37	1.88	1.22	3.82	2.37	5.19	2.07	0.00	0.00	0.00	0.00	0.13	17.05
2000	0.00	1.69	0.08	4.33	13.17	1.92	2.97	0.21	0.34	0.00	0.00	0.02	24.73
<i>For 1870-2000 Water Years</i>													
Sum	113.58	262.02	511.13	646.91	580.42	473.52	207.79	61.80	13.09	2.02	5.06	34.41	2911.75
N	131	131	131	131	131	131	131	131	131	131	131	131	131
Mean	0.87	2.00	3.90	4.94	4.43	3.61	1.59	0.47	0.10	0.02	0.04	0.26	22.23
Max	9.19	12.90	14.99	24.63	15.16	16.48	8.78	4.22	2.26	0.46	1.41	3.87	54.62
Min	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.33
STD	1.18	2.21	3.22	4.30	3.77	3.05	1.59	0.83	0.31	0.06	0.18	0.62	8.80

\*Hydrologic base period for this study



**Precipitation Data, In Inches**

STATION NAME: SUEY RANCH  
 LOCATION: SANTA MARIA VALLEY  
 GAGE NO: 023.0  
 ELEVATION: 500 FEET

BASE & MERIDIAN: SAN BERNARDINO  
 TOWNSHIP: 33 EAST  
 RANGE: 11 SOUTH  
 SECTION: 32D

LONGITUDE: 120-23  
 LATITUDE: 35-00  
 RECORD BEGAN: 1910

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1910	0.00	2.62	5.11	4.90	0.75	3.83	0.53	0.00	0.00	0.00	0.00	0.80	18.54
1911	0.63	0.45	0.18	8.55	4.00	7.25	1.10	0.00	0.00	0.00	0.00	0.00	22.16
1912	0.00	0.24	2.10	1.90	0.00	4.68	1.12	1.83	0.00	0.00	0.00	0.00	11.87
1913	0.00	0.87	0.00	2.50	1.54	0.90	0.25	0.13	0.10	0.15	1.90	0.00	8.34
1914	0.00	3.63	3.05	11.75	2.15	1.15	0.10	0.05	0.25	0.00	0.00	0.00	22.13
1915	0.00	0.00	5.68	5.72	6.80	0.39	2.40	1.35	0.00	0.00	0.00	0.00	22.34
1916	0.00	0.22	3.56	10.65	1.00	1.72	0.00	0.00	0.00	0.00	0.00	2.05	19.20
1917	1.81	0.44	5.76	1.75	2.27	0.00	0.63	0.18	0.00	0.00	0.00	0.00	12.84
1918	0.00	0.18	0.25	0.85	11.98	4.34	0.00	0.00	0.00	0.00	0.00	0.25	17.85
1919	0.40	2.52	0.53	0.45	2.77	1.76	0.06	0.61	0.00	0.00	0.00	0.60	9.70
1920	0.01	0.37	2.44	0.40	1.84	3.59	1.16	0.00	0.00	0.00	0.00	0.00	9.81
1921	0.70	1.15	1.93	3.19	2.09	1.46	0.27	1.37	0.00	0.00	0.00	0.17	12.33
1922	0.26	0.00	4.90	3.95	2.76	2.57	0.21	0.44	0.00	0.00	0.00	0.00	15.09
1923	0.00	2.08	3.87	2.55	1.23	0.22	4.42	0.00	0.00	0.00	0.00	0.51	14.88
1924	0.00	0.30	0.59	0.51	0.40	3.51	0.78	0.00	0.00	0.00	0.00	0.00	6.09
1925	1.08	1.17	1.68	1.89	2.24	2.77	2.86	1.58	0.22	0.00	0.00	0.00	15.49
1926	0.30	1.30	1.05	1.79	4.26	0.27	2.70	0.00	0.00	0.00	0.00	0.00	11.67
1927	0.53	2.43	0.55	1.79	5.21	2.17	1.13	0.00	0.00	0.00	0.00	0.00	13.81
1928	2.86	1.00	3.69	0.15	2.22	4.30	1.75	0.00	0.00	0.00	0.00	0.00	15.97
1929	0.14	3.10	1.22	1.90	1.40	1.54	0.75	0.00	0.22	0.00	0.00	0.00	10.27
1930	0.00	0.00	0.22	3.58	1.43	3.01	0.55	1.38	0.30	0.00	0.00	0.00	10.47
1931	0.00	1.71	0.00	3.96	1.59	0.27	0.27	1.28	0.00	0.00	0.00	0.00	9.08
1932	0.00	2.98	6.70	3.07	3.55	0.67	0.67	0.27	0.00	0.00	0.00	0.00	17.91
1933	0.00	0.00	1.20	6.07	0.20	0.30	0.19	0.09	2.53	0.00	0.00	0.00	10.58
1934	0.00	0.00	3.28	1.09	2.10	0.83	0.00	0.00	1.44	0.00	0.00	0.00	8.74
1935	2.17	4.89	2.01	3.94	1.39	3.44	2.63	0.00	0.00	0.00	0.00	0.00	20.47
1936	0.60	2.28	1.24	1.13	5.14	1.32	1.23	0.20	0.00	0.00	0.00	0.00	13.14
1937	1.33	0.00	6.30	3.51	4.62	4.32	0.47	0.00	0.00	0.00	0.00	0.00	20.55
1938	0.17	0.26	3.11	4.40	7.74	5.36	2.10	0.00	0.00	0.00	0.00	0.46	23.60
1939	0.19	0.20	1.62	3.38	2.39	2.25	0.32	0.02	0.00	0.00	0.00	0.88	11.25
1940	0.62	1.06	1.58	6.18	3.16	1.64	1.74	0.00	0.00	0.00	0.00	0.00	15.98
1941	0.72	0.04	5.34	4.37	8.46	7.36	3.65	0.08	0.00	0.14	0.11	0.00	30.27
1942	0.86	0.28	7.39	1.69	1.34	1.46	4.08	0.42	0.00	0.00	0.00	0.00	17.52
1943	0.64	1.05	3.55	7.02	1.26	3.93	1.62	0.00	0.00	0.00	0.00	0.00	19.07
1944	1.14	0.31	3.55	1.77	5.35	0.84	1.49	0.15	0.00	0.00	0.00	0.00	14.60
1945	0.40	1.99	1.74	0.56	3.47	3.66	0.09	0.00	0.00	0.00	0.00	0.02	11.93
1946	0.71	0.95	3.54	0.55	1.75	4.73	0.10	0.13	0.00	0.00	0.00	0.00	12.46
1947	0.46	4.09	1.24	0.23	0.55	1.26	0.23	0.36	0.00	0.00	0.00	0.03	8.45
1948	0.64	0.10	0.87	0.00	1.36	3.12	2.94	0.96	0.00	0.00	0.00	0.00	9.99
1949	0.09	0.00	2.82	1.37	1.77	4.07	0.06	1.07	0.00	0.00	0.00	0.00	11.25
1950	0.00	0.74	2.73	2.75	2.14	1.39	1.01	0.22	0.00	0.73	0.00	0.63	12.34
1951	1.10	3.59	1.25	2.20	1.47	0.91	1.68	0.00	0.00	0.00	0.00	0.06	12.26
1952	0.55	1.40	5.13	5.61	0.75	5.65	0.41	0.00	0.12	0.00	0.00	0.00	19.62
1953	0.13	5.38	5.17	1.70	0.00	0.82	1.83	0.01	0.00	0.00	0.00	0.00	15.04
1954	0.00	2.22	0.39	4.21	1.94	3.87	0.61	0.15	0.00	0.00	0.00	0.00	13.39
1955	0.00	1.58	2.72	5.85	2.17	0.43	1.55	1.42	0.00	0.00	0.00	0.00	15.72
1956	0.00	1.86	5.43	4.01	0.71	0.00	2.56	0.81	0.00	0.00	0.00	0.00	15.38
1957	0.66	0.00	1.00	2.32	2.61	0.87	1.45	2.06	0.24	0.00	0.00	0.04	11.25
1958	1.83	0.52	2.30	3.52	5.70	5.48	4.47	0.47	0.00	0.00	0.00	1.43	25.72
1959	0.00	0.32	0.21	1.39	4.94	0.00	0.41	0.00	0.00	0.00	0.00	0.26	7.53
1960	0.00	0.00	0.39	4.10	5.75	1.28	1.87	0.02	0.00	0.00	0.00	0.00	13.41
1961	1.94	3.28	1.23	1.10	0.13	1.16	0.29	0.14	0.09	0.00	0.00	0.00	9.36
1962	0.00	1.94	2.08	2.92	11.34	1.06	0.00	0.11	0.00	0.00	0.00	0.00	19.45
1963	0.54	0.00	0.42	1.01	4.05	3.53	3.10	0.88	0.00	0.00	0.00	0.40	13.93

**Precipitation Data, In Inches**

STATION NAME: SUEY RANCH  
 LOCATION: SANTA MARIA VALLEY  
 GAGE NO: 023.0  
 ELEVATION: 500 FEET

BASE & MERIDIAN: SAN BERNARDINO  
 TOWNSHIP: 33 EAST  
 RANGE: 11 SOUTH  
 SECTION: 32D

LONGITUDE: 120-23  
 LATITUDE: 35-00  
 RECORD BEGAN: 1910

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1964	1.83	2.87	0.21	1.10	0.14	2.20	1.01	0.38	0.33	0.00	0.10	0.00	10.17
1965	1.54	2.48	2.15	1.05	0.64	1.36	3.62	0.00	0.00	0.00	0.00	0.00	12.84
1966	0.01	4.64	3.22	1.20	0.92	0.27	0.12	0.00	0.00	0.09	0.00	0.35	10.82
1967	0.00	2.56	4.08	3.63	0.43	2.90	4.81	0.34	0.37	0.00	0.00	0.17	19.29
1968	0.00	2.98	1.69	1.00	1.65	2.82	0.70	0.03	0.00	0.00	0.00	0.00	10.87
1969	2.50	1.05	2.37	8.69	7.47	1.07	1.76	0.09	0.00	0.00	0.00	0.13	25.13
1970	0.33	1.14	0.79	3.26	2.09	1.96	0.02	0.00	0.05	0.00	0.00	0.00	9.64
1971	0.10	4.15	3.49	1.08	0.18	0.52	1.17	1.34	0.00	0.00	0.00	0.05	12.08
1972	0.56	1.09	3.34	0.29	0.52	0.00	0.53	0.08	0.03	0.06	0.00	0.00	6.50
1973	0.42	4.18	1.73	4.81	7.08	4.06	0.00	0.09	0.00	0.00	0.00	0.00	22.37
1974	0.88	3.63	2.77	5.68	0.17	5.14	1.67	0.00	0.00	0.00	0.00	0.00	19.94
1975	1.66	0.52	4.57	0.15	4.28	2.98	1.11	0.00	0.00	0.00	0.00	0.00	15.27
1976	1.29	0.36	0.15	0.00	4.97	1.71	1.19	0.00	0.00	0.09	1.08	4.65	15.49
1977	0.65	0.49	1.60	0.00	0.00	0.25	0.00	2.29	0.00	0.00	0.00	0.00	5.28
1978	0.20	0.00	5.22	5.94	7.94	6.35	1.52	0.00	0.00	0.00	0.00	2.05	29.22
1979	0.00	1.51	0.49	3.57	3.98	1.36	0.00	0.00	0.00	0.00	0.00	0.20	11.11
1980	1.03	0.59	1.17	6.24	6.07	2.69	0.90	0.16	0.00	0.09	0.00	0.00	18.94
1981	0.00	0.00	1.24	4.38	2.47	5.48	0.96	0.00	0.00	0.00	0.00	0.00	14.53
1982	1.12	2.09	1.69	3.70	1.44	5.52	3.88	0.00	0.25	0.00	0.03	0.65	20.37
1983	1.89	4.25	0.84	7.20	5.58	7.18	2.92	0.01	0.00	0.00	0.50	0.06	30.43
1984	1.20	3.66	3.09	0.00	0.40	0.72	0.62	0.00	0.00	0.00	0.00	0.00	9.69
1985	1.19	2.15	3.35	0.79	1.85	2.19	0.00	0.00	0.00	0.00	0.00	0.00	11.52
1986	0.52	3.37	0.71	1.24	3.57	5.84	0.62	0.02	0.00	0.00	0.00	1.51	17.40
1987	0.00	0.32	2.12	6.00	1.84	4.44	0.00	0.00	0.00	0.00	0.00	0.00	14.72
1988	1.02	1.21	2.81	2.14	1.78	0.58	3.55	0.06	0.00	0.00	0.00	0.00	13.15
1989	0.00	1.40	5.80	0.48	1.19	0.90	0.44	0.00	0.00	0.00	0.00	0.39	10.60
1990	0.40	0.63	0.03	3.30	1.83	0.33	0.59	0.00	0.00	0.00	0.00	0.87	7.98
1991	0.00	0.21	0.42	0.99	1.09	9.88	0.00	0.00	0.00	0.00	0.00	0.00	12.59
1992	0.55	0.31	3.13	2.24	6.93	1.66	0.00	0.00	0.00	0.76	0.00	0.00	15.58
1993	1.35	0.00	3.11	6.56	5.40	3.53	0.15	0.20	0.42	0.00	0.00	0.00	20.72
1994	0.22	1.14	1.53	2.17	3.70	1.86	1.19	0.98	0.00	0.00	0.00	0.06	12.85
1995	0.85	1.85	1.67	11.62	2.10	9.37	0.53	0.87	0.81	0.00	0.00	0.00	29.67

*For 1910-95 Water Years*

Sum	49.52	125.92	206.47	268.20	248.93	225.83	103.47	27.18	7.77	2.11	3.72	19.73	1288.85
N	86	86	86	86	86	86	86	86	86	86	86	86	86
Mean	0.58	1.46	2.40	3.12	2.89	2.63	1.20	0.32	0.09	0.02	0.04	0.23	14.99

*Mean for 1984-95*

Water Years*	0.61	1.35	2.31	3.13	2.64	3.44	0.64	0.18	0.10	0.06	0.00	0.24	14.71
Max	2.86	5.38	7.39	11.75	11.98	9.88	4.81	2.29	2.53	0.76	1.90	4.65	30.43
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28
STD	0.66	1.41	1.80	2.63	2.52	2.19	1.23	0.54	0.33	0.11	0.24	0.63	5.59

1996	0.02	0.40	2.08	3.83	9.14	1.79	0.97	0.47	0.01	0.00	0.00	0.00	18.71
1997	1.90	3.39	5.93	6.43	0.11	0.01	0.00	0.00	0.00	0.03	0.01	0.73	18.54
1998	0.00	4.90	3.24	5.01	14.12	3.01	2.90	3.46	0.06	0.00	0.00	0.48	37.18
1999	0.25	2.18	1.10	2.93	1.23	5.26	2.19	0.00	0.00				

*For 1910-99 Water Years*

Sum	51.69	136.79	218.82	286.40	273.53	235.90	109.53	31.11	7.84	2.14	3.73	20.94	1363.28
N	90	90	90	90	90	90	90	90	90	89	89	89	89
Mean	0.57	1.52	2.43	3.18	3.04	2.62	1.22	0.35	0.09	0.02	0.04	0.24	15.32
Max	2.86	5.38	7.39	11.75	14.12	9.88	4.81	3.46	2.53	0.76	1.90	4.65	37.18
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28
STD	0.67	1.44	1.80	2.60	2.83	2.18	1.23	0.62	0.32	0.11	0.23	0.62	5.99

\*Hydrologic base period for this study

**Precipitation Data, In Inches**

STATION NAME: NIPOMO 2NW  
 LOCATION: NIPOMO 2NW  
 GAGE NO: 38.0  
 ELEVATION: 360 FEET

BASE & MERIDIAN: SAN BERNARDINO  
 TOWNSHIP: 11 NORTH  
 RANGE: 34 WEST  
 SECTION: 06

LONGITUDE: 120-30-00  
 LATITUDE: 35-04-00  
 RECORD BEGAN: 1921

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1921	0.70	1.02	1.90	3.36	1.69	1.46	0.20	1.94	0.00	0.00	0.00	0.51	12.78
1922	0.12	0.05	4.73	3.69	3.47	3.21	0.25	0.42	0.00	0.00	0.00	0.00	15.94
1923	0.54	2.27	4.23	2.30	0.95	0.18	4.97	0.00	0.09	0.00	0.00	0.42	15.95
1924	0.11	0.28	0.31	0.85	0.50	3.45	0.61	0.00	0.00	0.14	0.00	0.00	6.25
1925	1.25	0.82	1.87	2.63	2.44	2.13	2.00	2.32	0.17	0.00	0.00	0.00	15.63
1926	0.30	0.20	2.69	1.76	3.84	0.32	2.41	0.08	0.00	0.00	0.00	0.00	11.60
1927	0.64	4.02	0.92	1.85	5.41	1.39	1.50	0.12	0.26	0.00	0.00	0.00	16.11
1928	2.62	1.55	4.01	0.18	3.84	4.12	0.15	0.75	0.00	0.00	0.00	0.00	17.22
1929	0.00	2.20	3.74	1.63	1.77	1.50	0.81	0.00	0.21	0.00	0.00	0.00	11.86
1930	0.00	0.00	0.17	3.95	1.78	2.63	0.52	0.44	0.00	0.00	0.00	0.30	9.79
1931	0.00	1.42	0.00	4.28	1.22	0.47	0.62	1.40	0.07	0.00	0.25	0.00	9.73
1932	0.36	2.95	7.63	2.91	3.43	0.26	0.40	0.18	0.00	0.00	0.00	0.00	18.12
1933	0.00	0.05	1.08	6.38	0.28	1.31	0.08	0.36	1.65	0.00	0.00	0.00	11.19
1934	0.00	0.30	2.69	1.06	3.11	0.00	0.00	0.00	0.90	0.00	0.00	0.00	8.06
1935	1.61	4.46	2.26	5.69	1.34	3.92	3.51	0.00	0.00	0.00	0.65	0.00	23.44
1936	0.70	1.84	1.79	2.21	7.43	1.45	0.00	0.00	0.00	0.00	0.00	0.00	15.42
1937	1.89	0.00	5.05	3.71	6.08	4.15	0.14	0.00	0.00	0.00	0.00	0.00	21.02
1938	0.00	0.41	4.75	2.45	7.67	5.32	1.60	0.03	0.00	0.00	0.00	0.55	22.78
1939	0.15	0.38	1.53	3.16	2.52	2.64	0.41	0.00	0.00	0.00	0.00	0.40	11.19
1940	1.19	0.96	1.75	6.53	4.35	1.12	1.59	0.00	0.00	0.00	0.00	0.00	17.49
1941	0.63	0.23	6.45	5.41	7.25	7.45	3.67	0.00	0.00	0.00	0.00	0.00	31.09
1942	0.95	0.30	8.57	1.97	1.16	1.63	3.91	0.37	0.00	0.00	0.00	0.00	18.86
1943	0.62	1.24	2.86	6.91	1.40	4.37	0.88	0.00	0.00	0.00	0.00	0.00	18.28
1944	0.99	0.30	3.90	1.28	4.82	0.61	1.52	0.15	0.00	0.00	0.00	0.00	13.57
1945	0.00	3.09	1.76	0.24	5.31	3.96	0.10	0.12	0.00	0.00	0.58	0.00	15.16
1946	0.59	0.74	3.23	0.49	1.66	3.69	0.20	0.17	0.00	0.00	0.00	0.00	10.77
1947	0.40	4.81	2.42	0.22	1.01	1.63	0.39	0.30	0.05	0.00	0.00	0.00	11.23
1948	0.93	0.16	1.05	0.05	1.71	4.30	2.45	0.90	0.00	0.00	0.00	0.00	11.55
1949	0.10	0.00	2.89	1.45	2.64	3.88	0.09	1.04	0.00	0.00	0.00	0.00	12.09
1950	0.10	1.37	4.21	3.15	2.81	1.82	0.70	0.00	0.00	0.55	0.00	0.00	14.71
1951	1.42	2.55	1.47	2.26	1.11	0.87	1.22	0.03	0.00	0.00	0.00	0.11	11.04
1952	0.55	2.03	6.19	7.15	0.82	5.36	1.11	0.00	0.27	0.00	0.00	0.00	23.48
1953	0.00	3.76	5.23	1.97	0.00	0.81	1.88	0.00	0.00	0.00	0.00	0.00	13.65
1954	0.00	2.45	0.30	4.66	2.12	4.20	1.05	0.22	0.00	0.00	0.00	0.00	15.00
1955	0.00	1.48	1.91	4.78	2.14	0.25	2.02	1.42	0.00	0.00	0.00	0.00	14.00
1956	0.00	2.08	6.94	5.86	0.75	0.00	1.88	0.86	0.00	0.00	0.00	0.00	18.37
1957	0.57	0.00	0.95	2.90	2.41	1.12	1.69	1.48	0.15	0.00	0.00	0.00	11.27
1958	2.00	0.59	2.38	4.12	6.09	6.11	5.32	0.16	0.00	0.00	0.00	1.60	28.37
1959	0.00	0.17	0.17	2.21	4.63	0.00	1.35	0.05	0.00	0.00	0.00	0.70	9.28
1960	0.01	0.00	0.57	4.29	6.39	1.24	2.94	0.02	0.00	0.00	0.00	0.00	15.46
1961	0.78	4.66	1.27	0.90	0.48	1.42	0.28	0.11	0.00	0.03	0.00	0.00	9.93
1962	0.00	2.56	1.77	3.96	12.25	1.71	0.10	0.21	0.01	0.00	0.00	0.00	22.57
1963	0.80	0.00	0.69	1.10	4.88	3.66	3.31	0.58	0.00	0.00	0.00	0.43	15.45
1964	1.68	3.37	0.25	1.35	0.05	2.45	1.50	0.48	0.25	0.02	0.00	0.18	11.58
1965	1.99	2.54	3.30	2.82	0.58	1.72	3.99	0.00	0.00	0.00	0.00	0.00	16.94
1966	0.03	7.49	3.77	1.47	1.06	0.23	0.11	0.00	0.02	0.10	0.20	0.50	14.98
1967	0.00	3.12	4.34	3.92	0.61	3.65	5.92	0.28	0.35	0.00	0.00	0.59	22.78
1968	0.00	2.86	1.84	1.12	1.32	2.71	0.84	0.09	0.00	0.00	0.00	0.00	10.78
1969	2.72	1.38	2.53	11.21	7.68	1.59	2.05	0.01	0.04	0.16	0.00	0.08	29.45
1970	0.49	0.92	1.13	3.94	1.54	3.50	0.06	0.00	0.05	0.00	0.00	0.00	11.63
1971	0.17	4.41	5.06	1.78	0.17	0.64	1.17	1.09	0.00	0.00	0.00	0.07	14.56
1972	0.20	1.55	3.86	0.31	0.47	0.00	0.60	0.00	0.00	0.00	0.00	0.03	7.02
1973	1.23	4.68	2.43	6.46	6.21	4.50	0.03	0.01	0.02	0.00	0.00	0.02	25.59
1974	0.82	3.76	3.49	6.31	0.16	6.35	1.79	0.00	0.00	0.06	0.00	0.00	22.74

**Precipitation Data, In Inches**

STATION NAME: NIPOMO 2NW  
 LOCATION: NIPOMO 2NW  
 GAGE NO: 38.0  
 ELEVATION: 360 FEET

BASE & MERIDIAN: SAN BERNARDINO  
 TOWNSHIP: 11 NORTH  
 RANGE: 34 WEST  
 SECTION: 06

LONGITUDE: 120-30-00  
 LATITUDE: 35-04-00  
 RECORD BEGAN: 1921

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1975	1.31	0.45	5.12	0.16	4.57	3.01	1.14	0.02	0.00	0.00	0.00	0.00	15.78
1976	1.39	0.21	0.19	0.00	3.69	2.49	0.69	0.00	0.07	0.00	1.09	3.30	13.12
1977	1.54	0.91	1.80	1.36	0.08	1.68	0.02	2.81	0.00	0.00	0.02	0.09	10.31
1978	0.02	0.28	6.19	6.88	7.90	6.17	3.85	0.00	0.02	0.00	0.00	1.40	32.71
1979	0.00	1.66	1.25	4.44	4.86	4.27	0.32	0.04	0.00	0.00	0.00	0.23	17.07
1980	1.13	0.69	2.18	5.18	5.51	2.40	0.89	0.57	0.00	0.00	0.00	0.00	18.55
1981	0.00	0.00	1.83	4.09	2.53	6.67	0.57	0.00	0.00	0.00	0.00	0.00	15.69
1982	1.25	2.71	1.92	3.56	1.37	5.14	4.08	0.00	0.04	0.00	0.12	0.66	20.85
1983	1.41	4.12	2.72	7.19	10.06	8.51	2.80	0.19	0.01	0.00	0.68	0.06	37.75
1984	2.02	3.80	3.89	0.09	0.55	0.86	0.57	0.00	0.00	0.00	0.00	0.02	11.80
1985	1.40	3.19	2.87	1.03	2.04	1.96	0.35	0.00	0.00	0.00	0.01	0.07	12.92
1986	0.96	3.90	1.05	1.31	5.29	5.73	0.61	0.00	0.00	0.04	0.00	2.00	20.89
1987	0.00	0.23	1.89	2.35	2.53	4.66	0.44	0.00	0.03	0.00	0.00	0.00	12.13
1988	1.62	1.22	3.59	2.17	2.06	0.58	3.29	0.16	0.04	0.00	0.00	0.00	14.73
1989	0.00	1.79	6.28	0.67	1.05	1.64	0.35	0.08	0.00	0.00	0.00	1.04	12.90
1990	0.79	0.42	0.06	2.11	1.86	0.48	0.40	0.87	0.00	0.00	0.00	0.74	7.73
1991	0.00	0.32	0.58	1.14	1.81	12.04	0.33	0.00	0.20	0.00	0.05	0.00	16.47
1992	0.51	0.45	3.88	2.12	8.02	2.17	0.03	0.00	0.00	0.84	0.00	0.00	18.02
1993	1.33	0.00	3.81	6.02	5.40	4.95	0.18	0.30	0.21	0.00	0.00	0.00	22.20
1994	0.31	1.56	1.67	2.67	3.48	1.76	1.10	0.82	0.00	0.00	0.00	0.50	13.87
1995	0.98	1.95	1.25	12.57	2.00	10.02	0.77	1.19	0.74	0.00	0.00	0.00	31.47
<i>For 1921-95 Water Years</i>													
Sum	50.92	125.69	206.30	235.71	233.47	215.65	100.67	25.24	5.92	1.94	3.65	16.60	1221.76
N	75	75	75	75	75	75	75	75	75	75	75	75	75
Mean	0.68	1.68	2.75	3.14	3.11	2.88	1.34	0.34	0.08	0.03	0.05	0.22	16.29
<i>Mean for 1984-95</i>													
Water Years*	0.83	1.57	2.57	2.85	3.01	3.90	0.70	0.29	0.10	0.07	0.01	0.36	16.26
Max	2.72	7.49	8.57	12.57	12.25	12.04	5.92	2.81	1.65	0.84	1.09	3.30	37.75
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.25
STD	0.69	1.59	1.93	2.47	2.60	2.40	1.40	0.57	0.24	0.12	0.18	0.52	6.28
1996	0.03	0.58	2.37	3.65	8.54	1.68	1.03	0.69	0.00	0.00	0.00	0.00	18.57
1997	2.28	4.89	8.08	7.65	0.11	0.00	0.00	0.00	0.00	0.06	0.00	0.31	23.38
1998	0.03	5.42	3.39	5.42	13.67	4.09	3.68	2.99	0.06	0.00	0.00	0.30	39.05
1999	0.30	2.44	1.04	2.95	1.65	4.85	2.26	0.00	0.02	0.00	0.02	0.00	15.53
2000	0.00	1.73	0.04	2.55	10.04	1.81	3.34	0.08	0.30	0.00	0.00	0.04	19.93

*For 1921-2000 Water Years*

Sum	53.56	140.75	221.22	257.93	267.48	228.08	110.98	29.00	6.30	2.00	3.62	17.25	1338.17
N	80	80	80	80	80	80	80	80	80	80	80	80	80
Mean	0.67	1.76	2.77	3.22	3.34	2.85	1.39	0.36	0.08	0.03	0.05	0.22	16.73
Max	2.72	7.49	8.57	12.57	13.67	12.04	5.92	2.99	1.65	0.84	1.09	3.30	39.05
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.25
STD	0.71	1.65	2.01	2.47	2.98	2.38	1.42	0.63	0.23	0.11	0.17	0.51	6.69

\*Hydrologic base period for this study

**Precipitation Data, In Inches**

STATION NAME: RUNELS RANCH  
 LOCATION: ARROYO GRANDE  
 GAGE NO: 42.1  
 ELEVATION: 70.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 28B

LONGITUDE: 120-35-00  
 LATITUDE: 35-07-00  
 RECORD BEGAN: 1925

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1925	1.53	4.14	2.36	6.25	1.12	4.62	2.86	0.00	0.00				
1926										0.00	0.00	0.00	
1927	0.90	3.33	1.07	1.77	4.15	1.44	1.26	0.00	0.51				
1928										0.00	0.00	0.00	
1929	0.00	2.25	4.32	2.41	1.78	1.44	0.58	0.00	0.22	0.00	0.00	0.00	13.00
1930	0.00	0.00	0.11	4.47	1.70	3.30	0.54	0.40	0.00	0.00	0.00	0.23	10.75
1931	0.00	1.55	0.00	5.28	1.42	0.26	0.06	1.32	0.00	0.00	0.00	0.00	9.89
1932	0.00	3.03	7.68	3.38	4.87	0.31	0.42	0.15	0.00	0.00	0.00	0.00	19.84
1933	0.00	0.08	1.73	6.97	0.35	1.14	0.12	0.41	1.73	0.00	0.00	0.00	12.53
1934	0.32	0.00	3.04	3.26	0.12	0.00	0.00	0.00	0.92	0.00	0.78	0.24	8.68
1935	1.08	2.00	0.91	1.44	4.99	1.53	0.88	0.00	0.00	0.00	0.00	0.00	12.83
1936	1.37	0.00	5.75	4.33	6.74	4.04	0.24	0.00	0.00				
1937													
1938													
1939										0.00	0.00	0.64	
1940	0.21	0.21	1.51	2.93	2.26	2.31	0.06	0.00	0.00	0.00	0.00	0.75	10.24
1941	1.12	1.20	0.62	5.98	4.19	1.26	1.73	0.00	0.00	0.00	0.00	0.00	16.10
1942	0.73	0.23	6.47	6.19	7.08	10.15	4.06	0.00	0.00	0.00	0.00	0.00	34.91
1943	1.07	0.63	9.53	1.31	0.38	1.82	3.57	0.00	0.00	0.00	0.00	0.00	18.31
1944	0.96	1.48	3.05	5.70	1.77	4.92	1.12	0.00	0.00	0.00	0.00	0.00	19.00
1945	0.96	0.20	3.68	1.30	6.05	0.49	1.68	0.14	0.00	0.00	0.00	0.00	14.50
1946	1.04	0.40	2.93	0.47	1.48	3.41	0.03	0.20	0.00	0.15	0.00	0.34	10.45
1947	0.33	4.10	1.30	0.23	0.81	1.43	0.42	0.00	0.00	0.00	0.00	0.02	8.64
1948	1.29	0.15	1.05	0.00	1.76	3.46	2.27	0.92	0.00	0.00	0.00	0.00	10.90
1949	0.08	0.00	2.98	1.51	2.52	4.64	0.16	0.83	0.00	0.00	0.00	0.00	12.72
1950	0.00	0.98	2.95	3.07	2.63	1.20	0.86	0.12	0.00	0.00	0.00	0.00	11.81
1951	1.36	2.09	1.93	2.37	0.99	0.95	1.17	0.00	0.00	0.00	0.00	0.00	10.86
1952	0.64	1.69	4.90	5.89	0.72	5.65	0.96	0.00	0.42	0.00	0.00	0.00	20.87
1953	0.00	3.31	5.25	1.53	0.00	0.55	1.78	0.15	0.00	0.00	0.00	0.00	12.57
1954	0.00	2.77	0.26	4.76	6.76	3.76	0.95	0.00	0.00	0.00	0.00	0.00	19.26
1955	0.00	1.57	1.61	5.28	1.48	0.18	1.88	1.20	0.00	0.00	0.00	0.00	13.20
1956	0.00	2.42	7.32	5.03	0.75	0.00	2.20	0.82	0.00	0.00	0.00	0.00	18.54
1957	0.44	0.00	0.53	3.32	2.53	1.55	1.53	1.25	0.28	0.00	0.00	0.00	11.43
1958	1.63	0.30	2.72	3.27	5.90	6.14	4.77	0.00	0.00	0.00	0.00	0.70	25.43
1959	0.00	0.40	0.28	3.15	4.11	0.00	0.47	0.00	0.00	0.00	0.00	0.55	8.96
1960	0.00	0.00	0.00	4.37	5.80	1.30	2.88	0.00	0.00	0.00	0.00	0.00	14.35
1961	0.75	6.20	1.75	1.10	0.50	1.28	0.25	0.00	0.00	0.00	0.00	0.00	11.83
1962	0.00	2.45	1.98	4.00	11.53	1.45	0.00	0.00	0.00	0.00	0.00	0.00	21.41
1963	0.73	0.00	1.00	0.80	4.90	3.95	4.15	0.30	0.00	0.00	0.00	0.50	16.33
1964	2.05	3.05	0.30	1.68	0.00	2.40	0.70	0.40	0.20	0.00	0.00	0.25	11.03
1965	1.90	3.10	3.80	2.70	0.30	1.90	1.80	0.00	0.00	0.00	0.00	0.00	15.50
1966	0.00	7.15	3.65	0.70	1.15	0.25	0.00	0.00	0.00	0.00	0.00	0.90	13.80
1967	0.00	3.30	4.25	3.90	0.70	4.50	4.35	0.30	0.18	0.00	0.00	0.40	21.88
1968	0.00	4.05	2.05	0.83	0.40	2.68	0.80	0.00	0.00	0.00	0.00	0.00	10.81
1969	2.65	1.70	3.30	12.00	9.60	1.50	2.65	0.00	0.00	0.00	0.00	0.00	33.40
1970	0.75	1.40	1.60	4.70	2.70	2.65	0.00	0.00	0.00	0.00	0.00	0.00	13.80
1971	0.00	5.35	5.28	2.10	0.20	0.70	1.25	1.50	0.00	0.00	0.00	0.18	16.56
1972	0.00	1.20	5.00	0.50	0.70	0.45	0.00	0.00	0.00	0.00	0.00	0.00	7.85
1973	1.90	5.40	1.80	6.90	7.10	4.10	0.00	0.00	0.00	0.00	0.00	0.00	27.20
1974	0.75	3.65	3.40	7.70	0.00	7.00	1.45	0.00	0.00	0.00	0.00	0.00	23.95
1975	1.30	0.50	4.10	0.10	4.25	2.95	1.05	0.00	0.00	0.00	0.00	0.00	14.25
1976	1.60	0.35	0.20	0.00	4.60	2.05	0.50	0.00	0.00	0.10	1.20	3.60	14.20
1977	0.20	0.85	1.50	1.90	0.00	2.15	0.00	3.00	0.00	0.00	0.00	0.00	9.60
1978	0.00	0.50	7.30	7.45	8.75	6.05	4.95	0.00	0.00	0.00	0.00	1.40	36.40

**Precipitation Data, In Inches**

STATION NAME: RUNELS RANCH  
 LOCATION: ARROYO GRANDE  
 GAGE NO: 42.1  
 ELEVATION: 70.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 28B

LONGITUDE: 120-35-00  
 LATITUDE: 35-07-00  
 RECORD BEGAN: 1925

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1979	0.00	2.65	1.65	4.90	6.25	3.95	0.55	0.00	0.00	0.00	0.00	0.20	20.15
1980	1.10	0.80	2.40	6.40	6.95	2.70	0.95	0.50	0.00	0.00	0.00	0.00	21.80
1981	0.00	0.00	2.35	4.00	2.80	8.30	0.60	0.00	0.00				
Sum	32.74	94.16	146.50	181.58	160.59	136.21	67.51	13.91	4.46	0.25	1.98	10.90	772.32
N	52	52	52	52	52	52	52	52	52	51	51	51	48
Mean	0.63	1.81	2.82	3.49	3.09	2.62	1.30	0.27	0.09	0.00	0.04	0.21	16.09
Max	2.65	7.15	9.53	12.00	11.53	10.15	4.95	3.00	1.73	0.15	1.20	3.60	36.40
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.85
STD	0.69	1.77	2.19	2.46	2.84	2.21	1.34	0.55	0.28	0.02	0.20	0.56	6.73

**Precipitation Data, In Inches**

STATION NAME: HUASNA VALLEY  
 LOCATION: NIPOMO 8 NE  
 GAGE NO: 51.0  
 ELEVATION: 715 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 15 EAST  
 SECTION: 32

LONGITUDE: 35-06-00  
 LATITUDE: 120-23-00  
 RECORD BEGAN: 1930

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1930	0.00	0.00	0.16	4.86	2.12	4.51	0.63	0.56	0.20	0.00	0.00	0.47	13.51
1931	0.00	1.85	0.00	4.93	1.33	0.45	0.75	1.34	0.06	0.15	0.07	0.07	11.00
1932	0.00	3.70	9.85	3.02	5.51	0.25	0.64	0.51	0.00	0.00	0.00	0.04	23.52
1933	0.00	0.20	1.51	10.45	0.12	0.98	0.18	0.87	1.25	0.00	0.00	0.00	15.56
1934	0.70	0.00	5.85	0.06	3.43	0.36	0.00	0.25	1.17	0.00	0.00	0.00	11.82
1935	3.39	3.73	2.43	5.83	1.56	4.22	4.93	0.00	0.00	0.00	1.22	0.00	27.31
1936	1.01	1.35	2.00	2.00	12.94	2.29	1.28	0.10	0.00	0.00	0.00	0.15	23.12
1937	2.58	0.00	6.54	5.54	9.36	6.11	0.33	0.00	0.00	0.00	0.00	0.00	30.46
1938	0.18	0.80	6.12	4.89	10.25	6.41	3.00	0.10	0.00	0.00	0.00	0.63	32.38
1939	0.21	0.30	1.57	4.13	3.16	2.61	0.25	0.00	0.00	0.00	0.00	0.50	12.73
1940	0.99	1.09	2.29	8.27	5.10	2.08	0.86	0.00	0.00	0.00	0.00	0.00	20.68
1941	0.60	0.20	7.24	5.69	11.93	7.83	4.05	0.19	0.00	0.03	0.05	0.00	37.81
1942	1.00	0.37	9.73	1.66	1.72	2.15	4.27	0.54	0.00	0.00	0.00	0.00	21.44
1943	0.40	1.81	2.94	12.48	2.09	7.04	1.38	0.00	0.00	0.00	0.00	0.00	28.14
1944	1.20	0.46	5.04	2.02	6.71	1.67	3.00	0.25	0.00	0.00	0.00	0.00	20.35
1945	0.56	4.76	1.78	0.68	5.17	5.69	0.15	0.10	0.05	0.00	0.00	0.05	18.99
1946	1.44	0.73	4.14	0.57	2.56	6.16	0.13	0.15	0.00	0.00	0.00	0.00	15.88
1947	0.48	6.64	3.04	0.90	0.60	1.95	0.32	0.18	0.08	0.00	0.00	0.00	14.19
1948	0.78	0.10	1.15	0.07	2.54	4.81	3.33	0.13	0.00	0.00	0.00	0.00	12.91
1949	0.23	0.00	3.90	1.79	3.24	4.73	0.09	0.94	0.03	0.00	0.00	0.00	14.95
1950	0.00	2.67	2.92	4.57	3.60	2.43	1.16	0.00	0.00	0.65	0.00	0.02	18.02
1951	2.54	5.62	1.81	2.12	1.19	1.24	1.73	0.08	0.00	0.00	0.00	0.09	16.42
1952	0.86	2.36	7.51	7.55	1.37	6.79	1.28	0.04	0.04	0.00	0.00	0.00	27.80
1953	0.16	3.28	7.27	2.71	0.00	1.60	2.34	0.00	0.00	0.00	0.00	0.00	17.36
1954	0.00	2.35	0.42	4.11	2.82	5.44	1.01	0.23	0.00	0.00	0.00	0.00	16.38
1955	0.00	1.86	2.29	6.20	2.35	0.24	2.62	0.39	0.00	0.00	0.00	0.00	15.95
1956	0.00	1.64	6.96	5.03	0.66	0.00	2.79	0.90	0.00	0.00	0.00	0.00	17.98
1957	0.48	0.00	0.85	3.60	2.65	0.63	2.34	2.03	0.04	0.00	0.00	0.00	12.62
1958	2.08	0.59	4.25	5.12	7.30	8.28	5.93	0.28	0.00	0.00	0.00	0.89	34.72
1959	0.00	0.20	0.16	2.03	5.77	0.00	0.57	0.00	0.00	0.00	0.00	0.62	9.35
1960	0.00	0.00	0.50	3.92	6.81	1.66	3.20	0.00	0.00	0.00	0.00	0.00	16.09
1961	1.26	4.98	1.23	1.72	0.07	1.42	0.33	0.16	0.00	0.00	0.00	0.00	11.17
1962	0.00	3.30	2.08	4.47	12.23	1.97	0.04	0.09	0.00	0.00	0.00	0.00	24.18
1963	0.77	0.00	0.44	1.79	4.51	3.14	3.88	0.58	0.00	0.00	0.22	0.40	15.73
1964	1.30	3.47	0.15	2.20	0.03	3.26	0.40	0.24	0.28	0.04	0.18	0.00	11.55
1965	1.68	2.70	2.59	2.91	0.72	2.24	4.13	0.00	0.00	0.00	0.00	0.00	16.97
1966	0.00	6.87	3.61	1.36	0.91	0.11	0.07	0.00	0.00	0.04	0.00	0.74	13.71
1967	0.00	3.43	8.82	5.51	0.64	4.42	6.25	0.21	0.17	0.00	0.00	0.88	30.33
1968	0.00	3.68	1.68	1.40	1.06	3.15	0.98	0.05	0.00	0.00	0.00	0.00	12.00
1969	2.23	1.19	2.46	15.36	10.41	0.97	2.30	0.00	0.04	0.00	0.00	0.00	34.96
1970	0.43	0.68	0.73	4.36	2.88	2.51	0.05	0.00	0.03	0.00	0.00	0.00	11.67
1971	0.15	4.64	4.95	2.23	0.10	1.20	1.24	1.15	0.00	0.00	0.00	0.13	15.79
1972	0.05	1.13	4.12	0.26	0.57	0.00	0.65	0.35	0.05	0.00	0.00	0.05	7.23
1973	1.93	4.52	1.97	5.93	8.44	4.05	0.00	0.00	0.00	0.00	0.00	0.00	26.84
1974	0.66	4.06	2.67	5.65	0.23	5.89	1.23	0.00	0.00	0.00	0.00	0.00	20.39
1975	1.22	0.30	3.87	0.15	4.40	3.27	1.55	0.00	0.00	0.00	0.00	0.00	14.76
1976	1.76	0.34	0.17	0.00	4.96	1.52	1.27	0.03	0.00				
Sum	35.31	93.95	153.76	182.10	178.12	139.73	78.91	13.02	3.49	0.91	1.74	5.73	876.72
N	47	47	47	47	47	47	47	47	47	46	46	46	46
Mean	0.75	2.00	3.27	3.87	3.79	2.97	1.68	0.28	0.07	0.02	0.04	0.12	19.06
Max	3.39	6.87	9.85	15.36	12.94	8.28	6.25	2.03	1.25	0.65	1.22	0.89	37.81
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.23
STD	0.84	1.93	2.65	3.16	3.55	2.30	1.63	0.42	0.25	0.10	0.18	0.25	7.44

**Precipitation Data, In Inches**

STATION NAME: UNION OIL COMPANY  
 LOCATION: SAN LUIS OBISPO  
 GAGE NO: 54.0  
 ELEVATION: 118.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 31 SOUTH  
 RANGE: 12 EAST  
 SECTION: 11D

LONGITUDE: 35-14-50  
 LATITUDE: 120-39-49  
 RECORD BEGAN: 1931

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1931	0.03	1.90	0.54	6.34	1.85	0.46	0.40	2.16	0.14	0.00	0.00	0.00	13.82
1932	0.09	2.78	13.50	3.00	5.60	0.55	0.39	0.21	0.00	0.00	0.00	0.01	26.13
1933	0.02	0.24	1.36	9.05	0.28	1.07	0.15	1.23	2.02	0.00	0.00	0.00	15.42
1934	0.55	0.00	3.61	1.60	4.01	0.09	0.00	0.56	1.85	0.00	0.00	0.07	12.34
1935	1.24	0.60	2.41	5.79	0.96	4.18	4.74	0.05	0.00	0.00	1.07	0.00	21.04
1936	0.48	1.72	2.92	2.49	10.64	1.53	1.76	0.00	0.20	0.23	0.00	0.18	22.15
1937	1.43	0.10	7.15	6.77	8.23	5.09	0.32	0.00	0.00	0.00	0.00	0.00	29.09
1938	0.07	0.92	3.49	2.55	9.57	5.33	1.30	0.05	0.00	0.00	0.00	0.62	23.90
1939	0.33	0.41	1.39	3.29	2.19	1.68	0.00	0.00	0.00	0.03	0.00	0.67	9.99
1940	1.07	0.99	2.25	8.37	6.30	2.12	1.41	0.00	0.00	0.00	0.00	0.00	22.51
1941	0.00	0.21	7.96	7.19	11.08	7.69	3.64	0.00	0.00	0.00	0.00	0.00	37.77
1942	1.25	1.10	10.41	2.19	1.28	2.35	3.76	0.00	0.00	0.00	0.00	0.00	22.34
1943	0.62	1.42	2.06	8.34	2.77	7.33	1.01	0.22	0.00	0.00	0.00	0.00	23.77
1944	0.90	0.34	1.84	1.75	8.19	1.28	2.06	0.14	0.00	0.00	0.00	0.00	16.50
1945	0.44	3.96	1.95	1.28	4.57	5.81	0.12	0.00	0.00	0.00	0.00	0.00	18.13
1946	0.99	0.46	8.25	0.00	2.23	4.91	0.00	0.23	0.00	0.00	0.00	0.00	17.07
1947	0.10	5.91	2.49	0.56	0.95	1.80	0.21	0.35	0.00	0.00	0.00	0.00	12.37
1948	0.51	0.00	1.21	0.03	1.80	5.15	3.36	0.95	0.00	0.00	0.00	0.00	13.01
1949	0.10	0.00	1.79	2.37	3.12	3.10	0.08	0.08	0.00	0.00	0.01	0.00	10.65
1950	0.00	1.78	4.29	4.66	4.14	1.94	1.35	0.11	0.00	0.00	0.00	0.00	18.27
1951	1.52	2.22	3.15	1.42	0.32	1.29	1.29	0.12	0.00	0.00	0.00	0.00	11.33
1952	1.13	2.17	8.80	8.46	0.62	3.41	0.50	0.02	0.04	0.00	0.00	0.00	25.15
1953	0.00	3.54	7.13	3.13	0.00	1.81	2.83	0.09	0.00	0.00	0.00	0.00	18.53
1954	0.00	4.15	0.27	4.77	3.92	5.33	1.81	0.00	0.00	0.00	0.00	0.00	20.25
1955	0.00	0.47	2.47	2.73	1.94	0.08	3.17	0.57	0.00	0.00	0.00	0.00	11.43
1956	0.00	1.80	3.88	4.18	1.38	0.00	3.29	0.00	0.00	0.00	0.00	0.00	14.53
1957	0.76	0.00	0.65	5.15	3.71	0.58	2.39	2.32	0.07	0.00	0.00	0.00	15.63
1958	1.54	0.45	3.80	4.47	8.42	8.38	6.04	0.30	0.00	0.00	0.00	0.96	34.36
1959	0.00	0.32	0.30	2.87	5.32	0.00	0.49	0.02	0.00	0.00	0.00	0.71	10.03
1960	0.00	0.00	0.62	4.16	7.40	1.35	2.88	0.01	0.00	0.00	0.00	0.00	16.42
1961	0.18	3.66	1.34	2.24	0.43	1.52	0.21	0.00	0.00	0.00	0.00	0.00	9.58
1962	0.00	4.30	1.69	5.34	11.89	1.91	0.00	0.00	0.00	0.00	0.00	0.00	25.13
1963	1.23	0.03	2.40	2.78	3.81	4.88	2.97	0.32	0.00	0.00	0.00	0.00	18.42
1964	1.81	4.28	0.18	1.75	0.09	3.43	0.00	0.98	0.28	0.00	0.11	0.00	12.91
1965	1.76	3.51	2.04	5.69	0.53	2.86	3.89	0.00	0.00	0.00	0.00	0.00	20.28
1966	0.00	7.09	3.58	2.12	0.98	0.40	0.05	0.00	0.00	0.02	0.00	0.99	15.23
1967	0.00	4.64	8.66	5.16	0.65	4.32	6.74	0.00	0.05	0.00	0.00	0.77	30.99
1968	0.02	3.13	2.89	2.31	1.43	2.95	1.15	0.11	0.00	0.00	0.00	0.00	13.99
1969	1.11	2.24	2.49	19.60	11.16	0.66	2.74	0.00	0.00	0.00	0.00	0.05	40.05
1970	0.51	0.93	1.16	6.83	2.33	2.08	0.28	0.00	0.00	0.00	0.00	0.00	14.12
1971	0.10	5.18	6.42	1.88	0.34	0.84	1.32	0.71	0.00	0.00	0.00	0.06	16.85
1972	0.00	1.46	5.87	0.96	0.71	0.00	1.14	0.05	0.00	0.00	0.00	0.00	10.19
1973	2.46	4.34	1.21	9.17	8.19	4.26	0.00	0.00	0.00	0.00	0.04	0.03	29.70
1974	1.28	4.75	1.95	7.44	0.22	7.37	1.84	0.00	0.00	0.02	0.00	0.00	24.87
1975	1.20	0.80	3.77	0.25	6.75	4.97	1.30	0.00	0.00	0.00	0.00	0.05	19.09
1976	1.18	0.28	0.07	0.00	5.26	1.22	1.23	0.00	0.00	0.00	1.06	2.68	12.98
1977	0.10	0.87	2.00	1.64	0.13	1.54	0.00	3.19	0.00	0.00	0.00	0.00	9.47
1978	0.23	0.00	8.73	9.21	13.20	6.62	4.56	0.00	0.00	0.00	0.00	1.02	43.57
1979	0.00	2.24	1.48	5.07	4.92	3.51	0.22	0.09	0.00	0.00	0.00	0.04	17.57
1980	0.84	0.63	3.56	8.05	9.57	2.48	0.92	0.29	0.00	0.00	0.00	0.00	26.34
1981													
1982	1.82	1.50	0.06	2.14	1.33	8.18	3.32	0.00	0.08	0.00	0.13	0.84	19.40
1983	1.63	6.64	4.91	8.04	6.28	11.34	2.57	0.38	0.00	0.00	0.53	2.59	44.91
1984	0.55	2.82	2.02	0.09	0.47	0.66	0.67	0.00	0.00	0.00	0.00	0.00	7.28



**Precipitation Data, in Inches**

STATION NAME: UNION OIL COMPANY  
 LOCATION: SAN LUIS OBISPO  
 GAGE NO: 54.0  
 ELEVATION: 118.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 31 SOUTH  
 RANGE: 12 EAST  
 SECTION: 11D

LONGITUDE: 35-14-50  
 LATITUDE: 120-39-49  
 RECORD BEGAN: 1931

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1985	0.94	4.35	3.68	1.07	2.33	3.21	0.33	0.00	0.00	0.00	0.00	0.00	15.91
1986	1.14	2.51	3.45	2.93	3.78	5.18	0.00	0.00	0.00	0.00	0.00	0.00	18.99
1987													
1988	2.83	1.90	4.85	2.55	1.45	0.15	3.70	0.20	0.20				
1989													
1990													
1991										0.05	0.00	0.00	
1992	0.72	0.65	4.29	3.50	9.65	2.58	0.06	0.00	0.00	0.18	0.00	0.00	21.63
1993	1.71	0.00	4.52	8.83	8.04	3.80	0.00	0.23	0.00	0.00	0.00	0.00	27.13
1994	0.20	1.33	1.26	3.57	4.93	1.65	1.28	0.88	0.00	0.00	0.00	2.23	17.33
1995	1.12	2.01	1.12	5.21	2.40	16.91	0.87	0.75	0.40	0.00	0.00	0.00	30.79

## For 1931-95 Water Years

Sum	41.84	118.03	203.59	254.38	246.04	197.17	94.11	17.97	5.33	0.53	2.95	14.57	1178.63
N	60	60	60	60	60	60	60	60	60	60	60	60	59
Mean	0.70	1.97	3.39	4.24	4.10	3.29	1.57	0.30	0.09	0.01	0.05	0.24	19.98
Max	2.83	7.09	13.50	19.60	13.20	16.91	6.74	3.19	2.02	0.23	1.07	2.68	44.91
Min	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.28
STD	0.69	1.83	2.81	3.34	3.60	3.06	1.62	0.60	0.35	0.04	0.20	0.59	8.47
1996	0.00	0.00	3.50	7.40	6.93	1.70	1.60	0.85	0.00				

**Precipitation Data, In Inches**

STATION NAME: UNION OIL COMPANY  
 LOCATION: AVILA BEACH  
 GAGE NO: 55.0  
 ELEVATION: 115.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 31 SOUTH  
 RANGE: 12 EAST  
 SECTION: 36Q

LONGITUDE: 35-10-40  
 LATITUDE: 120-43-32  
 RECORD BEGAN: 1932

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1931	0.02	1.58	0.45	5.26	1.54	0.38	0.10	1.32	0.00	0.00	0.00	0.00	10.65
1932	0.12	1.69	7.87	2.75	4.80	0.25	0.28	0.26	0.00	0.00	0.00	0.00	18.02
1933	0.05	0.12	1.81	6.54	0.42	1.66	0.00	1.07	1.96	0.00	0.00	0.00	13.63
1934	0.36	0.00	2.88	0.80	3.39	0.00	0.00	0.02	1.75	0.00	0.00	0.00	9.20
1935	1.47	0.76	2.48	5.48	0.81	4.35	4.60	0.05	0.00	0.00	0.75	0.02	20.77
1936	0.45	1.62	1.97	2.60	7.85	1.15	1.26	0.01	0.09	0.15	0.00	0.22	17.37
1937	1.20	0.00	4.72	5.25	7.85	4.24	0.24	0.00	0.00	0.00	0.00	0.00	23.50
1938	0.19	0.69	2.23	3.20	6.40	4.57	1.81	0.01	0.00	0.00	0.00	0.67	19.77
1939	0.44	0.26	1.00	2.99	3.26	1.53	0.00	0.00	0.00	0.00	0.00	0.71	10.19
1940	0.81	0.66	1.59	7.80	4.64	3.37	0.47	0.00	0.00	0.00	0.00	0.00	19.34
1941	0.21	0.17	6.60	5.97	9.20	6.38	3.02	0.00	0.00	0.00	0.00	0.00	31.55
1942	1.46	0.87	8.89	2.21	1.02	2.58	0.00	0.00	0.00	0.00	0.00	0.00	17.03
1943	0.46	1.36	3.51	6.10	1.62	7.61	1.21	0.00	0.00	0.00	0.00	0.00	21.87
1944	1.22	0.41	3.60	1.81	5.91	1.20	1.31	0.18	0.00	0.00	0.00	0.00	15.64
1945	1.36	3.82	2.12	1.86	3.03	4.88	0.15	0.25	0.00	0.00	0.00	0.00	17.47
1946	0.85	0.84	3.71	0.88	1.90	4.30	0.08	0.25	0.00	0.00	0.00	0.00	12.81
1947	0.23	4.69	2.92	0.33	1.37	2.89	0.42	0.48	0.00	0.00	0.00	0.00	13.33
1948	0.60	0.00	1.00	0.02	1.96	5.84	2.96	1.52	0.00	0.00	0.00	0.00	13.90
1949	0.00	0.01	2.50	2.19	2.65	3.86	0.12	0.00	0.00	0.00	0.00	0.00	11.33
1950	0.00	0.91	5.16	4.42	4.35	1.84	0.00	0.00	0.00	0.41	0.00	0.00	17.09
1951	1.08	4.41	4.01	2.69	0.99	1.31	1.03	0.00	0.00	0.00	0.00	0.00	15.52
1952	0.64	1.25	7.68	6.83	0.70	6.83	1.06	0.00	0.07	0.00	0.00	0.00	25.06
1953	0.00	2.90	4.74	3.30	0.00	0.93	1.56	0.04	0.00	0.00	0.00	0.00	13.47
1954	0.00	3.84	0.57	5.00	2.74	4.55	1.01	0.06	0.06	0.00	0.00	0.00	17.83
1955	0.00	0.40	2.12	2.35	1.67	0.07	2.73	0.49	0.00	0.00	0.06	0.00	9.89
1956	0.00	2.04	6.61	2.08	0.85	0.00	2.30	0.42	0.00	0.00	0.00	0.00	14.30
1957	0.41	0.00	0.53	3.78	2.60	1.44	1.89	1.37	0.02	0.00	0.00	0.06	12.10
1958	2.88	2.22	1.65	3.18	6.22	7.53	4.75	0.00	0.00	0.00	0.00	0.61	29.04
1959	0.00	0.00	0.44	2.52	3.48	0.00	0.00	0.08	0.00	0.00	0.00	1.44	7.96
1960	0.00	0.00	0.69	4.66	5.56	1.48	2.12	0.02	0.00	0.00	0.00	0.00	14.53
1961	0.18	3.61	1.19	2.61	0.25	1.48	0.17	0.07	0.00	0.01	0.00	0.00	9.57
1962	0.00	2.37	1.03	2.57	10.67	1.71	0.13	0.08	0.00	0.00	0.00	0.00	18.56
1963	1.05	0.00	2.84	1.99	4.68	4.43	3.65	0.10	0.00	0.00	0.00	0.09	18.83
1964	2.06	2.91	0.34	1.65	0.00	1.79	1.57	0.25	0.48	0.00	0.00	0.00	11.05
1965	1.60	2.44	4.55	2.46	0.71	1.67	3.09	0.00	0.00	0.00	0.00	0.00	16.52
1966	0.00	6.06	3.47	1.77	1.31	0.12	0.32	0.00	0.02	0.20	0.00	0.90	14.17
1967	0.00	3.36	3.51	3.23	0.47	3.98	6.40	0.34	0.00	0.00	0.00	0.16	21.45
1968	0.00	3.46	1.60	0.67	1.32	3.22	0.00	0.00	0.00	0.00	0.00	0.00	10.27
1969	3.01	4.00	3.76	15.05	8.96	0.51	2.19	0.04	0.00	0.00	0.00	0.00	37.52
1970	1.34	0.96	2.92	5.56	2.33	1.47	0.20	0.00	0.00	0.00	0.00	0.00	14.78
1971	0.00	7.32	5.62	1.66	0.27	0.67	1.25	1.00	0.00	0.00	0.00	0.10	17.89
1972	0.18	1.44	4.41	0.64	0.58	0.00	0.81	0.00	0.00	0.00	0.00	0.00	8.06
1973	2.00	5.49	1.80	6.52	5.31	3.43	0.00	0.00	0.00	0.00	0.00	0.00	24.55
1974	1.58	4.32	3.05	6.75	0.41	8.28	2.30	0.00	0.00	0.00	0.00	0.00	26.69
1975	1.82	0.83	3.40	1.35	4.64	3.47	1.62	0.03	0.00	0.00	0.00	0.66	17.82
1976	1.46	0.23	0.25	0.07	5.13	0.90	0.79	0.00	0.00	0.00	1.47	2.88	13.18
1977	0.07	0.66	1.56	2.49	0.40	1.83	0.78	2.05	0.00	0.00	0.00	0.00	9.84
1978	0.12	0.76	8.23	7.05	7.47	5.81	4.18	0.00	0.07	0.00	0.00	0.92	34.61
1979	0.00	2.45	1.18	5.33	3.78	2.94	0.50	0.00	0.00	0.00	0.00	0.00	16.18
1980													
1981	0.00	0.00	0.85	3.68	3.40	8.02	0.33	0.00	0.00	0.00	0.00	0.00	16.28
1982	1.43	1.73	3.42	3.76	2.00	7.13	3.54	0.00	0.06	0.00	0.16	0.78	24.01
1983	1.54	3.59	2.46	7.82	10.56	7.93	2.70	0.17	0.00	0.00	0.55	1.47	38.79
1984	0.70	3.76	3.22	0.09	0.46	0.75	0.84	0.00	0.00	0.17	0.00	0.00	9.99

### Precipitation Data, In Inches

STATION NAME: UNION OIL COMPANY  
LOCATION: AVILA BEACH  
GAGE NO: 55.0  
ELEVATION: 115.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
TOWNSHIP: 31 SOUTH  
RANGE: 12 EAST  
SECTION: 36Q

LONGITUDE: 35-10-40  
LATITUDE: 120-43-32  
RECORD BEGAN: 1932

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1985	1.46	3.80	3.42	1.42	1.77	2.53	0.40	0.00	0.00	0.05	0.00	0.18	15.03
1986	0.65	3.17	1.55	2.45	7.48	7.28	0.24	0.00	0.00	0.14	0.00	1.51	24.47
1987	0.00	0.43	1.12	2.67	2.61	4.95	0.36	0.09	0.03	0.00	0.00	0.00	12.26
1988	1.79	1.20	4.18	1.84	3.27	0.03	1.90	0.17	0.08	0.00	0.00	0.00	14.46
1989	0.00	2.47	7.02	0.85	1.32	2.84	0.00	0.20	0.00	0.00	0.00	1.91	16.61
1990	0.61	0.52	0.03	2.71	1.68	0.37	0.52	1.07	0.00	0.00	0.00	0.88	8.39
1991	0.00	0.33	0.43	1.00	3.47	10.82	0.15	0.00	0.24	0.00	0.05	0.00	16.49
1992	0.52	1.20	2.76	3.73	7.45	2.61	0.15	0.00	0.00	0.55	0.00	0.00	18.97
1993	0.80	0.00	4.92	6.52	6.79	5.25	0.29	0.45	0.25	0.00	0.00	0.00	25.27
1994	0.40	1.16	0.23	2.38	4.14	1.59	2.19	0.67	0.00	0.00	0.08	2.48	15.32
1995	1.28	2.31	1.62	12.80	1.55	12.43	0.98	1.00	0.87	0.00	0.00	0.00	34.84
<i>For 1931-95 Water Years</i>													
Sum	44.16	115.86	187.99	227.99	215.42	209.26	81.02	15.68	6.05	1.68	3.12	18.65	1126.88
N	64	64	64	64	64	64	64	64	64	64	64	64	64
Mean	0.69	1.81	2.94	3.56	3.37	3.27	1.27	0.25	0.09	0.03	0.05	0.29	17.61
<i>Mean for 1984-95</i>													
Water Years*	0.68	1.70	2.54	3.21	3.50	4.29	0.67	0.30	0.12	0.08	0.01	0.58	17.68
Max	3.01	7.32	8.89	15.05	10.67	12.43	6.40	2.05	1.96	0.55	1.47	2.88	38.79
Min	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.96
STD	0.75	1.71	2.14	2.77	2.77	2.82	1.40	0.44	0.34	0.09	0.21	0.61	7.12
1996	0.42	0.00	2.38	4.72	8.33	1.31	1.37	0.37	0.00	0.28	0.00	0.00	19.18
1997	1.82	5.41	10.97	9.07	0.11	0.00	0.00	0.00	0.00	0.10	0.00	0.00	27.48
1998	0.05	4.82	6.31	5.34	11.68	6.34	1.56	2.47	0.00	0.00	0.00	0.19	38.76
1999	0.40	3.62	0.72	3.70	2.08	4.99	1.98	0.00	0.00				
<i>For 1931-99 Water Years</i>													
Sum	46.85	129.71	208.37	250.82	237.62	221.90	85.93	18.52	6.05	2.06	3.12	18.84	1212.30
N	68	68	68	68	68	68	68	68	68	67	67	67	67
Mean	0.69	1.91	3.06	3.69	3.49	3.26	1.26	0.27	0.09	0.03	0.05	0.28	18.09
Max	3.01	7.32	10.97	15.05	11.68	12.43	6.40	2.47	1.96	0.55	1.47	2.88	38.79
Min	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.96
STD	0.74	1.78	2.35	2.78	2.96	2.81	1.37	0.51	0.33	0.10	0.21	0.60	7.51

\*Hydrologic base period for this study

**Precipitation Data, In Inches**

STATION NAME: COUNTY YARD  
 LOCATION: ARROYO GRANDE  
 GAGE NO: 85.0  
 ELEVATION: 125.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 22

LONGITUDE: 35-07-26  
 LATITUDE: 120-34-24  
 RECORD BEGAN: 1940

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1940	1.16	0.89	1.65	5.83	3.50	1.10	1.85	0.00	0.00	0.00	0.00	0.00	15.98
1941	0.74	0.23	6.90	6.43	7.91	7.71	3.46	0.10	0.00	0.00	0.00	0.00	33.48
1942	0.98	0.61	8.41	1.41	0.94	2.33	3.88	0.22	0.00	0.00	0.00	0.00	18.78
1943	0.48	1.31	3.47	7.35	1.08	5.78	1.03	0.00	0.00	0.00	0.00	0.00	20.50
1944	0.92	0.37	4.14	1.52	5.51	0.80	1.94	0.19	0.01	0.00	0.00	0.00	15.40
1945	0.39	3.22	1.92	0.25	3.58	3.89	0.11	0.05	0.05	0.00	0.00	0.10	13.56
1946	0.71	0.74	3.17	0.46	1.92	3.51	0.17	0.03	0.00	0.09	0.00	0.00	10.80
1947	0.58	4.38	1.84	0.42	0.94	2.15	0.29	0.31	0.22	0.00	0.00	0.07	11.20
1948	0.98	0.12	1.38	0.08	1.76	3.65	2.31	1.03	0.00	0.00	0.00	0.00	11.31
1949	0.08	0.00	3.38	1.45	2.89	4.56	0.09	0.81	0.12	0.00	0.00	0.02	13.40
1950	0.04	0.87	2.96	2.86	2.76	1.16	0.98	0.12	0.00	0.46	0.00	0.03	12.24
1951	1.14	2.84	1.71	2.87	1.12	0.84	1.02	0.00	0.00	0.00	0.00	0.09	11.63
1952	0.37	2.06	5.46	5.87	0.60	5.75	0.96	0.00	0.00	0.00	0.00	0.00	21.07
1953	0.00	2.91	4.98	1.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.44
1954	0.00	2.64	0.35	3.68	1.59	2.68	0.00	0.00	0.00				
1955													
1956													
1957													
1958													
1959										0.00	0.00	0.60	
1960	0.00	0.00	0.61	3.98	5.15	1.25	2.88	0.00	0.00	0.00	0.00	0.00	13.87
1961	0.70	4.74	1.38	1.18	0.33	1.04	0.26	0.35	0.00	0.01	0.00	0.00	9.99
1962	0.00	2.01	1.62	3.44	10.16	1.60	0.00	0.10	0.02	0.00	0.00	0.00	18.95
1963	0.08	0.00	1.55	0.83	4.70	3.47	3.69	0.28	0.03	0.00	0.05	0.29	14.97
1964	1.94	2.47	0.20	1.84	0.02	1.71	0.93	0.64	0.21	0.00	0.00	0.18	10.14
1965	1.76	2.54	3.20	2.36	0.32	1.86	2.93	0.00	0.00	0.00	0.00	0.00	14.97
1966	0.04	6.25	3.40	1.62	0.03	0.14	0.06	0.00	0.00	0.00	0.12	0.77	12.43
1967	0.00	3.29	3.82	3.86	0.63	3.58	5.28	0.22	0.09	0.00	0.00	0.78	21.55
1968	0.00	3.35	1.74	0.84	1.35	2.52	0.88	0.07	0.00	0.00	0.00	0.00	10.75
1969	2.69	1.75	2.89	10.71	8.05	0.94	2.23	0.02	0.06	0.10	0.00	0.10	29.54
1970	0.58	1.20	1.24	3.70	0.42	3.28	0.10	0.00	0.03	0.00	0.00	0.00	10.55
1971	0.22	4.86	4.09	1.74	0.15	0.66	0.93	1.24	0.01	0.00	0.00	0.07	13.97
1972	0.12	1.25	5.01	0.60	0.48	0.02	0.53	0.00	0.02	0.06	0.00	0.03	8.12
1973	1.65	4.81	1.82	6.57	6.28	3.95	0.04	0.03	0.03	0.00	0.00	0.07	25.25
1974	0.80	3.27	2.56	6.41	0.21	5.42	2.32	0.00	0.00	0.06	0.00	0.00	21.05
1975	1.57	0.52	3.85	0.25	3.42	2.90	1.04	0.02	0.00	0.00	0.00	0.00	13.57
1976	1.51	0.17	0.15	6.41	0.21	5.42	2.32	0.00	0.00	0.00	1.05	3.12	20.36
1977	0.11	0.66	1.55	0.95	0.12	1.85	0.00	2.39	0.00	0.00	0.00	0.00	7.63
1978	0.03	0.53	5.54	6.04	6.47	4.77	4.19	0.00	0.00	0.00	0.00	1.16	28.73
1979	0.00	2.24	1.27	3.66	4.33	3.55	0.45	0.00	0.00	0.00	0.00	0.02	15.52
1980	1.14	0.57	2.47	5.49	5.56	2.22	0.65	0.30	0.00	0.10	0.00	0.00	18.50
1981	0.00	0.00	1.12	2.65	2.03	7.05	0.50	0.01	0.00				
Sum	23.51	69.67	102.80	117.16	96.52	105.11	50.30	8.53	0.90	0.88	1.22	7.50	559.20
N	37	37	37	37	37	37	37	37	37	36	36	36	35
Mean	0.64	1.88	2.78	3.17	2.61	2.84	1.36	0.23	0.02	0.02	0.03	0.21	15.98
Max	2.69	6.25	8.41	10.71	10.16	7.71	5.28	2.39	0.22	0.46	1.05	3.12	33.48
Min	0.00	0.00	0.15	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.63
STD	0.67	1.65	1.85	2.52	2.66	1.95	1.39	0.46	0.05	0.08	0.17	0.56	6.17

**Precipitation Data, In Inches**

STATION NAME: POLICE DEPARTMENT  
 LOCATION: ARROYO GRANDE  
 GAGE NO: 87.0  
 ELEVATION: 120.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 22M

LONGITUDE: 35-07-06  
 LATITUDE: 120-34-35  
 RECORD BEGAN: 1940

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1940	1.16	0.89	1.65	5.83	3.50	1.10	1.85	0.00	0.00	0.00	0.00	0.01	15.99
1941	0.85	0.23	6.90	6.43	7.91	7.71	3.46	0.00	0.00	0.00	0.04	0.00	33.53
1942	0.98	0.61	8.41	1.41	0.94	2.33	3.88	0.22	0.00	0.00	0.00	0.00	18.78
1943	0.48	1.31	3.47	7.35	1.08	5.78	1.03	0.00	0.00	0.00	0.00	0.00	20.50
1944	0.92	0.37	4.14	1.52	5.51	0.80	1.94	0.19	0.01	0.00	0.00	0.00	15.40
1945	0.39	3.22	1.92	0.25	3.58	3.89	0.11	0.05	0.05	0.00	0.00	0.10	13.56
1946	0.71	0.74	3.17	0.46	1.92	3.51	0.17	0.15	0.00	0.09	0.00	0.00	10.92
1947	0.58	4.38	1.84	0.42	0.94	2.15	0.29	0.31	0.22	0.00	0.00	0.07	11.20
1948	0.98	0.12	1.38	0.08	1.76	3.65	2.31	1.03	0.00	0.00	0.00	0.00	11.31
1949	0.08	0.00	3.38	1.45	2.89	4.56	0.19	0.81	0.02	0.00	0.00	0.02	13.40
1950	0.04	0.87	2.96	2.86	2.76	1.16	1.06	0.12	0.00	0.46	0.00	0.03	12.32
1951	1.14	2.84	1.71	2.87	1.12	0.84	1.02	0.00	0.00	0.00	0.00	0.09	11.63
1952	0.37	2.06	5.46	5.87	0.60	5.75	0.96	0.00	0.00	0.00	0.00	0.00	21.07
1953	0.00	2.91	5.07	1.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.43
1954	0.00	4.09	0.35	3.68	1.59	2.67	0.00	0.00	0.00	0.00	0.00	0.00	12.38
1955	0.00	1.53	1.81	3.35	1.21	0.19	1.64	0.98	0.00	0.00	0.00	0.00	10.71
1956	0.00	2.34	6.95	4.56	0.86	0.00	2.03	0.69	0.00	0.00	0.00	0.00	17.43
1957	0.40	0.00	0.63	3.32	2.91	0.76	1.83	1.44	0.28	0.00	0.00	0.00	11.57
1958	1.72	0.36	3.15	3.53	5.67	6.27	5.06	0.19	0.00	0.00	0.18	1.24	27.37
1959	0.00	0.31	0.41	3.19	4.77	0.53	0.00	0.00	0.00	0.00	0.00	0.70	9.91
1960	0.00	0.00	0.61	4.16	5.69	1.31	2.90	0.00	0.00	0.00	0.00	0.00	14.67
1961	0.65	4.69	1.58	1.36	0.14	1.48	0.35	0.11	0.00	0.00	0.00	0.00	10.36
1962	0.00	2.52	1.30	3.44	10.38	1.68	0.12	0.06	0.05	0.00	0.00	0.00	19.55
1963	0.84	0.00	1.15	0.86	4.70	3.21	3.86	0.28	0.00	0.00	0.00	0.00	14.90
1964	2.36	2.40	0.22	1.56	0.00	1.67	0.95	0.41	0.21	0.00	0.00	0.18	9.96
1965	1.70	2.38	3.21	2.33	0.33	1.75	3.01	0.00	0.00	0.00	0.00	0.00	14.71
1966	0.04	6.50	3.47	1.70	1.01	0.10	0.00	0.00	0.00	0.11	0.00	0.80	13.73
1967	0.00	3.29	3.65	4.48	0.72	3.50	5.20	0.23	0.04	0.00	0.00	1.14	22.25
1968	0.00	3.17	1.79	0.43	1.22	2.13	0.94	0.05	0.00	0.00	0.00	0.00	9.73
1969	2.52	1.68	2.70	10.86	7.78	0.95	2.30	0.00	0.08	0.11	0.00	0.08	29.06
1970	0.53	1.46	1.21	3.61	1.24	2.66	0.07	0.00	0.05	0.00	0.00	0.00	10.83
1971	0.21	4.78	4.35	1.64	0.00	0.68	0.90	1.20	0.01	0.00	0.00	0.01	13.78
1972	0.09	1.88	5.05	0.58	0.48	0.00	0.32	0.00	0.00	0.09	0.00	0.03	8.52
1973	1.71	4.36	1.67	6.64	6.38	3.92	0.03	0.01	0.00				
Sum	21.45	68.29	96.72	103.53	91.59	78.69	49.78	8.53	1.02	0.86	0.22	4.50	500.46
N	34	34	34	34	34	34	34	34	34	33	33	33	33
Mean	0.63	2.01	2.84	3.05	2.69	2.31	1.46	0.25	0.03	0.03	0.01	0.14	15.17
Max	2.52	6.50	8.41	10.86	10.38	7.71	5.20	1.44	0.28	0.46	0.18	1.24	33.53
Min	0.00	0.00	0.22	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.52
STD	0.69	1.68	2.00	2.39	2.63	1.96	1.48	0.39	0.07	0.08	0.03	0.32	5.91

**Precipitation Data, in Inches**

STATION NAME: RANCHITA RANCH  
 LOCATION: ARROYO GRANDE RD.  
 GAGE NO: 100.0  
 ELEVATION: 640.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 31 SOUTH  
 RANGE: 14 EAST  
 SECTION: 25F

LONGITUDE: 35-12-03  
 LATITUDE: 120-25-47  
 RECORD BEGAN: 1944

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1944	0.93	0.38	4.19	2.39	9.74	1.87	2.00	0.00	0.00	0.00	0.00	0.00	21.50
1945	1.00	5.00	2.50	1.00	5.75	4.99	0.00	0.00	0.00	0.00	0.00	0.00	20.24
1946	2.00	1.25	5.25	0.50	3.25	6.00	0.60	0.00	0.40	0.30	0.00	0.00	19.55
1947	0.70	7.25	3.25	1.00	1.50	3.25	0.60	0.00	0.40	0.00	0.00	0.00	17.95
1948	1.50	0.00	1.50	0.00	3.25	6.50	3.75	0.00	0.00				
1949													
1950													
1951													
1952													
1953													
1954													
1955													
1956													
1957													
1958													
1959										0.00	0.02	4.71	
1960	0.00	0.00	0.41	6.73	8.34	1.47	2.09	0.20	0.00				
1961										0.00	0.00	0.00	
1962	0.00	3.51	2.05	4.59	11.54	1.46	0.00	0.09	0.00	0.00	0.00	0.00	23.24
1963	0.95	0.00	0.55	0.00	6.30	3.00	4.10	0.60	0.00	0.00	0.00	0.75	16.25
1964	1.30	3.50	0.20	2.25	0.00	3.15	0.70	0.30	0.30	0.00	0.00	0.00	11.70
1965	1.65	4.88	4.05	3.40	1.10	3.60	4.05	0.00	0.00	0.00	0.00	0.00	22.73
1966	0.00	8.35	4.30	1.45	1.60	0.10	0.13	0.00	0.00	0.10	0.00	0.89	16.92
1967	0.00	4.52	7.25	6.84	0.71	6.35	6.56	0.30	1.88	0.00	0.00	1.60	36.01
1968	0.00	3.60	2.70	1.70	1.47	3.25	1.65	0.00	0.00	0.00	0.00	0.00	14.37
1969	0.75	1.87	3.24	20.35	12.55	1.18	2.90	0.00	0.00	0.00	0.00	0.00	42.84
1970	0.55	0.90	1.30	5.75	3.35	3.20	0.00	0.00	0.00	0.00	0.00	0.00	15.05
1971	0.16	5.85	6.25	2.50	1.45	0.30	1.40	1.50	0.00	0.00	0.00	0.00	19.41
1972	0.20	1.50	6.09	0.56	0.65	0.00	0.86	0.42	0.00	0.00	0.00	0.00	10.28
1973	1.55	5.26	1.95	7.41	9.21	4.47	0.00	0.00	0.00	0.00	0.00	0.00	29.85
1974	1.05	5.76	4.15	7.36	0.40	7.40	1.99	0.00	0.00	0.00	0.00	0.00	28.11
1975	2.07	0.86	4.68	0.18	5.19	4.37	2.13	0.00	0.00	0.00	0.00	0.00	19.48
1976	1.62	0.30	0.15	0.00	3.92	2.73	1.33	0.00	0.05	0.00	1.13	5.00	16.23
1977	1.09	0.75	2.00	1.31	0.30	1.52	0.04	2.26	0.01	0.00	0.03	0.00	9.31
1978	0.04	0.65	9.60	8.40	10.42	6.72	4.08	0.00	0.00	0.00	0.00	1.52	41.43
1979	0.00	2.09	1.48	5.58	4.79	5.28	0.35	0.00	0.00	0.00	0.00	0.15	19.72
1980	1.16	0.83	2.21	9.80	9.54	3.25	0.83	0.50	0.00	0.10	0.00	0.00	28.22
1981	0.03	0.00	1.61	5.52	2.71	7.80	0.70	0.00	0.00	0.00	0.00	0.00	18.37
1982	0.90	2.48	2.01	4.75	1.97	8.70	5.65	0.00	0.00	0.00	0.00	1.00	27.46
1983	0.80	7.60	3.20	8.70	8.75	10.40	3.90	0.00	0.00	0.00	1.00	0.00	44.35
1984	1.90	6.55	6.20	0.00	0.65	0.95	0.00	0.00	0.00	0.00	0.00	0.00	16.25
1985	1.65	4.75	3.55	1.55	2.25	3.34	0.00	0.00	0.00	0.00	0.00	0.00	17.09
1986	0.52	4.40	1.50	2.40	7.40	7.30	0.50	0.00	0.00	0.00	0.00	2.19	26.21
1987	0.00	0.40	1.39	2.60	2.90	5.23	0.26	0.00	0.00				
Sum	26.07	95.04	100.76	126.57	142.95	129.13	53.15	6.17	3.04	0.50	2.18	17.81	650.12
N	32	32	32	32	32	32	32	32	32	31	31	31	29
Mean	0.81	2.97	3.15	3.96	4.47	4.04	1.66	0.19	0.10	0.02	0.07	0.57	22.42
Max	2.07	8.35	9.60	20.35	12.55	10.40	6.56	2.26	1.88	0.30	1.13	5.00	44.35
Min	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.31
STD	0.68	2.54	2.19	4.14	3.70	2.62	1.78	0.47	0.34	0.06	0.26	1.26	9.11

**Precipitation Data, In Inches**

STATION NAME: POLICE DEPARTMENT  
 LOCATION: PISMO BEACH  
 GAGE NO: 126.0  
 ELEVATION: 80.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 12 EAST  
 SECTION: 13

LONGITUDE: 35-08-00  
 LATITUDE: 120-38-00  
 RECORD BEGAN: 1955

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0.06	1.10	2.78	3.41	3.12	1.40	1.02	0.17	0.00	0.59	0.00	0.00	13.65
1951	1.29	3.27	2.49	2.23	2.36	0.52	1.08	0.00	0.03	0.00	0.03	0.08	13.38
1952	0.52	1.73	6.69	6.20	0.72	6.07	1.16	0.00	0.11	0.00	0.00	0.00	23.20
1953	0.08	3.06	3.00	2.11	0.00	0.96	1.92	0.20	0.00	0.00	0.00	0.07	11.40
1954	0.00	3.27	0.43	4.77	2.26	3.98	1.18	0.09	0.03	0.07	0.00	0.00	16.08
1955	0.00	1.89	2.18	5.23	2.02	0.09	2.35	1.24	0.00	0.00	0.06	0.00	15.06
1956	0.00	2.52	6.72	4.37	1.20	0.00	2.29	0.70	0.00	0.00	0.00	0.00	17.80
1957	0.48	0.00	0.45	3.57	2.99	0.63	1.70	1.03	0.22	0.00	0.00	0.00	11.07
1958	2.47	0.45	2.96	3.62	7.89	8.08	5.57	0.25	0.00	0.00	0.00	1.45	32.74
1959	0.00	0.16	0.37	2.68	4.66	0.00	0.37	0.06	0.00	0.00	0.00	0.85	9.15
1960	0.00	0.00	0.86	3.55	6.36	1.13	2.46	0.02	0.00	0.00	0.00	0.00	14.38
1961	0.64	4.41	1.06	1.72	0.12	1.46	0.26	0.10	0.00	0.00	0.09	0.01	9.87
1962	0.00	1.82	1.17	2.48	9.92	1.41	0.07	0.04	0.02	0.00	0.00	0.00	16.93
1963	0.69	0.04	1.80	1.75	4.15	3.49	4.20	0.22	0.05	0.00	0.00	0.33	16.72
1964	2.23	2.61	0.23	1.80	0.00	2.07	0.64	0.49	0.24	0.00	0.10	0.04	10.45
1965	1.56	2.35	2.92	2.32	0.43	1.95	2.70	0.00	0.00	0.00	0.00	0.00	14.23
1966	0.00	5.76	3.55	1.32	1.08	0.13	0.00	0.00	0.00	0.00	0.00	1.05	12.89
1967	0.00	2.94	3.37	3.30	0.98	3.40	5.76	0.48	0.05	0.00	0.00	0.61	20.89
1968	0.00	3.09	1.66	2.40	1.66	2.75	1.36	0.16	0.00	0.00	0.00	0.00	13.08
1969	2.74	2.66	6.40	13.18	7.27	0.57	2.38	0.04	0.05	0.10	0.00	0.12	35.51
1970	0.91	1.13	1.70	4.33	1.90	1.95	0.07	0.00	0.04	0.00	0.00	0.00	12.03
1971	0.22	4.73	4.28	1.55	0.19	0.63	1.33	1.09	0.00	0.00	0.00	0.12	14.14
1972	0.21	1.68	3.11	0.28	0.62	0.04	0.63	0.02	0.19	0.04	0.00	0.05	6.87
1973	2.83	5.31	1.56	6.67	5.38	3.95	0.00	0.09	0.00	0.00	0.00	0.10	25.89
1974	0.83	2.34	3.13	6.77	0.00	6.05	1.60	0.00	0.00	0.00	0.00	0.00	20.72
1975	1.76	0.50	3.69	0.37	3.96	2.50	0.22	0.00	0.00	0.00	0.00	0.00	13.00
1976	0.29	0.17	0.00	0.00	3.84	1.82	0.82	0.00	0.00	0.00	0.00	4.20	11.14
1977	0.03	0.86	1.52	1.53	0.20	1.80	0.00	2.25	0.00	0.00	0.00	0.00	8.19
1978	0.06	1.10	7.20	11.16	6.52	6.04	3.84	0.00	0.00	0.00	0.00	1.23	37.15
1979	0.00	0.60	0.00	3.59	3.86	2.86	0.35	0.39	0.00	0.00	0.00	0.00	11.65
1980	1.03	0.38	1.69	8.62	6.52	1.77	0.00	0.00	0.00	0.00	0.00	0.01	20.02
1981	0.00	0.00	1.07	2.53	2.42	7.14	0.60	0.00	0.00	0.00	0.00	0.00	13.76
1982	0.62	1.60	1.75	4.37	3.16	6.40	5.82	0.00	0.11	0.00	0.05	0.55	24.43
1983	1.06	3.40	1.98	6.91	7.79	7.01	2.24	0.56	0.00	0.00	0.44	0.09	31.48
1984	0.00	2.77	4.77	0.00	0.33	0.73	0.63	0.00	0.00	0.00	0.03	0.02	9.28
1985	0.92	3.51	2.65	0.29	0.39	1.72	0.10	0.00	0.00	0.02	0.00	0.04	9.64
1986	0.48	3.46	0.00	1.46	5.45	3.36	0.00	0.00	0.00	0.00	0.00	0.00	14.21
1987	3.65	0.31	1.43	2.08	4.68	3.45	0.39	0.10	0.00	0.01	0.00	0.00	16.10
1988	0.00	0.00	3.86	1.83	2.25	0.50	2.06	0.09	0.00	0.00	0.00	0.00	10.59
1989	0.00	1.62	6.68	0.87	1.24	0.55	0.07	0.21	0.00	0.00	0.00	0.56	11.80
1990	0.61	0.38	0.00	1.90	1.76	0.31	0.55	0.80	0.01	0.00	0.00	0.82	7.14
1991	0.01	0.28	0.77	1.58	2.37	17.06	0.18	0.00	0.28	0.00	0.19	0.00	22.72
1992	0.56	0.87	3.47	2.92	8.99	3.20	0.05	0.00	0.05	0.73	0.00	0.00	20.84
1993	0.81	0.00	5.12	7.95	6.65	4.02	0.18	0.04	0.22	0.00	0.00	0.00	24.99
1994	0.53	2.09	0.37	2.48	4.41	1.64	0.78	0.22	0.00	0.00	0.02	1.19	13.73
1995	1.13	2.67	1.32	10.80	1.41	7.44	0.94	1.83	0.75				
Sum	31.31	84.89	114.21	164.85	145.48	134.03	61.92	12.98	2.45	1.56	1.01	13.59	739.99
N	46	46	46	46	46	46	46	46	46	45	45	45	45
Mean	0.68	1.85	2.48	3.58	3.16	2.91	1.35	0.28	0.05	0.03	0.02	0.30	16.44
Max	3.65	5.76	7.20	13.18	9.92	17.06	5.82	2.25	0.75	0.73	0.44	4.20	37.15
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.87
STD	0.88	1.52	1.98	2.97	2.67	3.08	1.54	0.49	0.13	0.14	0.07	0.70	7.32

**Precipitation Data, In Inches**

STATION NAME: SPENCER RANCH  
 LOCATION: LOPEZ LAKE  
 GAGE NO: 127.1  
 ELEVATION: 510.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 31 SOUTH  
 RANGE: 14 EAST  
 SECTION: 22F

LONGITUDE: 35-12-27  
 LATITUDE: 120-26-49  
 RECORD BEGAN: 1951

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1951	2.50	5.50	2.90	3.30	1.80	1.80	2.30	0.20	0.00	0.00	0.00	0.00	20.30
1952	1.00	2.80	9.50	15.20	1.90	8.20	1.60	0.20	0.00	0.00	0.00	0.00	40.40
1953	0.00	3.50	8.00	3.80	0.00	2.10	3.00	3.70	0.00	0.00	0.00	0.00	24.10
1954	0.00	2.50	0.80	6.70	3.70	6.10	1.00	0.50	0.20	0.00	0.00	0.00	21.50
1955	0.00	2.20	2.50	6.00	2.80	0.10	1.80	1.50	0.00	0.00	0.00	0.00	16.90
1956	0.00	2.30	12.60	7.10	1.30	0.30	3.70	1.50	0.00	0.00	0.00	0.00	28.80
1957	1.00	0.00	1.00	6.30	2.50	1.60	3.10	2.60	0.20	0.00	0.00	1.80	20.10
1958	2.80	0.70	5.50	5.20	8.20	9.80	8.90	0.20	0.00	0.00	0.00	0.00	41.30
1959	0.00	0.10	0.60	4.10	4.90	0.00	1.40	0.00	0.00	0.00	0.00	1.40	12.50
1960	0.00	0.00	0.60	4.40	8.00	2.30	3.20	0.00	0.00	0.00	0.00	0.00	18.50
1961	0.90	6.30	2.40	2.50	0.20	1.90	0.30	0.00	0.00	0.00	0.00	0.00	14.50
1962	0.00	5.20	0.00	6.40	14.50	2.40	0.00	0.00	0.00	0.00	0.00	0.00	28.50
1963	1.90	0.00	0.00	0.00	8.80	2.40	5.20	0.50	0.00	0.00	0.00	0.30	19.10
1964	1.60	5.40	0.20	2.20	0.00	4.40	0.00	0.30	0.40	0.00	0.00	0.00	14.50
1965	2.50	5.10	5.60	3.80	0.00	3.10	3.20	0.00	0.00	0.00	0.00	0.00	23.30
1966	0.00	9.00	5.50	2.00	1.20	0.00	0.20	0.00	0.00	0.00	0.00	0.90	18.80
1967	0.00	4.00	10.00	5.10	0.90	4.60	5.70	0.20	0.20	0.00	0.00	1.14	31.84
1968	0.00	3.61	3.16	1.60	1.45	3.41	1.87	0.25	0.00	0.00	0.00	0.00	15.35
1969	3.30	2.22	3.95	21.33	11.51	1.27	2.98	0.00	0.09	0.00	0.00	0.00	46.65
1970	0.90	1.00	1.50	7.80	5.10	1.60	0.00	0.00	0.00	0.00	0.00	0.00	17.90
1971	0.00	8.30	5.10	2.40	0.10	1.50	1.70	0.00	0.00	0.00	0.00	0.00	19.10
1972	0.00	1.70	6.90	0.80	0.80	0.00	0.90	0.30	0.00	0.00	0.00	0.00	11.40
1973	2.00	5.60	2.90	7.50	10.10	5.20	0.00	0.00	0.00	0.00	0.00	0.00	33.30
1974	1.10	5.60	4.90	8.40	0.30	7.80	2.30	0.00	0.00	0.00	0.00	0.00	30.40
1975	1.50	0.70	4.00	0.10	4.50	4.10	1.30	0.00	0.00	0.00	0.00	0.00	16.20
1976	2.05	0.10	0.30	0.00	3.90	3.30	1.10	0.00	0.00	0.00	1.60	1.60	13.95
1977	1.00	0.90	2.50	1.20	0.10	1.60	0.00	2.20	0.00	0.00	0.00	0.00	9.50
1978	0.00	0.80	8.50	6.60	11.80	6.80	3.30	0.00	0.00	0.00	0.00	1.50	39.30
1979	0.00	2.20	2.00	5.20	6.70	5.40	0.00	0.00	0.00	0.00	0.00	0.00	21.50
1980	1.50	1.20	2.70	11.70	11.60	2.60	1.00	0.70	0.00	0.00	0.00	0.00	33.00
1981	0.00	0.00	1.30	5.10	2.60	10.60	0.40	0.00	0.00	0.00	0.00	0.00	20.00
1982	1.50	1.20	3.50	5.00	0.80	6.80	5.50	0.00	0.00	0.00	0.00	0.65	24.95
1983	3.50	8.26	3.51	7.46	7.44	6.45	2.23	0.24	0.00	0.00	0.85	0.00	39.94
1984	1.51	4.87	8.07	0.00	0.80	0.75	0.47	0.00	0.00	0.00	0.00	0.00	16.47
1985	0.50	2.10	1.35	2.35	4.60	3.44	0.24	0.00	0.00				
1986													
1987										0.00	0.00	0.00	
1988	2.65	0.95	4.40	2.00	3.50	0.00	4.00	0.00	0.00	0.00	0.00	0.00	17.50
1989	0.00	2.40	8.43	0.60	2.00	2.75	0.45	0.00	0.00	0.00	0.00	1.80	18.43
1990	1.60	0.55	0.00	3.45	2.35	0.65	0.30	1.10	0.00	0.00	0.00	0.00	10.00
1991	0.00	0.50	0.90	1.10	3.05	16.00	0.20	0.00	0.00				
Sum	38.81	109.36	147.57	185.79	155.80	143.12	74.84	16.19	1.09	0.00	2.45	11.09	849.78
N	39	39	39	39	39	39	39	39	39	38	38	38	37
Mean	1.00	2.80	3.78	4.76	3.99	3.67	1.92	0.42	0.03	0.00	0.06	0.29	22.97
Max	3.50	9.00	12.60	21.33	14.50	16.00	8.90	3.70	0.40	0.00	1.60	1.80	46.65
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.50
STD	1.06	2.51	3.18	4.21	3.90	3.40	1.96	0.81	0.08	0.00	0.29	0.58	9.50



**Precipitation Data, In Inches**

STATION NAME: PEROZZI RANCH  
 LOCATION: SAN LUIS OBISPO  
 GAGE NO: 129.0  
 ELEVATION: 470.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 31 SOUTH  
 RANGE: 13 EAST  
 SECTION: 6G

LONGITUDE: 35-15-40  
 LATITUDE: 120-37-20  
 RECORD BEGAN: 1952

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1952	1.03	2.41	8.43	8.98	0.98	6.88	0.96	0.00	0.00	0.08	0.00	0.00	29.75
1953	0.00	3.47	6.83	3.17	0.00	1.26	2.79	0.00	0.01	0.00	0.00	0.00	17.53
1954	0.00	4.20	0.50	5.62	3.24	5.04	1.66	0.14	0.00	0.00	0.00	0.00	20.40
1955													
1956													
1957	0.83	0.00	0.63	2.53	3.70	1.02	2.79	2.40	0.25	0.00	0.00	0.00	14.15
1958	1.54	0.75	4.76	3.55	8.04	9.86	4.86	0.27	0.00	0.00	0.00	1.30	34.93
1959	0.00	0.42	0.25	2.94	5.58	0.04	0.88	0.07	0.00	0.00	0.00	0.69	10.87
1960	0.00	0.00	0.82	4.50	7.32	1.70	2.49	0.07	0.00	0.00	0.00	0.00	16.90
1961	0.35	3.53	1.78	2.56	0.36	2.28	0.34	0.16	0.00	0.00	0.00	0.00	11.36
1962	0.00	3.82	1.51	3.52	12.69	1.87	0.22	0.00	0.10	0.00	0.00	0.00	23.73
1963	1.39	0.05	2.31	4.65	4.68	4.28	3.52	0.41	0.06	0.00	0.00	0.22	21.57
1964	2.05	4.68	0.13	2.12	0.10	3.48	0.07	1.28	0.22	0.00	0.11	0.00	14.24
1965	1.48	4.08	4.71	3.36	0.53	3.05	3.58	0.00	0.00	0.07	0.00	0.00	20.86
1966	0.01	7.77	3.75	1.88	1.08	0.24	0.60	0.00	0.00	0.00	0.00	1.13	16.46
1967	0.00	3.92	6.95	5.22	0.61	5.76	6.47	0.40	0.29	0.00	0.00	1.29	30.91
1968	0.00	3.88	2.17	1.89	1.59	2.79	1.10	0.00	0.00	0.00	0.00	0.00	13.42
1969	2.96	2.25	3.73	18.92	11.59	1.18	3.02	0.00	0.00	0.00	0.00	0.16	43.81
1970	0.40	1.07	1.43	5.84	2.47	1.65	0.08	0.00	0.00	0.00	0.00	0.00	12.94
1971	0.17	6.02	7.81	1.78	0.26	0.52	1.49	1.08	0.00	0.00	0.00	0.00	19.13
1972	0.00	1.59	6.22	1.09	0.77	0.00	1.02	0.00	0.00	0.00	0.00	0.00	10.69
1973	2.41	5.35	1.96	10.17	8.03	5.02	0.00	0.00	0.00	0.00	0.00	0.08	33.02
1974	2.64	3.68	4.30	8.31	0.31	8.38	3.12	0.00	0.06	0.00	0.00	0.00	30.80
1975	1.83	0.96	4.09	0.27	7.76	5.01	1.61	0.00	0.00	0.00	0.00	0.06	21.59
1976	2.18	0.29	0.11	0.06	5.15	1.18	1.50	0.00	0.00	0.00	1.07	3.79	15.33
1977	0.37	0.72	2.30	1.66	0.10	1.58	0.02	2.92	0.00	0.00	0.00	0.03	9.70
1978	0.05	0.42	8.95	10.47	11.20	9.00	6.12	0.00	0.00	0.00	0.00	1.19	47.40
1979	0.00	2.51	1.58	4.40	5.46	4.13	0.32	0.00	0.00	0.00	0.00	0.00	18.40
1980	1.03	0.98	2.27	9.72	9.03	2.99	0.91	0.51	0.00	0.38	0.00	0.00	27.82
1981	0.00	0.04	1.57	5.37	2.27	8.60	0.55	0.00	0.00	0.00	0.00	0.00	18.40
1982	1.67	2.67	1.53	5.02	1.78	6.49	6.37	0.06	0.18	0.00	0.15	0.40	26.32
1983	1.83	6.31	6.40	9.19	10.52	8.34	2.39	0.45	0.00	0.00	0.76	1.19	47.38
1984	1.41	4.18	6.64	0.25	0.83	0.75	0.66	0.00	0.00	0.00	0.05	0.00	14.77
1985	1.03	3.74	3.89	0.80	1.86	3.16	0.20	0.00	0.00	0.00	0.00	0.09	14.77
1986	1.14	3.91	2.00	2.33	9.15	7.13	0.19	0.00	0.00	0.06	1.23	0.00	27.14
1987	0.00	0.37	1.64	3.75	2.60	4.60	0.36	0.00	0.00	0.00	0.00	0.00	13.32
1988	2.45	1.19	3.07	2.53	3.00	0.70	2.65	0.11	0.12	0.00	0.00	0.00	15.82
1989	0.00	2.05	6.93	0.89	1.74	2.41	0.58	0.13	0.00	0.00	0.00	1.44	16.17
1990	1.35	0.55	0.02	2.77	2.68	0.52	0.52	1.29	0.00	0.00	0.00	0.55	10.25
1991	0.00	0.40	0.72	0.81	2.38	12.99	0.40	0.00	0.62	0.00	0.06	0.00	18.38
1992	0.57	0.45	4.37	2.82	9.10	2.33	0.05	0.00	0.00	0.54	0.00	0.00	20.23
1993	1.52	0.00	6.20	8.98	7.38	4.19	0.22	0.22	0.16	0.00	0.00	0.00	28.87
1994	0.52	2.34	1.55	2.81	5.51	1.46	1.58	1.10	0.00	0.00	0.00	2.15	19.02
1995	1.58	2.57	1.24	15.05	2.12	14.13	1.25	1.18	0.71	0.00	0.00	0.00	39.83

*For 1952-95 Water Years*

Sum	37.79	99.59	138.05	192.55	175.55	167.99	69.51	14.25	2.78	1.13	3.43	15.76	918.38
N	42	42	42	42	42	42	42	42	42	42	42	42	42
Mean	0.90	2.37	3.29	4.58	4.18	4.00	1.66	0.34	0.07	0.03	0.08	0.38	21.87
Mean for 1984-95													
Water Years*	0.96	1.81	3.19	3.65	4.03	4.53	0.72	0.34	0.13	0.05	0.11	0.35	19.88
Max	2.96	7.77	8.95	18.92	12.69	14.13	6.47	2.92	0.71	0.54	1.23	3.79	47.40
Min	0.00	0.00	0.02	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.70

\*Hydrologic base period for this study

**Precipitation Data, In Inches**

STATION NAME: PEROZZI RANCH  
 LOCATION: SAN LUIS OBISPO  
 GAGE NO: 129.0  
 ELEVATION: 470.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 31 SOUTH  
 RANGE: 13 EAST  
 SECTION: 6G

LONGITUDE: 35-15-40  
 LATITUDE: 120-37-20  
 RECORD BEGAN: 1952

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
STD	0.89	1.98	2.52	4.00	3.68	3.44	1.75	0.65	0.15	0.10	0.27	0.75	9.86
1996	0.02	0.45	3.30	4.08	10.38	1.65	1.51	0.95	0.00	0.07	0.00	0.00	22.41
1997	2.71	4.81	12.47	12.90	0.46	0.00	0.00	0.00	0.00	0.08	0.04	0.00	33.47
1998	0.10	5.79	4.56	5.91	15.82	4.06	3.36	3.24	0.07	0.00	0.00	0.40	43.31
1999	0.28	1.64	0.91	3.48	2.14	4.48	2.24	0.00	0.00	0.00	0.00	0.14	15.31
2000	0.00	1.70	0.00	3.98	10.89	1.54	3.30	0.17	0.44	0	0	0.03	22.05

*For 1952-2000 Water Years*

Sum	40.90	113.98	159.29	222.90	215.24	179.72	79.92	18.61	3.29	1.28	3.47	16.33	1054.93
N	47	47	47	47	47	47	47	47	47	47	47	47	47
Mean	0.87	2.43	3.39	4.74	4.58	3.82	1.70	0.40	0.07	0.03	0.07	0.35	22.45
Max	2.96	7.77	12.47	18.92	15.82	14.13	6.47	3.24	0.71	0.54	1.23	3.79	47.40
Min	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.70
STD	0.91	1.99	2.80	3.97	4.12	3.34	1.71	0.75	0.16	0.10	0.25	0.72	10.01

**Precipitation Data, In Inches**

STATION NAME: A. B. CUNNINGHAM  
 LOCATION: OAK PARK  
 GAGE NO: 141.1  
 ELEVATION: 180.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 8R

LONGITUDE: 35-09-06  
 LATITUDE: 120-35-47  
 RECORD BEGAN: 1954

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1954	0.00	3.46	0.35	5.71	2.40	4.58	1.25	0.00	0.00	0.00	0.00	0.00	17.75
1955	0.00	1.92	2.04	4.93	2.42	0.20	3.10	0.61	0.00	0.00	0.00	0.00	15.22
1956	0.00	3.26	6.70	5.58	1.30	0.00	2.49	0.89	0.00	0.00	0.00	0.00	20.22
1957	0.55	0.00	0.65	3.78	3.12	0.70	2.08	1.95	0.00	0.00	0.00	0.00	12.83
1958	1.89	0.23	3.23	3.95	8.60	8.81	6.07	0.25	0.00	0.00	0.00	1.58	34.61
1959	0.00	0.17	0.40	2.92	5.08	0.00	0.40	0.07	0.00	0.00	0.00	0.75	9.79
1960	0.00	0.00	0.55	4.03	6.02	1.22	2.48	0.00	0.00	0.03	0.00	0.00	14.33
1961	1.15	4.34	1.48	1.60	0.17	1.55	0.77	0.10	0.00	0.00	0.00	0.00	11.16
1962	0.00	2.48	1.27	2.84	11.18	1.56	0.09	0.00	0.08	0.00	0.00	0.00	19.50
1963	0.82	1.52	0.00	1.80	4.33	3.61	4.36	0.21	0.05	0.00	0.00	0.18	16.88
1964	2.16	2.90	0.25	1.40	0.10	2.85	0.00	0.00	0.30	0.00	0.00	0.00	9.96
1965	1.80	2.67	4.41	3.76	0.70	2.83	4.53	0.00	0.00	0.00	0.00	0.00	20.70
1966	0.00	7.64	4.18	1.91	1.89	0.15	0.00	0.00	0.00	0.00	0.00	0.88	16.65
1967	0.00	3.04	5.80	4.65	0.51	3.98	6.02	0.30	0.07	0.00	0.00	0.85	25.22
1968	0.00	3.26	2.10	1.33	1.67	2.83	1.30	0.00	0.00	0.00	0.00	0.00	12.49
1969	0.60	4.60	3.63	17.57	7.85	1.05	3.15	0.00	0.00	0.00	0.00	0.00	38.45
1970	1.48	1.72	2.58	5.80	2.45	2.75	0.00	0.00	0.00	0.00	0.00	0.00	16.78
1971	0.21	8.85	8.31	1.98	0.12	1.35	1.40	1.50	0.00	0.00	0.00	0.00	23.72
1972	0.25	1.83	8.13	0.62	1.07	0.00	0.35	0.00	0.00	0.00	0.00	0.00	12.25
1973	2.10	8.99	2.13	11.58	11.60	6.90	0.00	0.00	0.00	0.00	0.00	0.10	43.40
1974	1.10	5.56	1.67	7.60	0.26	6.54	1.48	0.00	0.00	0.00	0.00	0.00	24.21
1975	1.57	0.55	3.92	0.70	4.02	2.79	1.32	0.00	0.00	0.00	0.00	0.00	14.87
1976	1.58	0.20	0.18	0.00	3.60	1.67	0.62	0.00	0.05	0.00	1.41	3.20	12.51
1977	0.12	0.62	1.70	1.47	0.25	1.92	0.02	2.06	0.00	0.01	0.00	0.10	8.27
1978	0.02	0.49	6.69	6.70	9.24	5.97	3.83	0.00	0.05	0.00	0.00	1.31	34.30
1979	0.00	1.54	0.45	4.77	3.32	4.53	0.00	0.00	0.00	0.00	0.00	0.15	14.76
1980	1.20	0.60	2.32	6.77	6.46	2.90	0.78	0.51	0.00	0.23	0.00	0.00	21.77
1981	0.00	0.00	1.34	4.15	2.73	6.67	0.48	0.06	0.00	0.00	0.00	0.00	15.43
1982	0.72	2.33	2.47	3.42	1.75	7.17	3.28	0.00	0.10	0.00	0.20	0.58	22.02
1983	1.28	4.75	2.22	7.53	11.41	7.93	3.09	0.13	0.00	0.00	0.68	1.80	40.82
1984	0.30	3.71	5.62	0.15	0.58	1.13	0.40	0.00	0.00	0.07	0.01	0.20	12.17
1985	1.55	3.57	3.39	1.70	1.75	2.52	0.02	0.00	0.00	0.02	0.00	0.10	14.62
1986	0.45	3.91	1.12	1.98	6.64	6.31	0.00	0.37	0.00	0.10	0.00	2.62	23.50
1987	0.01	0.27	1.88	2.63	2.44	5.07	0.52	0.00	0.02	0.00	0.00	0.00	12.84
1988	2.37	1.25	3.89	1.84	3.48	0.20	3.32	0.11	0.21	0.00	0.00	0.00	16.67
1989	0.00	2.09	7.69	1.10	1.38	2.10	0.19	0.00	0.00	0.00	0.00	0.40	14.95
1990	0.90	0.40	0.00	2.03	2.00	0.31	0.35	0.90	0.06	0.00	0.00	1.15	8.10
1991	0.00	0.40	0.40	1.15	2.45	12.04	0.45	0.00	0.37	0.00	0.05	0.00	17.31
1992	0.55	0.74	3.91	3.05	9.78	3.29	0.05	0.00	0.00	0.75	0.00	0.00	22.12
1993	0.90	0.00	4.31	8.03	7.83	5.23	0.35	0.30	0.25	0.00	0.00	0.00	27.20
1994	0.80	2.62	1.58	2.72	4.09	1.60	2.65	0.90	0.00	0.00	0.00	1.10	18.06
1995	1.33	2.35	1.68	11.54	1.90	11.80	1.03	2.43	0.70	0.00	0.00	0.00	34.76

*For 1954-95 Water Years*

Sum	29.76	100.83	116.62	168.77	159.94	146.61	64.07	13.65	2.31	1.21	2.35	17.05	823.17
N	42	42	42	42	42	42	42	42	42	42	42	42	42
Mean	0.71	2.40	2.78	4.02	3.81	3.49	1.53	0.33	0.06	0.03	0.06	0.41	19.60
Mean for 1984-95													
Water Years*	0.76	1.78	2.96	3.16	3.69	4.30	0.78	0.42	0.13	0.08	0.01	0.46	18.53
Max	2.37	8.99	8.31	17.57	11.60	12.04	6.07	2.43	0.70	0.75	1.41	3.20	43.40
Min	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.10
STD	0.73	2.27	2.29	3.45	3.33	3.04	1.67	0.60	0.13	0.12	0.24	0.74	8.77

\*Hydrologic base period for this study

**Precipitation Data, In Inches**

STATION NAME: A. B. CUNNINGHAM  
 LOCATION: OAK PARK  
 GAGE NO: 141.1  
 ELEVATION: 180.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 8R

LONGITUDE: 35-09-06  
 LATITUDE: 120-35-47  
 RECORD BEGAN: 1954

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1996	0.00	0.60	2.37	5.19	9.22	1.79	1.20	0.68	0.00	0.00	0.00	0.00	21.05
1997	2.68	5.85	9.32	8.29	0.12	0.00	0.00	0.00	0.00	0.15	0.00	0.00	26.41
1998	0.05	6.29	4.50	5.90	14.38	4.56	3.60	3.24	0.00	0.00	0.00	0.27	42.79
1999	0.00	2.48	1.12	3.63	2.31	5.10	2.78	0.00	0.00	0.00	0.00	0.00	17.42
2000	0.00	1.13	0.00	3.44	9.70	2.15	3.53	0.25	0.22	0.00	0.00	0.05	20.47

*For 1954-2000 Water Years*

Sum	32.49	117.18	133.93	195.22	195.67	160.21	75.18	17.82	2.53	1.36	2.35	17.37	951.31
N	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00
Mean	0.69	2.49	2.85	4.15	4.16	3.41	1.60	0.38	0.05	0.03	0.05	0.37	20.24
Max	2.68	8.99	9.32	17.57	14.38	12.04	6.07	3.24	0.70	0.75	1.41	3.20	43.40
Min	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.10
STD	0.78	2.32	2.45	3.37	3.77	2.98	1.68	0.72	0.13	0.12	0.23	0.71	9.09

**Precipitation Data, In Inches**

STATION NAME: WASTEWATER PLANT  
 LOCATION: SAN LUIS OBISPO  
 GAGE NO: 145.1  
 ELEVATION: 130.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 31 SOUTH  
 RANGE: 12 EAST  
 SECTION: 3K

LONGITUDE: 35-15-16  
 LATITUDE: 120-41-24  
 RECORD BEGAN: 1955

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1955	0.00	3.09	2.37	5.06	1.82	0.11	1.10	0.48	0.00	0.00	0.00	0.00	14.03
1956	0.00	2.16	12.44	8.64	0.09	0.00	2.28	1.72	0.00	0.00	0.00	0.00	27.33
1957	0.81	0.00	0.70	4.80	4.56	0.47	2.50	2.01	0.10	0.00	0.00	0.00	15.95
1958	1.97	0.08	4.07	4.81	8.16	10.12	4.35	0.20	0.00	0.00	0.00	0.98	34.74
1959	0.00	0.45	0.22	3.66	5.77	0.00	0.65	0.05	0.00	0.00	0.00	0.65	11.45
1960	0.00	0.00	0.65	5.00	8.89	1.25	2.80	0.00	0.00	0.01	0.00	0.00	18.60
1961	0.20	4.38	1.72	2.61	0.00	1.36	0.00	0.00	0.00	0.00	0.00	0.00	10.27
1962	0.00	4.67	1.87	4.80	14.52	2.61	0.15	0.00	0.00	0.00	0.00	0.00	28.62
1963	1.25	0.00	2.92	3.93	5.13	5.73	4.95	0.33	0.03	0.00	0.00	0.14	24.41
1964	1.86	4.16	0.15	2.15	0.08	3.63	0.00	0.75	0.30	0.00	0.00	0.00	13.08
1965	1.58	3.73	6.42	4.70	0.70	2.61	4.30	0.00	0.00	0.00	0.00	0.00	24.04
1966	0.00	9.43	3.86	2.44	0.70	0.20	0.00	0.00	0.00	0.00	0.00	1.10	17.73
1967	0.00	4.92	10.12	7.52	0.51	8.75	6.64	0.20	0.13	0.00	0.00	0.73	39.52
1968	0.00	8.20	2.76	2.77	1.55	3.15	1.47	0.03	0.00	0.00	0.00	0.00	19.93
1969	1.15	2.03	4.07	22.16	12.36	0.60	2.95	0.00	0.00	0.00	0.00	0.00	45.32
1970	0.37	0.85	1.32	6.33	2.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.59
1971	0.00	5.58	6.82	1.98	0.37	0.07	1.30	0.77	0.00	0.00	0.00	0.05	16.94
1972	0.00	1.54	5.62	1.06	0.70	0.00	1.30	0.07	0.00	0.00	0.00	0.00	10.29
1973	2.62	5.04	1.25	11.50	7.61	4.01	0.00	0.00	0.00	0.00	0.00	0.05	32.08
1974	1.46	5.41	3.18	6.96	0.25	8.08	1.84	0.00	0.00	0.00	0.00	0.00	27.18
1975	1.19	0.75	3.75	0.30	6.53	5.00	1.39	0.00	0.00	0.00	0.00	0.04	18.95
1976	0.30	0.30	0.16	0.07	5.35	1.61	0.69	0.00	0.05	0.00	0.99	3.12	12.64
1977	0.07	1.15	2.12	1.81	0.09	1.97	0.05	2.98	0.00	0.00	0.00	0.00	10.24
1978	0.08	0.26	9.34	9.66	12.91	6.47	4.67	0.00	0.00	0.00	0.00	1.16	44.55
1979	0.00	2.34	1.57	3.72	5.30	3.27	0.25	0.08	0.00	0.00	0.00	0.03	16.56
1980	0.60	0.90	5.15	9.08	9.55	2.12	0.81	0.38	0.00	0.34	0.00	0.00	28.93
1981	0.00	0.04	2.92	6.43	2.24	8.49	0.25	0.00	0.00	0.00	0.00	0.00	20.37
1982	1.92	2.52	1.09	5.57	1.41	7.38	8.39	0.00	0.10	0.00	0.16	0.75	29.29
1983	1.59	5.47	4.90	10.40	12.91	7.42	3.82	0.00	0.00	0.00	0.00	0.00	46.51
1984													
1985	1.14	4.79	3.71	1.08	2.58	3.18	0.35	0.00	0.00	0.00	0.00	0.00	16.83
1986	1.00	4.23	2.35	2.68	11.92	8.60	0.18	0.00	0.02	0.00	0.00	0.78	31.76
1987	0.00	0.37	1.53	3.15	3.08	4.47	0.35	0.05	0.00	0.00	0.00	0.00	13.00
1988													
1989	0.00	2.42	6.97	1.02	1.90	1.77	0.58	0.00	0.00	0.00	0.00	1.74	16.40
1990	1.25	0.60	0.03	2.47	2.71	0.41	0.10	1.17	0.00	0.00	0.00	0.53	9.27
1991	0.00	0.21	0.66	0.64	2.98	12.52	0.79	0.00	0.50	0.00	0.00	0.00	18.30
1992	0.50	0.33	2.43	2.63	8.31	0.00	0.00	0.00	0.00				
Sum	22.91	92.40	121.21	173.59	166.26	127.43	61.25	11.27	1.23	0.35	1.15	11.85	776.70
N	36	36	36	36	36	36	36	36	36	35	35	35	35
Mean	0.64	2.57	3.37	4.82	4.62	3.54	1.70	0.31	0.03	0.01	0.03	0.34	22.19
Max	2.62	9.43	12.44	22.16	14.52	12.52	8.39	2.98	0.50	0.34	0.99	3.12	46.51
Min	0.00	0.00	0.03	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.27
STD	0.75	2.44	2.91	4.13	4.32	3.40	2.05	0.66	0.10	0.06	0.17	0.65	10.48

**Precipitation Data, In Inches**

STATION NAME: BATES PLUMBING  
 LOCATION: ARROYO GRANDE  
 GAGE NO: 147.0  
 ELEVATION: 28.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 30F

LONGITUDE: 35-06-52  
 LATITUDE: 120-37-29  
 RECORD BEGAN: 1956

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1956	0.00	2.66	7.08	4.32	0.94	0.00	1.98	0.66	0.00	0.00	0.00	0.00	17.64
1957	0.57	0.00	0.62	3.18	2.35	1.32	1.76	1.26	0.26	0.00	0.00	0.09	11.41
1958	1.61	0.70	3.01	3.43	5.03	6.62	5.17	0.21	0.00	0.00	0.00	1.23	27.01
1959	0.00	0.00	0.71	3.41	4.31	0.00	0.48	0.00	0.00	0.00	0.00	0.69	9.60
1960	0.00	0.00	0.73	4.29	5.59	1.23	3.09	0.00	0.00	0.00	0.00	0.00	14.93
1961	0.68	5.16	1.52	1.26	0.39	1.39	0.39	0.13	0.00	0.00	0.00	0.00	10.92
1962	0.00	2.03	1.49	3.67	10.17	1.66	0.09	0.00	0.00	0.00	0.00	0.00	19.11
1963	0.79	0.00	1.17	0.89	4.46	3.71	3.69	0.31	0.04	0.00	0.00	0.39	15.45
1964	2.19	2.66	0.22	1.84	0.05	1.87	1.01	0.61	0.21	0.00	0.00	0.23	10.89
1965	1.76	2.45	3.09	2.27	0.26	1.89	3.05	0.00	0.00	0.00	0.00	0.00	14.77
1966	0.06	6.40	3.23	1.83	1.19	0.18	0.09	0.00	0.00	0.15	0.00	0.80	13.93
1967	1.64	2.44	3.54	3.56	0.63	3.66	5.20	0.27	0.13	0.00	0.00	0.83	21.90
1968	0.00	3.74	1.77	0.97	1.37	2.83	0.93	0.09	0.00	0.00	0.00	0.00	11.70
1969	2.97	1.89	2.78	10.10	7.53	1.20	2.35	0.06	0.06	0.11	0.00	0.16	29.21
1970	0.00	1.72	1.32	3.78	1.33	2.86	0.09	0.00	0.00	0.00	0.00	0.00	11.10
1971	0.00	4.91	4.45	1.86	0.15	0.70	0.97	1.25	0.00	0.00	0.00	0.08	14.37
1972	0.30	1.33	4.96	0.58	0.38	0.00	0.73	0.00	0.00	0.07	0.00	0.06	8.41
1973	1.56	4.95	1.69	6.24	5.49	4.00	0.00	0.00	0.10	0.00	0.00	0.09	24.12
1974	0.76	3.03	2.97	7.04	0.19	5.85	1.66	0.00	0.00	0.09	0.00	0.00	21.59
1975	1.48	0.58	3.39	0.25	3.55	2.58	1.09	0.02	0.00	0.00	0.00	0.00	12.94
1976	1.18	0.23	0.13	0.00	3.74	1.61	0.67	0.00	0.00	0.00	1.11	3.13	11.80
1977	0.25	0.84	1.54	0.97	0.11	1.82	0.06	2.34	0.00	0.00	0.04	0.08	8.05
1978	0.08	0.27	6.56	6.50	6.51	6.65	4.77	0.00	0.00	0.00	0.00	0.04	31.38
1979	0.00	1.91	1.49	5.58	4.39	3.24	0.38	0.05	0.00	0.00	0.00	0.07	17.11
1980	0.80	0.31	2.33	6.41	6.11	2.48	0.70	0.35	0.00	0.26	0.00	0.00	19.75
1981	0.00	0.04	1.22	3.59	2.66	7.58	0.33	0.00	0.00	0.00	0.00	0.00	15.42
1982	0.73	1.65	1.30	3.01	1.27	5.58	3.83	0.00	0.10	0.00	0.05	0.38	17.90
1983	1.26	2.90	1.77	6.51	7.95	7.01	1.76	0.66	0.00	0.00	0.29	0.00	30.11
1984	2.10	2.30	4.98	0.00	0.46	0.62	0.61	0.00	0.00	0.00	0.06	0.00	11.13
1985	0.66	2.87	2.56	0.91	0.95	1.29	0.00	0.00	0.00	0.00	0.00	0.07	9.31
1986	0.37	3.35	1.01	1.47	5.60	5.14	0.06	0.00	0.00	0.01	0.00	0.96	17.97
1987	0.00	0.35	1.38	2.17	1.83	5.10	0.26	0.00	0.06	0.00	0.00	0.00	11.15
1988	2.06	0.87	3.52	1.38	2.77	0.13	2.59	0.12	0.00	0.00	0.00	0.00	13.44
1989	0.00	1.22	6.25	0.72	0.83	1.25	0.19	0.09	0.00	0.00	0.00	1.40	11.95
1990	0.57	0.35	0.00	2.26	1.77	0.30	0.29	0.78	0.04	0.00	0.00	0.67	7.03
1991	0.22	0.00	0.43	0.98	2.38	10.58	0.35	0.00	0.13	0.00	0.06	0.00	15.13
1992	0.38	0.73	3.49	2.61	9.00	2.61	0.03	0.00	0.00	0.45	0.00	0.00	19.30
1993	0.43	0.00	3.94	6.68	6.17	4.69	0.09	0.19	0.09	0.00	0.00	0.00	22.28
1994	0.39	2.16	1.14	2.39	3.65	1.55	1.18	0.70	0.00	0.00	0.02	0.87	14.05
1995	1.02	1.84	1.20	10.87	1.50	10.19	0.79	2.41	0.63	0.00	0.00	0.00	30.45

*For 1956-95 Water Years*

Sum	28.87	70.84	95.98	129.78	125.01	122.97	52.76	12.56	1.85	1.14	1.63	12.32	655.71
N	40	40	40	40	40	40	40	40	40	40	40	40	40
Mean	0.72	1.77	2.40	3.24	3.13	3.07	1.32	0.31	0.05	0.03	0.04	0.31	16.39
Mean for 1984-95													
Water Years*	0.68	1.34	2.49	2.70	3.08	3.62	0.54	0.36	0.08	0.04	0.01	0.33	15.27
Max	2.97	6.40	7.08	10.87	10.17	10.58	5.20	2.41	0.63	0.45	1.11	3.13	31.38
Min	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.03
STD	0.76	1.62	1.77	2.60	2.70	2.70	1.48	0.58	0.11	0.08	0.18	0.59	6.45
1996	0.00	0.48	1.26	2.67	7.07	1.24	0.72	0.36	0.00	0.35	0.00	0.00	14.15
1997	2.24	4.03	6.50	6.30	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.12

\*Hydrologic base period for this study

**Precipitation Data, In Inches**

STATION NAME: BATES PLUMBING  
 LOCATION: ARROYO GRANDE  
 GAGE NO: 147.0  
 ELEVATION: 28.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 30F

LONGITUDE: 35-06-52  
 LATITUDE: 120-37-29  
 RECORD BEGAN: 1956

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1998	0.00	3.83	4.89	3.87	11.16	4.52	2.44	1.94	0.00	0.00	0.00	0.16	32.81
1999	0.28	1.15	1.83	2.04	1.23	4.51	1.99	0.00	0.00	0.00	0.00	0.00	13.03
2000	0.00	1.31	0.03	2.35	8.88	1.37	3.21	0.05	0.11	0.00	0.00	0.04	17.35

*For 1956-2000 Water Years*

Sum	31.39	81.64	110.49	147.01	153.40	134.61	61.12	14.91	1.96	1.49	1.63	12.52	752.17
N	45	45	45	45	45	45	45	45	45	45	45	45	45
Mean	0.70	1.81	2.46	3.27	3.41	2.99	1.36	0.33	0.04	0.03	0.04	0.28	16.71
Max	2.97	6.40	7.08	10.87	11.16	10.58	5.20	2.41	0.63	0.45	1.11	3.13	32.81
Min	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.03
STD	0.78	1.61	1.85	2.51	3.04	2.63	1.46	0.60	0.11	0.09	0.17	0.56	6.59

STATION NAME: NIPOMO CDF  
 LOCATION: NIPOMO  
 GAGE NO: 151.1  
 ELEVATION: 335.0 FEET

BASE & MERIDIAN: SAN BERNARDINO  
 TOWNSHIP: 11 NORTH  
 RANGE: 34 WEST  
 SECTION: 8N

LONGITUDE: 35-02-26  
 LATITUDE: 120-29-10  
 RECORD BEGAN: 1959

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1959	0.00	0.00	0.50	2.58	4.85	0.01	0.00	0.00	0.00	0.00	0.00	0.00	7.94
1960	0.00	0.00	0.11	3.74	6.11	1.26	3.14	0.03	0.00	0.00	0.00	0.00	14.39
1961	0.00	1.10	1.58	1.20	0.16	1.32	0.32	0.00	0.00	0.00	0.00	0.00	5.68
1962	0.00	0.00	1.83	3.86	11.73	1.44	0.06	0.00	0.00	0.00	0.00	0.00	18.92
1963	0.00	0.00	0.00	1.45	3.41	3.90	3.06	0.00	0.00	0.00	0.00	0.30	12.12
1964	1.90	3.45	0.25	1.75	0.10	2.43	0.57	0.36	0.00	0.04	0.00	0.21	11.06
1965	1.80	2.35	2.54	2.15	0.76	1.63	0.78	0.00	0.00	0.00	0.00	0.00	12.01
1966	0.02	6.16	3.19	1.05	0.59	0.00	0.11	0.00	0.00	0.00	0.00	0.05	11.17
1967	0.00	2.45	3.16	3.12	0.43	3.04	3.63	0.34	0.03	0.00	0.00	0.02	16.22
1968	0.00	2.89	1.66	1.06	1.33	2.72	0.63	0.00	0.00	0.00	0.00	0.00	10.29
1969	2.44	0.88	2.33	11.08	7.67	0.56	1.88	0.02	0.00	0.14	0.00	0.03	27.03
1970	0.35	0.89	0.85	4.08	3.27	1.90	0.04	0.00	0.00	0.00	0.00	0.00	11.38
1971	0.21	4.48	4.45	1.35	0.14	0.58	0.80	0.99	0.00	0.00	0.00	0.18	13.18
1972	0.27	1.23	2.93	0.54	0.56	0.00	0.53	0.00	0.00	0.00	0.00	0.01	6.07
1973	0.83	4.31	2.20	5.85	5.24	3.54	0.03	0.00	0.00	0.00	0.00	0.00	22.00
1974	0.99	2.73	2.56	5.80	5.35	1.66	0.00	0.00	0.00	0.00	0.00	0.00	19.09
1975	1.16	0.46	4.97	0.18	4.44	4.06	2.02	0.00	0.00	0.00	0.00	0.00	17.29
1976	1.23	0.21	0.15	0.00	3.71	2.18	0.96	0.00	0.06	0.00	1.28	3.67	13.45
1977	1.62	1.22	1.57	1.65	0.09	1.61	0.04	2.35	0.00	0.00	0.00	0.08	10.23
1978	0.01	0.26	5.44	6.60	7.68	5.97	3.25	0.00	0.00	0.00	0.00	1.45	30.66
1979	0.00	1.11	1.19	4.03	4.54	4.36	0.35	0.04	0.00	0.00	0.00	0.18	15.80
1980	1.13	0.58	1.22	4.75	5.31	2.10	0.99	0.44	0.00	0.05	0.00	0.00	16.57
1981	0.00	0.00	1.70	3.55	2.65	5.14	0.35	0.00	0.00	0.00	0.00	0.00	13.39
1982	0.98	2.24	1.97	3.08	1.11	4.66	3.93	0.00	0.01	0.00	0.05	0.55	18.58
1983	1.27	4.17	2.13	6.30	9.18	6.80	2.50	0.23	0.00	0.00	0.49	0.14	33.21
1984	2.00	3.31	3.09	0.09	0.50	0.84	0.84	0.55	0.00	0.00	0.00	0.00	11.22
1985	1.04	2.25	2.82	1.09	2.15	2.02	0.76	0.00	0.00	0.00	0.00	0.07	12.20
1986	0.10	2.39	0.55	1.73	4.64	5.44	0.68	0.00	0.00	0.05	0.00	1.27	16.85
1987	0.00	0.23	1.66	2.12	2.52	4.41	0.27	0.04	0.04	0.00	0.00	0.00	11.29
1988	1.97	0.94	2.51	1.99	2.17	0.25	2.67	0.14	0.02	0.00	0.00	0.00	12.66
1989	0.00	1.38	6.10	0.49	1.31	1.44	0.41	0.18	0.00	0.00	0.00	0.91	12.22

### Precipitation Data, In Inches

STATION NAME: NIPOMO CDF  
LOCATION: NIPOMO  
GAGE NO: 151.1  
ELEVATION: 335.0 FEET

BASE & MERIDIAN: SAN BERNARDINO  
TOWNSHIP: 11 NORTH  
RANGE: 34 WEST  
SECTION: 8N

LONGITUDE: 35-02-26  
LATITUDE: 120-29-10  
RECORD BEGAN: 1959

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1990	0.56	0.48	0.06	2.24	1.61	0.46	0.32	0.86	0.00	0.00	0.00	0.53	7.12
1991	0.00	0.33	0.39	0.03	1.31	10.77	0.23	0.00	0.00	0.00	0.00	0.00	13.06
1992	0.41	0.40	3.85	2.11	6.62	1.70	0.00	0.00	0.00	0.57	0.00	0.00	15.66
1993	1.11	0.00	2.98	6.46	4.51	4.81	0.10	0.00	0.20	0.00	0.00	0.00	20.17
1994	0.20	1.10	1.25	2.80	3.52	1.34	0.90	0.66	0.00	0.00	0.00	0.38	12.15
1995	0.63	1.59	0.52	11.35	1.03	8.64	0.54	0.57	0.60	0.00	0.00	0.00	25.47
<i>For 1959-95 Water Years</i>													
Sum	24.23	57.57	76.26	113.30	122.30	104.99	37.69	7.80	0.96	0.85	1.82	10.03	557.80
N	37	37	37	37	37	37	37	37	37	37	37	37	37
Mean	0.65	1.56	2.06	3.06	3.31	2.84	1.02	0.21	0.03	0.02	0.05	0.27	15.08
<i>Mean for 1984-95 Water Years*</i>													
	0.67	1.20	2.15	2.71	2.66	3.51	0.64	0.25	0.07	0.05	0.00	0.26	14.17
Max	2.44	6.16	6.10	11.35	11.73	10.77	3.93	2.35	0.60	0.57	1.28	3.67	33.21
Min	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.68
STD	0.72	1.52	1.52	2.70	2.80	2.43	1.15	0.44	0.10	0.09	0.22	0.66	6.19
1996	0.00	0.40	1.59	3.05	9.53	1.46	0.51	0.00	0.00	0.00	0.00	0.00	16.54
1997	2.20	4.51	7.16	6.37	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.23	20.50
1998	0.00	5.17	3.69	5.00	10.71	4.09	2.81	2.05	0.00	0.00	0.00	0.15	33.67
1999	0.15	1.80	0.85	2.21	1.35	4.78	1.84	0.00	0.00	0.00	0.00	0.00	12.98
2000	0.00	0.00	1.46	2.02	7.13	2.06	1.65	0.00	0.15				
<i>For 1959-2000 Water Years</i>													
Sum	26.58	69.45	91.01	131.95	151.02	117.38	44.50	9.85	1.11	0.88	1.82	10.41	641.49
N	42	42	42	42	42	42	42	42	42	41	41	41	41
Mean	0.63	1.65	2.17	3.14	3.60	2.79	1.06	0.23	0.03	0.02	0.04	0.25	15.65
Max	2.44	6.16	7.16	11.35	11.73	10.77	3.93	2.35	0.60	0.57	1.28	3.67	33.67
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.68
STD	0.74	1.62	1.66	2.61	3.12	2.37	1.14	0.51	0.10	0.09	0.21	0.63	6.60

\*Hydrologic base period for this study



**Precipitation Data, In Inches**

STATION NAME: BETTENCOURT  
 LOCATION: LOPEZ CANYON  
 GAGE NO: 153.0  
 ELEVATION: 745.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 31 SOUTH  
 RANGE: 14 EAST  
 SECTION: 5F

LONGITUDE: 35-15-15  
 LATITUDE: 120-29-56  
 RECORD BEGAN: 1960

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1960	0.00	6.45	0.57	7.97	10.49	2.94	3.41	0.00	0.00	0.00	0.00	0.00	31.83
1961	0.83	6.47	4.09	3.71	0.34	2.43	2.70	0.00	0.00	0.00	0.00	0.00	20.57
1962	0.00	11.00	4.05	6.97	20.08	3.89	0.50	0.00	0.00	0.00	0.00	0.00	46.49
1963	2.40	0.00	1.46	0.00	6.40	4.79	5.16	0.93	0.16	0.00	0.00	0.32	21.62
1964	1.94	6.92	0.34	3.78	0.05	5.58	0.36	1.13	0.64	0.00	0.18	0.00	20.92
1965	1.87	6.70	7.16	8.18	1.21	4.50	5.44	0.00	0.00	0.00	0.00	0.00	35.06
1966	0.00	13.25	5.92	1.91	1.53	0.36	0.20	0.00	0.00	0.08	0.00	1.70	24.95
1967	0.00	6.73	20.46	9.72	1.20	10.69	10.54	0.42	0.20	0.00	0.00	1.35	61.31
1968	0.00	4.05	3.83	3.43	1.19	5.39	2.24	0.22	0.00	0.00	0.00	0.00	20.35
1969	3.79	3.52	6.43	37.15	12.00	2.26	1.60	0.00	0.00	0.00	0.00	0.16	66.91
1970	1.08	1.48	2.37	9.94	6.85	0.11	0.15	0.00	0.10	0.00	0.00	0.00	22.08
1971	0.51	11.37	9.35	3.74	0.16	2.22	2.04	1.90	0.00	0.00	0.00	0.13	31.42
1972	0.35	2.93	9.63	1.64	1.51	0.00	1.50	0.30	0.20	0.01	0.00	0.06	18.13
1973	3.47	8.73	3.89	12.30	13.80	6.99	0.05	0.00	0.00	0.00	0.00	0.00	49.23
1974	2.79	9.86	2.07	10.84	0.45	9.77	2.28	0.00	0.00	0.00	0.00	0.00	38.06
1975	2.00	1.65	5.88	0.05	9.35	6.93	3.53	0.00	0.00	0.00	0.00	0.00	29.39
1976	3.92	0.35	0.44	0.00	5.46	4.80	1.61	0.00	0.08	0.00	2.19	3.78	22.63
1977	0.36	0.88	3.30	2.87	0.46	2.19	0.00	3.56	0.00	0.00	0.00	0.00	13.62
1978	0.10	1.09	13.19	15.00	13.49	12.13	7.73	0.10	0.00	0.00	0.00	0.40	63.23
1979	0.00	1.45	3.20	5.89	9.95	7.45	0.50	0.00	0.00				
1980										0.00	0.00	0.00	
1981	0.00	0.00	2.73	9.60	2.57	11.60	1.25	0.00	0.00	0.00	0.00	0.00	27.75
1982	1.85	3.45	3.90	8.39	2.16	11.81	13.61	0.00	0.00	0.00	0.10	0.60	45.87
1983	3.02	14.51	8.50	12.43	14.65	11.01	5.42	0.35	0.00	0.00	0.94	0.20	71.03
1984	3.05	9.18	10.00	0.20	1.04	2.47	0.86	0.00	0.00	0.00	0.00	0.00	26.80
1985	2.72	5.69	4.09	1.40	3.96	6.34	1.10	0.00	0.00	0.00	0.00	0.00	25.30
1986	0.00	2.10	7.85	3.49	25.07	10.15	0.17	0.00	0.00	0.00	0.00	1.85	50.68
1987	0.00	0.45	1.20	4.50	4.40	6.25	0.57	0.00	0.00				
Sum	36.05	140.26	145.90	185.10	169.82	155.05	74.52	8.91	1.38	0.09	3.41	10.55	885.23
N	27	27	27	27	27	27	27	27	27	26	26	26	25
Mean	1.34	5.19	5.40	6.86	6.29	5.74	2.76	0.33	0.05	0.00	0.13	0.41	35.41
Max	3.92	14.51	20.46	37.15	25.07	12.13	13.61	3.56	0.64	0.08	2.19	3.78	71.03
Min	0.00	0.00	0.34	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.62
STD	1.36	4.23	4.38	7.28	6.57	3.72	3.30	0.77	0.13	0.02	0.45	0.85	16.42

STATION NAME: CSA NO 13  
 LOCATION: OCEANO  
 GAGE NO: 157.1  
 ELEVATION: 80.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 32D

LONGITUDE: 35-06-16  
 LATITUDE: 120-36-35  
 RECORD BEGAN: 1960

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1960	0.00	0.00	0.00	4.08	5.42	1.03	2.56	0.00	0.00	0.00	0.00	0.00	13.09
1961	0.51	5.78	1.29	1.08	0.34	0.94	0.29	0.08	0.00	0.00	0.03	0.00	10.34
1962	0.00	1.70	1.46	3.57	9.49	1.16	0.05	0.08	0.00	0.00	0.00	0.00	17.51
1963	0.60	0.00	1.15	0.71	4.20	3.46	3.25	0.21	0.00	0.00	0.00	0.35	13.93
1964	1.98	2.38	0.30	1.70	0.00	1.82	1.05	0.61	0.30	0.00	0.00	0.20	10.34
1965	1.97	2.07	3.25	2.11	0.29	1.79	3.45	0.00	0.00	0.00	0.00	0.00	14.93
1966	0.00	6.38	3.43	1.99	1.14	0.15	0.06	0.00	0.00	0.00	0.00	1.55	14.70
1967	0.00	3.06	4.58	3.56	0.59	4.34	4.85	0.32	0.03	0.00	0.00	0.34	21.67

**Precipitation Data, In Inches**

STATION NAME: CSA NO 13  
 LOCATION: OCEANO  
 GAGE NO: 157.1  
 ELEVATION: 80.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 32D

LONGITUDE: 35-06-16  
 LATITUDE: 120-36-35  
 RECORD BEGAN: 1960

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1968	0.00	3.94	1.81	0.81	1.22	1.33	0.81	0.00	0.00	0.00	0.00	0.00	9.92
1969	2.77	1.63	2.67	13.15	9.17	0.89	1.80	0.00	0.00	0.10	0.00	0.00	32.18
1970	0.45	1.20	1.33	3.76	1.09	2.87	0.04	0.00	0.00	0.00	0.00	0.00	10.74
1971	0.11	3.90	4.43	1.85	0.11	0.55	0.91	1.06	0.00	0.00	0.00	0.10	13.02
1972	0.14	1.25	4.71	0.57	0.59	0.00	0.54	0.00	0.00	0.00	0.00	0.04	7.84
1973	1.36	5.03	1.70	6.14	5.11	3.64	0.00	0.01	0.00	0.00	0.00	0.07	23.06
1974	0.70	3.85	1.32	6.41	0.16	6.04	1.42	0.00	0.00	0.03	0.00	0.00	19.93
1975	1.59	0.42	2.68	0.46	3.29	2.65	1.06	0.04	0.00	0.00	0.00	0.03	12.22
1976	1.38	0.12	0.15	0.00	4.43	0.98	0.59	0.00	0.03	0.00	1.10	3.22	12.00
1977	0.00	0.72	1.39	0.81	0.13	1.52	0.14	1.94	0.00	0.00	0.00	0.02	6.67
1978	0.00	0.33	7.25	6.34	7.25	6.37	4.75	0.00	0.00	0.00	0.00	1.29	33.58
1979	0.00	2.02	1.03	3.67	4.55	2.65	0.38	0.05	0.00	0.00	0.00	0.13	14.48
1980	0.83	0.56	2.27	5.82	5.73	1.79	0.44	0.33	0.00	0.20	0.00	0.00	17.97
1981	0.00	0.00	2.20	2.99	1.73	7.70	0.45	0.00	0.00	0.00	0.00	0.00	15.07
1982	0.84	1.13	1.29	3.08	1.34	5.49	4.52	0.00	0.14	0.00	0.00	0.06	17.89
1983	1.26	2.49	1.55	6.08	8.10	6.31	2.16	0.29	0.00	0.00	0.49	0.00	28.73
1984	2.36	2.44	4.07	0.00	0.30	0.62	0.24	0.00	0.00	0.00	0.00	0.00	10.03
1985	0.63	2.42	2.87	1.08	1.10	1.31	0.10	0.00	0.00	0.00	0.12	0.30	9.93
1986	0.25	3.79	1.00	1.34	5.46	5.59	0.30	0.00	0.00	0.10	0.00	1.10	18.93
1987	0.00	0.40	1.62	2.13	2.38	4.97	0.30	0.10	0.00	0.00	0.00	0.00	11.90
1988	1.93	1.14	3.40	1.60	2.63	0.70	3.15	0.10	0.07	0.00	0.00	0.00	14.72
1989	0.00	1.44	5.11	0.90	0.90	1.55	0.37	0.12	0.00	0.00	0.00	1.30	11.69
1990	0.70	0.40	0.00	2.15	1.46	0.10	0.36	0.95	0.00	0.00	0.00	0.60	6.72
1991	0.00	0.22	0.30	0.82	2.02	9.86	0.38	0.00	0.13	0.00	0.00	0.00	13.73
1992	0.50	0.60	3.19	2.10	8.18	2.86	0.04	0.00	0.00	0.67	0.00	0.00	18.14
1993	0.58	0.00	3.82	5.89	5.93	3.86	0.10	0.23	0.00	0.00	0.00	0.00	20.41
1994	0.39	1.85	1.18	2.35	3.36	1.48	1.10	0.63	0.00	0.00	0.08	0.74	13.16
1995	1.28	1.48	1.08	10.47	1.40	9.57	0.88	2.37	0.64	0.00	0.00	0.00	29.17
<i>For 1960-95 Water Years</i>													
Sum	25.11	66.14	80.88	111.57	110.59	107.94	42.89	9.52	1.34	1.10	1.82	11.44	570.34
N	36	36	36	36	36	36	36	36	36	36	36	36	36
Mean	0.70	1.84	2.25	3.10	3.07	3.00	1.19	0.26	0.04	0.03	0.05	0.32	15.84
<i>Mean for 1984-95 Water Years*</i>													
	0.72	1.35	2.30	2.57	2.93	3.54	0.61	0.38	0.07	0.06	0.02	0.34	14.88
Max	2.77	6.38	7.25	13.15	9.49	9.86	4.85	2.37	0.64	0.67	1.10	3.22	33.58
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.67
STD	0.77	1.67	1.63	2.86	2.82	2.60	1.41	0.53	0.12	0.12	0.20	0.65	6.65
1996	0.00	0.45	2.13	2.50	7.21	1.53	0.83	0.45	0.00	0.00	0.00	0.00	15.10
1997	2.16	4.17	6.88	6.28	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	19.57
1998	0.00	5.48	3.80	4.39	11.23	3.87	3.37	2.46	0.00	0.00	0.00	0.13	34.73
1999	0.30	2.32	0.86	2.56	1.59	4.82	2.30	0.00	0.00	0.00	0.00	0.00	14.75
2000	0.00	1.42	0.03	2.65	8.39	1.17	3.05	0.15	0.20	0.00	0.00	0.14	17.20

*For 1960-2000 Water Years*

Sum	27.57	79.98	94.58	129.95	139.01	119.33	52.44	12.58	1.54	1.18	1.82	11.71	671.69
N	41	41	41	41	41	41	41	41	41	41	41	41	41
Mean	0.67	1.95	2.31	3.17	3.39	2.91	1.28	0.31	0.04	0.03	0.04	0.29	16.38
Max	2.77	6.38	7.25	13.15	11.23	9.86	4.85	2.46	0.64	0.67	1.10	3.22	34.73
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.67
STD	0.78	1.71	1.76	2.73	3.14	2.53	1.42	0.61	0.11	0.11	0.18	0.61	6.91

\*Hydrologic base period for this study

**Precipitation Data, In Inches**

STATION NAME: PENNY RANCH  
 LOCATION: NIPOMO 4.5 N  
 GAGE NO: 175.1  
 ELEVATION: 520.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 14 EAST  
 SECTION: 33C

LONGITUDE: 35-06-11  
 LATITUDE: 120-28-56  
 RECORD BEGAN: 1966

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1966	0.00	1.19	4.20	1.98	1.68	0.00	0.20	0.00	0.00	0.15	0.00	1.12	10.52
1967	0.00	5.20	12.95	6.72	0.75	0.12	7.36	0.00	0.00	0.00	0.00	0.55	33.65
1968	0.00	2.65	2.20	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.70
1969	3.05	1.97	2.37	4.30	12.35	1.10	3.10	0.00	0.00				
1970													
1971													
1972													
1973													
1974													
1975													
1976													
1977										0.00	0.00	1.53	
1978	0.00	2.25	1.20	11.00	10.17	8.05	5.25	0.00	0.00				
1979										0.00	0.00	0.25	
1980	1.65	1.15	2.30	8.25	7.25	0.00	0.50	0.00	0.00				
1981										0.00	0.00	0.00	
1982	1.25	3.93	2.25	4.60	1.85	6.10	2.45	0.05	0.15	0.00	0.00	0.72	23.35
1983	1.90	5.20	3.40	6.30	9.09	8.50	2.80	0.10	0.00	0.00	0.50	0.43	38.22
1984	2.50	5.27	3.03	0.15	0.40	1.10	0.65	0.00	0.00	0.00	0.00	0.00	13.10
1985	1.55	3.50	2.55	1.30	2.45	2.30	0.05	0.00	0.00	0.01	0.00	0.00	13.71
1986	0.50	2.35	1.30	2.35	7.50	7.25	0.90	0.00	0.00	0.15	0.00	0.20	22.50
1987	0.00	0.30	2.15	2.45						0.00	0.00	0.00	
1988	2.86	1.27	3.77	2.48	2.62	0.84	4.07	0.16	0.00	0.00	0.00	0.00	18.07
1989	0.00	2.67	7.58	1.04	1.59	2.60	0.44	0.05	0.00	0.00	0.00	1.11	17.08
1990	1.25	0.60	0.01	3.36	2.87	0.55	0.27	1.25	0.00	0.00	0.00	1.02	11.18
1991	0.00	0.40	0.85	1.24	2.27	14.63	0.31	0.00	0.26	0.00	0.00	0.00	19.96
1992	0.00	0.00	5.29	2.97	9.40	3.62	0.00	0.00	0.00	1.15	0.00	0.00	22.43
1993	0.30	0.00	5.10	8.73	7.93	4.72	0.00	0.00	0.00	0.48	0.00	0.00	27.26
1994	0.20	2.10	2.05	2.80	4.52	1.57	1.25	1.23	0.00	0.00	0.00	0.45	16.17
1995	1.10	2.14	0.85	14.35	2.66	11.60	0.31	1.10	1.00	0.00	0.00	0.00	35.11
<i>For 1966-95 Water Years</i>													
Sum	17.01	42.00	64.55	73.87	84.69	63.05	29.60	2.84	0.41	1.94	0.50	7.38	293.90
N	19	19	19	19	18	18	18	18	18	19	19	19	15
Mean	0.90	2.21	3.40	3.89	4.71	3.50	1.64	0.16	0.02	0.10	0.03	0.39	19.59
<i>Mean for 1984-95 Water Years*</i>													
Max	0.86	1.72	2.88	3.60	4.02	4.62	0.75	0.34	0.11	0.15	0.00	0.23	19.69
Min	3.05	5.27	12.95	11.00	12.35	14.63	7.36	1.25	0.26	1.15	0.50	1.53	38.22
STD	0.00	0.00	0.01	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.70
	1.04	1.70	2.83	2.90	3.77	3.90	2.06	0.38	0.07	0.27	0.11	0.48	8.37
1996	0.00	0.59	0.36	4.71	10.02	1.89	1.45	0.94	0.00	0.00	0.00	0.00	19.96
1997	3.35	5.38	8.90	10.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.05
1998	0.00	5.73	4.08	6.24	16.03	4.29	4.18	4.85	0.07				

*For 1966-98 Water Years*

Sum	21.46	55.84	78.74	109.59	113.40	80.83	35.54	9.73	1.48	1.94	0.50	7.38	377.02
N	23	23	23	23	22	22	22	22	22	22	22	22	18
Mean	0.93	2.43	3.42	4.76	5.15	3.67	1.62	0.44	0.07	0.09	0.02	0.34	20.95
Max	3.35	5.73	12.95	14.35	16.03	14.63	7.36	4.85	1.00	1.15	0.50	1.53	38.22
Min	0.00	0.00	0.01	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.70
STD	1.11	1.85	2.94	3.61	4.45	4.01	1.99	1.05	0.21	0.25	0.10	0.46	8.60

\*Hydrologic base period for this study

□ Appendix B

**Precipitation Data, In Inches**

STATION NAME: CORPORATE YARD  
 LOCATION: ARROYO GRANDE  
 GAGE NO: 177.1  
 ELEVATION: 85.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 29F

LONGITUDE: 35-06-47  
 LATITUDE: 120-36-25  
 RECORD BEGAN: 1967

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1967	0.08	2.73	2.36	2.67	1.20	3.29	3.63	0.25	0.00	0.00	0.00	0.25	16.46
1968	0.00	2.06	1.35	0.44	0.92	2.23	0.80	0.00	0.00	0.00	0.00	0.00	7.80
1969	2.40	1.80	2.60	10.05	6.55	0.97	1.73	0.00	0.00	0.00	0.00	0.00	26.10
1970	0.65	1.00	1.10	3.14	2.30	1.32	0.00	0.00	0.00	0.00	0.00	0.00	9.51
1971	0.20	4.30	4.20	1.20	0.00	1.89	1.04	0.25	0.00	0.00	0.00	0.00	13.08
1972	0.15	1.40	4.00	0.50	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.05	6.55
1973	1.40	4.55	1.55	6.20	4.96	3.57	0.00	0.00	0.00	0.00	0.00	0.09	22.32
1974	0.80	4.05	2.90	6.15	0.00	6.25	0.95	0.00	0.00	0.00	0.00	0.00	21.10
1975	1.39	0.47	3.70	0.02	4.00	2.23	1.15	0.00	0.00	0.00	0.00	0.02	12.98
1976	1.10	0.15	0.17	0.10	3.34	1.17	0.65	0.00	0.05	0.00	1.15	2.90	10.78
1977	0.00	0.70	1.45	0.69	0.15	1.86	0.00	2.15	0.00	0.00	0.00	0.06	7.06
1978	0.03	0.24	5.92	6.63	7.54	4.42	4.78	0.00	0.00	0.00	0.00	1.27	30.83
1979	0.00	2.28	1.26	4.30	4.71	3.02	0.40	0.00	0.00	0.00	0.00	0.11	16.08
1980	0.86	0.61	1.66	5.48	5.53	2.21	0.57	0.32	0.00	0.12	0.00	0.12	17.48
1981	0.00	0.00	1.70	3.27	2.15	7.56	0.04	0.00	0.00				
1982													
1983													
1984													
1985													
1986													
1987													
1988													
1989													
1990													
1991										0.00	0.00	0.00	0.00
1992	0.40	0.52	2.83	2.33	8.18	1.81	0.00	0.00	0.00	0.57	0.00	0.00	16.64
1993	0.10	0.50	3.82	5.40	6.16	4.44	0.11	0.25	0.05	0.00	0.00	0.00	20.83
1994	0.37	2.00	1.21	2.44	3.54	1.61	1.20	0.75	0.00	0.00	0.00	0.56	13.68
1995	1.35	1.93	1.13	10.33	1.45	7.40	0.00	0.00	0.00	0.00	0.00	0.00	23.59

*For 1967-95 Water Years*

Sum	11.28	31.29	44.91	71.34	63.13	57.25	17.05	3.97	0.10	0.69	1.15	5.43	292.87
N	19	19	19	19	19	19	19	19	19	19	19	19	19
Mean	0.59	1.65	2.36	3.75	3.32	3.01	0.90	0.21	0.01	0.04	0.06	0.29	15.41
Max	2.40	4.55	5.92	10.33	8.18	7.56	4.78	2.15	0.05	0.57	1.15	2.90	30.83
Min	0.00	0.00	0.17	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
STD	0.66	1.39	1.40	3.07	2.58	2.08	1.26	0.49	0.02	0.13	0.26	0.68	7.43

1996	0.00	0.50	1.25	3.05	7.80	1.60	1.15	0.45	0.00	0.00	0.00	0.00	15.80
1997	2.10	4.65	7.45	3.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.65
1998	0.00	5.40	4.10	4.70	9.90	4.00	1.90	2.60	0.00	0.00	0.00	0.15	32.75
1999	0.30	3.00	0.70	3.05	1.35	4.45	2.20	0.00	0.00	0.00	0.00	0.00	15.05
2000	0.00	1.55	0.00	2.80	9.60	1.60	3.15	0.00	0.00	0.00	0.00	0.50	19.20

*For 1967-2000 Water Years*

Sum	13.68	46.39	58.41	88.39	91.78	68.90	25.45	7.02	0.10	0.69	1.15	6.08	393.32
N	24	24	24	24	24	24	24	24	24	24	24	24	24
Mean	0.57	1.93	2.43	3.68	3.82	2.87	1.06	0.29	0.00	0.03	0.05	0.25	17.10
Max	2.40	5.40	7.45	10.33	9.90	7.56	4.78	2.60	0.05	0.57	1.15	2.90	32.75
Min	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.55
STD	0.69	1.59	1.77	2.75	3.15	2.02	1.26	0.66	0.01	0.12	0.23	0.62	6.81

**Precipitation Data, In Inches**

STATION NAME: LOPEZ DAM  
 LOCATION: LOPEZ RESERVOIR  
 GAGE NO: 178.1  
 ELEVATION: 547.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 31 SOUTH  
 RANGE: 14 EAST  
 SECTION: 33E

LONGITUDE: 35-11-12  
 LATITUDE: 120-29-03  
 RECORD BEGAN: 1968

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1968	0.00	3.12	2.73	1.38	1.25	2.94	1.62	0.22	0.00	0.00	0.00	0.00	13.26
1969	2.85	1.92	3.41	18.39	9.93	1.10	2.57	0.00	0.08	0.00	0.00	0.10	40.35
1970	0.83	0.75	1.27	5.97	1.91	3.01	0.00	0.00	0.00	0.00	0.00	0.00	13.74
1971	0.25	5.89	5.49	1.80	0.13	1.13	1.10	0.86	0.00	0.00	0.00	0.05	16.70
1972	0.18	1.42	5.72	0.47	0.65	0.00	0.60	0.51	0.00	0.00	0.00	0.03	9.58
1973	1.42	4.89	1.85	6.63	7.69	4.23	0.00	0.00	0.02	0.00	0.00	0.10	26.83
1974	0.64	4.39	4.04	7.16	0.20	7.00	2.03	0.00	0.00	0.00	0.00	0.00	25.46
1975	1.60	0.91	4.64	0.16	4.20	4.61	1.43	0.00	0.00	0.00	0.00	0.00	17.55
1976	1.60	0.32	0.11	0.00	4.19	2.07	0.94	0.00	0.00	0.00	0.70	4.18	14.11
1977	0.70	0.78	1.35	0.95	0.05	1.35	0.00	2.29	0.00	0.00	0.00	0.05	7.52
1978	0.03	0.63	7.93	8.22	7.49	6.21	3.96	0.00	0.03	0.00	0.00	1.25	35.75
1979	0.00	1.82	1.52	4.23	4.19	4.75	0.40	0.00	0.00	0.00	0.00	0.08	16.99
1980	1.17	0.72	2.02	7.82	7.89	2.50	0.78	0.47	0.00	0.10	0.00	0.00	23.47
1981	0.00	0.00	1.15	4.88	1.00	7.30	0.45	0.00	0.00	0.00	0.00	0.00	14.78
1982	0.65	2.10	1.70	3.85	1.70	7.08	5.32	0.00	0.08	0.00	0.79	0.60	23.87
1983	1.55	6.60	2.90	7.09	8.64	8.37	2.62	0.18	0.00	0.00	0.70	0.00	38.65
1984	3.00	4.95	5.14	0.05	0.50	0.85	0.55	0.00	0.00	0.00	0.00	0.00	15.04
1985	1.10	3.24	2.70	0.87	2.02	2.46	0.07	0.00	0.00	0.00	0.05	0.07	12.58
1986	0.50	3.99	1.00	1.95	6.61	7.78	0.35	0.00	0.00	0.00	0.00	1.15	23.33
1987	0.00	0.00	1.33	2.36	2.85	3.70	0.00	0.00	0.00	0.00	0.00	0.00	10.24
1988	2.60	1.36	3.90	2.25	2.22	1.05	3.72	0.10	0.00	0.00	0.00	0.00	17.20
1989	0.00	2.69	6.02	0.75	1.41	1.92	0.30	0.02	0.00	0.00	0.00	0.98	14.09
1990	0.98	0.47	0.12	2.61	2.13	0.33	0.32	1.02	0.00	0.00	0.00	0.46	8.44
1991	0.00	0.50	0.44	0.82	2.24	12.52	0.10	0.00	0.35	0.00	0.04	0.00	17.01
1992	0.80	0.52	4.25	2.53	7.89	2.87	0.00	0.00	0.00	0.80	0.00	0.00	19.66
1993	2.02	0.00	4.01	7.66	8.45	4.63	0.07	0.01	0.49	0.00	0.00	0.00	27.34
1994	0.30	2.04	1.60	2.40	4.60	0.75	1.56	0.70	0.00	0.00	0.03	0.43	14.41
1995	1.95	2.35	1.45	12.95	2.15	11.18	0.62	2.16	0.70	0.00	0.00	0.00	35.51
<i>For 1968-95 Water Years</i>													
Sum	26.72	58.37	79.79	116.20	104.18	113.69	31.48	8.54	1.75	0.90	2.31	9.53	553.46
N	28	28	28	28	28	28	28	28	28	28	28	28	28
Mean	0.95	2.08	2.85	4.15	3.72	4.06	1.12	0.31	0.06	0.03	0.08	0.34	19.77
<i>Mean for 1984-95 Water Years*</i>													
	1.10	1.84	2.66	3.10	3.59	4.17	0.64	0.33	0.13	0.07	0.01	0.26	17.90
Max	3.00	6.60	7.93	18.39	9.93	12.52	5.32	2.29	0.70	0.80	0.79	4.18	40.35
Min	0.00	0.00	0.11	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.52
STD	0.90	1.86	1.97	4.19	3.03	3.23	1.36	0.60	0.16	0.15	0.23	0.82	8.96
1996	0.00	0.75	1.24	3.26	6.59	1.41	0.15	0.00	0.00	0.00	0.00	0.00	13.40
1997	2.51	4.65	7.93	7.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	23.13
1998	0.00	6.06	2.21	5.12	11.06	4.07	3.07	3.15	0.00	0.00	0.00	0.10	34.84
1999	0.23	1.15	0.97	3.11	1.45	3.20	1.30	0.00	0.00	0.00	0.00	0.00	11.41
2000	0.00	1.51	0.00	2.57	8.49	1.68	2.76	0.10	0.20	0.00	0.00	0.02	17.33

*For 1968-2000 Water Years*

Sum	29.46	72.49	92.14	138.20	131.77	124.05	38.76	11.79	1.95	0.90	2.31	9.75	653.57
N	33	33	33	33	33	33	33	33	33	33	33	33	33
Mean	0.89	2.20	2.79	4.19	3.99	3.76	1.17	0.36	0.06	0.03	0.07	0.30	19.81
Max	3.00	6.60	7.93	18.39	11.06	12.52	5.32	3.15	0.70	0.80	0.79	4.18	40.35
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.52
STD	0.92	1.92	2.12	3.93	3.30	3.11	1.35	0.75	0.15	0.14	0.21	0.76	8.88

\*Hydrologic base period for this study

□ Appendix B

### Precipitation Data, In Inches

STATION NAME: TAR SPRINGS USGS  
LOCATION: ARROYO GRANDE 3 ENE  
GAGE NO: 178.2  
ELEVATION: 290.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
TOWNSHIP: 32 SOUTH  
RANGE: 13 EAST  
SECTION: 23H

LONGITUDE: 35-07-56  
LATITUDE: 120-32-30  
RECORD BEGAN: 1969

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1969	2.44	0.91	2.83	10.43	7.30	1.16	2.28	0.06	0.06	0.00	0.00	0.00	27.47
1970	0.53	0.68	0.97	3.67	2.00	1.74	0.00	0.00	0.00	0.00	0.00	0.00	9.59
1971	0.15	4.95	4.64	1.75	0.04	0.76	0.91	1.07	0.00	0.00	0.00	0.00	14.27
1972	0.29	1.29	4.81	0.56	0.37	0.00	0.71	0.00	0.00	0.07	0.00	0.06	8.16
1973	1.18	1.82	4.75	6.57	6.67	4.18	0.00	0.00	0.00	0.00	0.00	0.00	25.17
1974	0.66	3.53	3.07	6.51	0.13	5.70	1.19	0.00	0.00	0.00	0.00	0.00	20.79
1975	1.14	0.33	4.11	0.04	3.92	3.21	1.06	0.00	0.00	0.00	0.00	0.00	13.81
1976	1.29	0.05	0.05	0.00	4.73	0.91	0.49	0.00	0.00				
Sum	7.68	13.56	25.23	29.53	25.16	17.66	6.64	1.13	0.06	0.07	0.00	0.06	119.26
N	8	8	8	8	8	8	8	8	8	7	7	7	7
Mean	0.96	1.70	3.15	3.69	3.15	2.21	0.83	0.14	0.01	0.01	0.00	0.01	17.04
Max	2.44	4.95	4.81	10.43	7.30	5.70	2.28	1.07	0.06	0.07	0.00	0.06	27.47
Min	0.15	0.05	0.05	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.16
STD	0.69	1.60	1.69	3.57	2.75	1.84	0.69	0.35	0.02	0.02	0.00	0.02	6.98

**Precipitation Data, In Inches**

STATION NAME: TREATMENT PLANT  
 LOCATION: LOPEZ TERMINAL RESERVOIR  
 GAGE NO: 179.1  
 ELEVATION: 335.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 1G

LONGITUDE: 35-10-13  
 LATITUDE: 120-31-57  
 RECORD BEGAN: 1970

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1970	0.40	1.09	0.80	4.83	0.66	3.08	0.11	0.00	0.00	0.00	0.00	0.00	10.97
1971	0.25	5.31	4.99	1.46	0.15	0.96	1.01	1.00	0.00	0.00	0.00	0.04	15.17
1972	0.44	1.39	5.02	0.44	0.40	0.00	0.55	0.08	0.11	0.00	0.00	0.03	8.46
1973	1.21	4.62	1.97	5.20	6.20	4.39	0.00	0.03	0.02	0.00	0.00	0.10	23.74
1974	0.83	3.55	3.09	7.21	0.17	6.16	1.29	0.00	0.00	0.05	0.00	0.00	22.35
1975	1.40	0.79	2.61	0.27	3.78	3.03	1.06	0.00	0.00	0.00	0.00	0.00	12.94
1976	1.05	0.28	0.24	0.00	2.96	1.89	0.85	0.00	0.00	0.00	1.20	3.54	12.01
1977	0.26	0.69	1.21	0.94	0.08	1.57	0.04	3.03	0.00	0.00	0.03	0.05	7.90
1978	0.01	0.31	6.15	5.89	6.65	5.80	3.80	0.00	0.02	0.00	0.00	1.19	29.82
1979	0.00	2.19	1.44	3.67	3.70	4.55	0.51	0.05	0.00	0.00	0.00	0.09	16.20
1980	1.21	0.61	1.89	6.37	5.88	2.29	0.78	0.44	0.00	0.22	0.00	0.00	19.69
1981	0.02	0.00	0.82	4.09	2.28	7.17	0.44	0.02	0.00	0.00	0.00	0.00	14.84
1982	0.64	1.78	1.62	3.37	1.49	6.06	4.85	0.02	0.13	0.00	0.00	0.63	20.59
1983	1.35	4.67	2.31	5.59	9.15	6.57	2.00	0.53	0.00	0.00	0.89	0.07	33.13
1984	2.10	3.17	4.39	0.14	0.49	0.90	0.51	0.00	0.00	0.00	0.00	0.00	11.70
1985	1.56	3.10	2.41	1.21	1.97	2.57	0.03	0.00	0.00	0.00	0.02	0.07	12.94
1986	0.38	3.48	0.67	1.31	4.30	6.65	0.40	0.00	0.00	0.04	0.00	1.40	18.63
1987	0.00	0.20	1.70	2.40	2.42	3.85	0.06	0.03	0.00	0.00	0.00	0.00	10.66
1988	2.30	1.28	3.59	1.72	2.27	0.26	3.10	0.10	0.07	0.00	0.00	0.00	14.69
1989	0.00	2.13	6.79	0.91	1.18	1.52	0.20	0.07	0.00	0.00	0.00	0.41	13.21
1990	0.91	0.42	0.03	2.07	1.83	0.27	0.31	0.93	0.00	0.00	0.00	0.73	7.50
1991	0.00	0.31	0.69	0.89	1.99	12.92	0.21	0.00	0.26	0.00	0.06	0.00	17.33
1992	0.68	0.54	3.99	3.01	7.73	2.17	0.02	0.00	0.00	0.61	0.00	0.00	18.75
1993	2.11	0.00	4.29	6.87	6.51	4.75	0.12	0.27	0.47	0.00	0.00	0.00	25.39
1994	0.19	2.13	1.46	2.54	3.54	0.81	1.52	0.80	0.00	0.00	0.03	0.97	13.99
1995	2.03	2.27	1.47	10.85	1.85	10.10	0.76	1.69	0.65	0.00	0.00	0.00	31.67
<i>For 1970-95 Water Years</i>													
Sum	21.33	46.31	65.64	83.25	79.63	100.29	24.53	9.09	1.73	0.92	2.23	9.32	444.27
N	26	26	26	26	26	26	26	26	26	26	26	26	26
Mean	0.82	1.78	2.52	3.20	3.06	3.86	0.94	0.35	0.07	0.04	0.09	0.36	17.09
<i>Mean for 1984-95 Water Years*</i>													
1.02	1.59	2.62	2.83	3.01	3.90	0.60	0.32	0.12	0.05	0.01	0.30	16.37	
Max	2.30	5.31	6.79	10.85	9.15	12.92	4.85	3.03	0.65	0.61	1.20	3.54	33.13
Min	0.00	0.00	0.03	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.50
STD	0.74	1.55	1.81	2.67	2.50	3.12	1.21	0.68	0.16	0.12	0.28	0.75	6.95
1996	0.03	0.70	1.88	4.13	9.01	2.05	1.05	0.80	0.00	0.15	0.00	0.03	19.83
1997	3.18	5.01	9.07	9.09	0.15	0.00	0.00	0.00	0.00	0.11	0.06	0.05	26.72
1998	0.00	5.47	3.21	5.28	10.80	5.48	3.80	3.39	0.03	0.00	0.00	0.23	37.69
1999	0.32	2.15	1.20	3.08	1.87	4.16	2.61	0.00	0.01	0.00	0.06	0.00	15.46
2000	0.00	1.68	0.09	3.27	8.65	1.84	3.36	0.12	0.15	0.00	0.00	0.07	19.23
<i>For 1970-2000 Water Years</i>													
Sum	24.86	61.32	81.09	108.10	110.11	113.82	35.35	13.40	1.92	1.18	2.35	9.70	563.20
N	31	31	31	31	31	31	31	31	31	31	31	31	31
Mean	0.80	1.98	2.62	3.49	3.55	3.67	1.14	0.43	0.06	0.04	0.08	0.31	18.17
Max	3.18	5.47	9.07	10.85	10.80	12.92	4.85	3.39	0.65	0.61	1.20	3.54	37.69
Min	0.00	0.00	0.03	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.50
STD	0.84	1.67	2.10	2.68	3.07	2.99	1.32	0.83	0.14	0.12	0.26	0.70	7.52

\*Hydrologic base period for this study

**Precipitation Data, In Inches**

STATION NAME: WASTEWATER PLANT  
 LOCATION: LOPEZ LAKE  
 GAGE NO: 193.0  
 ELEVATION: 530.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 31 SOUTH  
 RANGE: 14 EAST  
 SECTION: 27B

LONGITUDE: 35-12-12  
 LATITUDE: 120-27-32  
 RECORD BEGAN: 1973

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1973	1.69	4.84	2.23	6.75	8.43	4.60	0.00	0.00	0.00	0.00	0.00	0.00	28.54
1974	1.04	5.39	4.22	7.33	0.31	7.07	0.89	0.00	0.00	0.05	0.00	0.00	26.30
1975	2.17	1.04	4.60	0.18	4.74	4.91	1.69	0.00	0.00	0.00	0.00	0.00	19.33
1976	1.73	0.39	0.25	0.02	4.10	2.42	1.20	0.00	0.00	0.00	1.06	4.15	15.32
1977	0.75	0.68	1.72	1.17	0.22	1.50	0.01	2.57	0.00	0.00	0.03	0.03	8.68
1978	0.06	0.71	8.66	7.74	8.55	6.87	3.88	0.00	0.03	0.00	0.00	1.41	37.91
1979	0.00	1.79	1.67	4.87	5.21	5.00	0.47	0.02	0.00	0.00	0.00	0.12	19.15
1980	1.37	1.00	2.16	9.24	3.93	2.96	0.97	0.54	0.00	0.17	0.00	0.00	22.34
1981	0.04	0.00	1.17	5.76	2.62	8.61	0.61	0.00	0.00	0.00	0.00	0.00	18.81
1982	1.08	2.27	2.41	4.68	1.92	7.00	5.76	0.03	0.08	0.00	0.00	0.73	25.96
1983	2.20	6.94	3.32	8.07	9.33	9.14	3.18	0.32	0.00	0.00	0.76	0.07	43.33
1984	2.47	5.73	5.98	0.13	0.79	0.89	0.66	0.00	0.00	0.00	0.00	0.00	16.65
1985	1.64	4.09	2.97	1.16	1.91	3.26	0.13	0.00	0.00	0.00	0.16	0.05	15.37
1986	0.55	4.45	1.18	2.27	7.50	8.26	0.45	0.00	0.00	0.00	0.00	1.04	25.70
1987	0.00	0.35	1.60	2.81	2.76	4.18	0.31	0.02	0.03	0.00	0.00	0.00	12.06
1988	1.48	1.16	3.84	2.35	2.19	0.84	3.68	0.18	0.02	0.00	0.00	0.01	15.75
1989	0.00	3.03	7.13	0.96	1.74	2.40	0.28	0.03	0.00	0.00	0.00	1.15	16.72
1990	1.11	0.50	0.08	3.09	1.79	0.65	0.36	0.96	0.00	0.00	0.00	0.70	9.24
1991	0.00	0.52	0.87	0.89	2.41	13.98	0.20	0.00	0.19	0.00	0.04	0.00	19.10
1992	0.87	0.79	4.30	2.66	9.08	3.18	0.02	0.00	0.02	0.40	0.00	0.00	21.32
1993	1.91	0.00	4.44	8.31	8.91	4.83	0.26	0.17	0.70	0.00	0.00	0.00	29.53
1994	0.45	2.00	1.80	2.51	5.06	1.31	1.67	0.92	0.00	0.00	0.01	0.62	16.35
1995	1.81	2.87	1.47	14.02	2.25	12.01	0.91	1.59	0.78	0.00	0.00	0.00	37.71
<i>For 1973-95 Water Years</i>													
Sum	24.42	50.54	68.07	96.97	95.75	115.87	27.59	7.35	1.85	0.62	2.06	10.08	501.17
N	23	23	23	23	23	23	23	23	23	23	23	23	23
Mean	1.06	2.20	2.96	4.22	4.16	5.04	1.20	0.32	0.08	0.03	0.09	0.44	21.79
<i>Mean for 1984-95 Water Years*</i>													
Max	2.47	6.94	8.66	14.02	9.33	13.98	5.76	2.57	0.78	0.40	1.06	4.15	43.33
Min	0.00	0.00	0.08	0.02	0.22	0.65	0.00	0.00	0.00	0.00	0.00	0.00	8.68
STD	0.80	2.03	2.13	3.56	2.97	3.53	1.48	0.63	0.21	0.09	0.26	0.90	8.82
1996	0.03	0.76	2.45	5.63	9.70	2.88	1.22	0.62	0.00	0.00	0.00	0.00	23.29
1997	3.75	5.28	10.15	11.43	0.26	0.00	0.00	0.00	0.00	0.10	0.00	0.46	31.43
1998	0.11	6.43	3.86	7.03	14.73	5.47	3.40	4.51	0.01	0.00	0.00	0.38	45.93
1999	0.27	2.37	1.83	4.79	2.01	4.08	2.55	0.00	0.00	0.00	0.00	0.00	17.90
2000	0.00	1.67	0.03	3.22	11.85	1.84	3.52	0.24	0.36	0.00	0.00	0.03	22.76
<i>For 1973-2000 Water Years</i>													
Sum	28.58	67.05	86.39	129.07	134.30	130.14	38.28	12.72	2.22	0.72	2.06	10.95	642.48
N	28	28	28	28	28	28	28	28	28	28	28	28	28
Mean	1.02	2.39	3.09	4.61	4.80	4.65	1.37	0.45	0.08	0.03	0.07	0.39	22.95
Max	3.75	6.94	10.15	14.02	14.73	13.98	5.76	4.51	0.78	0.40	1.06	4.15	45.93
Min	0.00	0.00	0.03	0.02	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.68
STD	0.95	2.10	2.44	3.54	3.84	3.40	1.50	0.97	0.20	0.08	0.24	0.83	9.35

\*Hydrologic base period for this study



### Precipitation Data, In Inches

STATION NAME: WASTEWATER PLANT  
LOCATION: OCEANO  
GAGE NO: 194.0  
ELEVATION: 10.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
TOWNSHIP: 32 SOUTH  
RANGE: 13 EAST  
SECTION: 31F

LONGITUDE: 35-06-05  
LATITUDE: 120-37-26  
RECORD BEGAN: 1973

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1973	1.32	4.29	1.46	6.00	4.34	3.45	0.00	0.01	0.00	0.00	0.05	0.05	20.97
1974	0.68	2.66	3.13	6.17	0.13	5.95	1.35	0.00	0.00	0.00	0.00	0.00	20.07
1975	1.25	0.55	3.55	0.20	3.43	2.17	0.92	0.00	0.05	0.00	0.00	0.07	12.19
1976	0.44	0.15	0.17	0.00	3.76	1.56	0.51	0.00	0.02	0.03	0.93	3.46	11.03
1977	0.23	0.72	1.14	1.11	0.09	1.50	0.02	2.20	0.00	0.00	0.00	0.04	7.05
1978	0.05	0.29	5.78	5.89	5.94	6.21	4.09	0.00	0.02	0.00	0.00	1.55	29.82
1979	0.00	1.69	1.32	4.53	3.85	2.39	0.28	0.03	0.00	0.00	0.00	0.20	14.29
1980	0.68	0.55	2.00	5.43	5.59	2.33	0.61	0.31	0.00	0.07	0.08	0.00	17.65
1981	0.06	0.01	2.04	3.24	2.33	7.05	0.37	0.00	0.00	0.00	0.00	0.00	15.10
1982	0.77	1.65	1.46	2.82	1.32	5.31	4.19	0.00	0.00	0.00	0.50	0.46	18.48
1983	1.23	3.30	1.53	6.99	8.06	6.57	7.73	0.50	0.00	0.00	0.41	0.00	36.32
1984	1.78	2.23	4.04	0.02	0.50	0.65	0.33	0.00	0.00	0.00	0.03	0.00	9.58
1985	0.66	2.71	2.70	0.80	1.18	1.31	0.04	0.00	0.00	0.00	0.02	0.08	9.50
1986	0.35	3.21	0.00	0.00	5.08	5.00	0.18	0.00	0.00	0.00	0.00	0.97	14.79
1987	0.00	0.33	1.34	2.15	1.93	4.56	0.00	0.11	0.05				
1988													
1989										0.00	0.00	1.74	
1990	1.25	0.60	0.03	2.47	2.71	0.41	0.10	1.17	0.00	0.00	0.00	0.45	9.19
1991	0.00	0.84	0.45	0.92	1.86	9.16	0.32	0.00	0.09	0.00	0.06	0.00	13.70
1992	0.47	0.37	2.72	1.93	9.48	2.66	0.05	0.00	0.00	0.72	0.00	0.00	18.40
1993	0.50	0.00	2.88	5.54	6.23	2.70	0.10	0.19	0.17				
1994										0.00	0.00	0.05	
1995	0.91	1.69	1.08	8.94	0.51	9.34	0.79	2.10	0.64				
Sum	12.63	27.84	38.82	65.15	68.32	80.28	21.98	6.62	1.04	0.82	2.08	9.12	278.13
N	20	20	20	20	20	20	20	20	20	19	19	19	17
Mean	0.63	1.39	1.94	3.26	3.42	4.01	1.10	0.33	0.05	0.04	0.11	0.48	16.36
Max	1.78	4.29	5.78	8.94	9.48	9.34	7.73	2.20	0.64	0.72	0.93	3.46	36.32
Min	0.00	0.00	0.00	0.00	0.09	0.41	0.00	0.00	0.00	0.00	0.00	0.00	7.05
STD	0.51	1.25	1.43	2.66	2.61	2.63	1.93	0.66	0.14	0.16	0.24	0.87	7.35

**Precipitation Data, In Inches**

STATION NAME: POLICE DEPARTMENT  
 LOCATION: ARROYO GRANDE  
 GAGE NO: 195.1  
 ELEVATION: 115.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 2D

LONGITUDE: 35-07-12  
 LATITUDE: 120-35-26  
 RECORD BEGAN: 1974

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1974	0.77	3.00	2.96	7.09	0.16	5.45	1.70	0.00	0.00	0.00	0.00	0.00	21.13
1975	1.54	0.45	3.68	0.41	3.78	2.68	0.83	0.00	0.00	0.00	0.01	0.01	13.39
1976	1.11	0.15	0.11	0.00	2.64	1.47	0.64	0.00	0.03	0.00	1.03	2.57	9.75
1977	0.10	0.66	1.44	1.03	0.11	1.80	0.00	2.22	0.00	0.00	0.00	0.06	7.42
1978	0.01	0.25	6.36	6.42	6.63	6.23	4.47	0.00	0.00	0.00	0.00	1.25	31.62
1979	0.00	2.35	1.27	3.97	4.34	3.36	0.47	0.04	0.00	0.00	0.00	0.23	16.03
1980	0.98	0.63	2.33	5.87	5.67	1.88	0.51	0.35	0.00	0.11	0.00	0.00	18.33
1981	0.00	0.00	1.79	3.07	2.14	7.57	0.29	0.00	0.00	0.00	0.00	0.00	14.86
1982	0.75	1.64	1.16	3.00	1.40	5.58	4.60	0.00	0.12	0.00	0.08	0.44	18.77
1983	1.21	2.86	2.19	6.13	8.09	7.30	2.15	1.16	0.00	0.00	0.63	0.09	31.81
1984	1.65	3.06	4.49	0.04	0.48	0.67	0.57	0.00	0.00	0.00	0.00	0.01	10.97
1985	0.99	2.88	2.54	0.88	1.17	1.79	0.02	0.00	0.00	0.00	0.00	0.07	10.34
1986	0.35	3.72	0.91	1.36	5.53	5.40	0.31	0.00	0.00	0.00	0.00	1.02	18.60
1987	0.00	0.29	1.50	2.12	2.11	3.78	0.31	0.05	0.00	0.00	0.00	0.00	10.16
1988	1.66	0.96	3.50	1.75	2.19	0.00	2.34	0.08	0.07	0.00	0.00	0.00	12.55
1989	0.00	2.01	5.28	1.12	0.91	1.49	0.15	0.08	0.00				
1990										0.00	0.00	0.60	
1991	0.00	0.20	0.40	0.80	1.70	11.00	0.10	0.00	0.00				
1992													
1993										0.00	0.00	0.00	
1994	0.65	1.10	1.20	1.50	2.60	1.60	0.40	0.00	0.00	0.00	0.00	0.60	9.65
1995	0.30	1.09	0.90							0.00	0.00	0.00	

*For 1974-95 Water Years*

Sum	12.07	27.30	44.01	46.56	51.65	69.05	19.86	3.98	0.22	0.11	1.75	6.95	255.38
N	19	19	19	18	18	18	18	18	18	19	19	19	16
Mean	0.64	1.44	2.32	2.59	2.87	3.84	1.10	0.22	0.01	0.01	0.09	0.37	15.96
Max	1.66	3.72	6.36	7.09	8.09	11.00	4.60	2.22	0.12	0.11	1.03	2.57	31.81
Min	0.00	0.00	0.11	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.42
STD	0.59	1.18	1.65	2.27	2.26	2.84	1.39	0.55	0.03	0.02	0.26	0.63	7.09
1996	0.00	0.48	0.00	3.05	7.45	1.41	0.88	0.53	0.00	0.00	0.00	0.00	13.80
1997	2.30	4.95	7.10	7.63	0.06	0.03	0.00	0.00	0.00	0.07	0.01	0.00	22.15
1998	0.08	2.77	4.35	4.77	7.22	1.57	2.05	1.68	0.00				

*For 1974-98 Water Years*

Sum	14.45	35.50	55.46	62.01	66.38	72.06	22.79	6.19	0.22	0.18	1.76	6.95	291.33
N	22	22	22	21	21	21	21	21	21	21	21	21	18
Mean	0.66	1.61	2.52	2.95	3.16	3.43	1.09	0.29	0.01	0.01	0.08	0.33	16.19
Max	2.30	4.95	7.10	7.63	8.09	11.00	4.60	2.22	0.12	0.11	1.03	2.57	31.81
Min	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.42
STD	0.68	1.36	1.94	2.39	2.56	2.83	1.32	0.61	0.03	0.03	0.25	0.61	6.86

**Precipitation Data, In Inches**

STATION NAME: M. BOLDING - PRINTZ ROAD  
 LOCATION: ARROYO GRANDE 2N  
 GAGE NO: 200.0  
 ELEVATION: 300.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 15E

LONGITUDE: 35-08-30  
 LATITUDE: 120-34-35  
 RECORD BEGAN: 1975

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1975	2.01	0.85	3.90	0.95	5.35	4.57	1.00	0.00	0.00	0.00	0.00	0.00	18.63
1976	1.28	0.21	0.18	0.00	3.87	1.75	0.91	0.00	0.00	0.00	1.33	3.13	12.66
1977	0.17	0.64	1.64	0.69	0.02	1.86	0.00	2.65	0.00	0.00	0.00	0.00	7.67
1978	0.00	0.50	7.15	7.15	7.53	5.62	3.99	0.00	0.00	0.00	0.00	1.31	33.25
1979	0.00	2.82	1.42	4.55	4.68	4.56	0.60	0.00	0.00				
Sum	3.46	5.02	14.29	13.34	21.45	18.36	6.50	2.65	0.00	0.00	1.33	4.44	72.21
N	5	5	5	5	5	5	5	5	5	4	4	4	4
Mean	0.69	1.00	2.86	2.67	4.29	3.67	1.30	0.53	0.00	0.00	0.33	1.11	18.05
Max	2.01	2.82	7.15	7.15	7.53	5.62	3.99	2.65	0.00	0.00	1.33	3.13	33.25
Min	0.00	0.21	0.18	0.00	0.02	1.75	0.00	0.00	0.00	0.00	0.00	0.00	7.67
STD	0.81	0.93	2.46	2.74	2.46	1.57	1.39	1.06	0.00	0.00	0.58	1.28	9.59

**Precipitation Data, In Inches**

STATION NAME: COUNTY YARD  
 LOCATION: ARROYO GRANDE  
 GAGE NO: 205.0  
 ELEVATION: 193.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 21L

LONGITUDE: 35-07-33  
 LATITUDE: 120-35-20  
 RECORD BEGAN: 1983

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1982	0.84	0.80	0.65	2.46	0.96	4.12	2.90	0.00	0.05	0.00	0.00	0.61	13.39
1983	1.11	2.85	1.46	4.56	5.93	6.16	1.47	0.00	0.00	0.00	0.43	1.75	25.72
1984	0.00	2.77	3.18	0.00	0.34	0.50	0.87	0.00	0.00	0.00	0.00	0.00	7.66
1985	1.44	1.65	1.74	0.81	1.90	1.27	0.10	0.00	0.00	0.00	0.00	0.82	9.73
1986	0.80	1.52	2.45	1.31	5.58	6.09	0.00	0.00	0.00	0.00	0.00	0.00	17.75
1987	0.00	0.00	1.75	1.25	1.62	0.70	0.58	0.00	0.00	0.00	0.00	0.00	5.90
1988	1.33	1.14	3.10	1.67	2.12	0.45	2.62	0.00	0.00	0.00	0.00	0.00	12.43
1989	0.00	0.42	6.25	0.60	0.03	1.66	0.41	0.02	0.00	0.28	0.00	0.75	10.42
1990	0.52	0.25	0.00	1.36	1.34	0.30	0.00	0.87	0.00				
1991										0.66	0.00	0.00	
1992	0.41	0.85	2.25	2.16	6.30	2.24	0.00	0.00	0.00	0.00	0.00	0.00	14.21
1993	0.44	0.00	2.70	4.94	4.85	4.80	0.00	0.22	0.00	0.00	0.00	0.00	17.95
1994	0.00	1.84	0.06	1.41	3.39	1.05	1.47	0.66	0.00	0.00	0.00	0.03	9.91
1995	1.60	1.39	1.50	10.82	1.56	9.02	0.85	1.87	0.00	0.00	0.00	0.00	28.61
<i>For 1982-95 Water Years</i>													
Sum	8.49	15.48	27.09	33.35	35.92	38.36	11.27	3.64	0.05	0.94	0.43	3.96	173.68
N	13	13	13	13	13	13	13	13	13	13	13	13	12
Mean	0.65	1.19	2.08	2.57	2.76	2.95	0.87	0.28	0.00	0.07	0.03	0.30	14.47
<i>Mean for 1984-95 Water Years*</i>													
	0.59	1.08	2.27	2.39	2.64	2.55	0.63	0.33	0.00	0.09	0.00	0.15	13.46
Max	1.60	2.85	6.25	10.82	6.30	9.02	2.90	1.87	0.05	0.66	0.43	1.75	28.61
Min	0.00	0.00	0.00	0.00	0.03	0.30	0.00	0.00	0.00	0.00	0.00	0.00	5.90
STD	0.56	0.90	1.56	2.75	2.11	2.70	0.95	0.53	0.01	0.19	0.11	0.52	6.67
1996	0.00	0.50	1.28	3.85	7.71	1.34	1.02	0.52	0.00				
1997													
1998													
1999	0.30	2.71	0.63	3.02	1.51	4.91	2.30	0.00	0.00	0.00	0.00	0.00	15.38
2000	0.00	1.06	0.05	2.57	7.61	1.29	3.31	0.10	0.20				
<i>For 1982-2000 Water Years</i>													
Sum	8.79	19.75	29.05	42.79	52.75	45.90	17.90	4.26	0.25	0.94	0.43	3.96	189.06
N	16	16	16	16	16	16	16	16	16	14	14	14	13
Mean	0.55	1.23	1.82	2.67	3.30	2.87	1.12	0.27	0.02	0.07	0.03	0.28	14.54
Max	1.60	2.85	6.25	10.82	7.71	9.02	3.31	1.87	0.20	0.66	0.43	1.75	28.61
Min	0.00	0.00	0.00	0.00	0.03	0.30	0.00	0.00	0.00	0.00	0.00	0.00	5.90
STD	0.55	0.91	1.53	2.50	2.53	2.55	1.09	0.49	0.05	0.18	0.11	0.50	6.42

\*Hydrologic base period for this study

**Precipitation Data, in Inches**

STATION NAME: HOLZINGERS COW CAMP  
 LOCATION: CRESTON  
 GAGE NO: 205.2  
 ELEVATION: 193.0 FEET

BASE & MERIDIAN: MOUNT DIABLO  
 TOWNSHIP: 32 SOUTH  
 RANGE: 13 EAST  
 SECTION: 21L

LONGITUDE: 35-07-33  
 LATITUDE: 120-35-20  
 RECORD BEGAN: 1982

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1982	1.15	1.45	1.20	3.40	1.35	6.35	2.60	0.00	0.00	0.00	0.00	1.20	18.70
1983	1.30	5.85	3.80	7.40	4.85	6.70	2.70	0.35	0.00	0.00	0.45	1.60	35.00
1984	0.20	2.55	4.60	0.20	0.40	0.75	0.40	0.00	0.00	0.00	0.00	0.25	9.35
1985	0.40	2.65	2.80	0.68	1.50	2.35	0.20	0.00	0.00	0.00	0.00	0.00	10.58
1986	0.50	4.05	1.00	1.45	10.30	5.85	0.70	0.00	0.00	0.00	0.00	0.85	24.70
1987	0.00	0.50	0.40	2.00	1.90	3.60	0.10	0.00	0.00	0.00	0.00	0.00	8.50
1988	1.85	2.80	3.15	2.30	3.25	0.00	2.40	0.25	0.20	0.00	0.00	0.00	16.20
1989	0.00	1.65	4.65	1.35	1.70	1.10	0.30	0.25	0.00	0.00	0.00	1.64	12.64
1990	0.80	0.65	0.00	3.10	2.40	0.50	0.10	0.85	0.00	0.00	0.00	0.80	9.20
1991	0.00	0.10	0.25	1.10	2.30	13.90	0.00	0.00	0.20	0.00	0.05	0.20	18.10
1992	0.75	0.35	3.85	2.70	10.25	3.00	0.00	0.00	0.00	0.00	0.00	0.00	20.90
1993	1.80	0.00	4.50	8.80	6.51	3.30	0.00	0.00	0.00	0.00	0.00	0.00	24.91
1994	0.10	0.80	1.50	2.10	3.35	1.40	0.70	1.30	0.00	0.00	0.00	2.60	13.85
1995	1.10	2.40	1.10	12.70	1.10	12.90	0.35	1.25	0.35	0.00	0.00	0.00	33.25
<i>For 1982-95 Water Years</i>													
Sum	9.95	25.80	32.80	49.28	51.16	61.70	10.55	4.25	0.75	0.00	0.50	9.14	255.88
N	14	14	14	14	14	14	14	14	14	14	14	14	14
Mean	0.71	1.84	2.34	3.52	3.65	4.41	0.75	0.30	0.05	0.00	0.04	0.65	18.28
<i>Mean for 1984-95 Water Years*</i>													
	0.63	1.54	2.32	3.21	3.75	4.05	0.44	0.33	0.06	0.00	0.00	0.53	16.85
Max	1.85	5.85	4.65	12.70	10.30	13.90	2.70	1.30	0.35	0.00	0.45	2.60	35.00
Min	0.00	0.00	0.00	0.20	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.50
STD	0.63	1.61	1.68	3.46	3.10	4.22	0.97	0.46	0.11	0.00	0.12	0.80	8.32
1996	0.00	0.25	2.05	3.50	9.00	2.00	1.05	0.55	0.00	0.00	0.00	0.00	18.40
1997	2.30	2.10	7.60	9.05	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.15
1998	0.00	5.50	4.05	4.60	13.40	4.10	2.85	3.00	0.00	0.00	0.00	0.17	37.67
1999	0.28	1.30	1.00	3.45	1.80	3.80	1.85	0.00	0.00	0.00	0.00	0.25	13.73
2000	0.00	0.90	0.10	3.35	7.95	1.90	2.20	0.25	0.15		0.00	0.00	
<i>For 1982-2000 Water Years</i>													
Sum	12.53	35.85	47.60	73.23	83.41	73.50	18.50	8.05	0.90	0.00	0.50	9.56	346.83
N	19	19	19	19	19	19	19	19	19	18	19	19	18
Mean	0.66	1.89	2.51	3.85	4.39	3.87	0.97	0.42	0.05	0.00	0.03	0.50	19.27
Max	2.30	5.85	7.60	12.70	13.40	13.90	2.85	3.00	0.35	0.00	0.45	2.60	37.67
Min	0.00	0.00	0.00	0.20	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.50
STD	0.71	1.68	2.00	3.22	3.86	3.81	1.04	0.73	0.10	0.00	0.10	0.73	8.68

\*Hydrologic base period for this study

**Precipitation Data, In Inches**

STATION NAME: BETTERAVIA UNION SUGAR CO.  
 LOCATION: BETTERAVIA  
 GAGE NO: BET387  
 ELEVATION: 160.0 FEET

BASE & MERIDIAN: SAN BERNARDINO  
 TOWNSHIP: 10 NORTH  
 RANGE: 35 WEST  
 SECTION: 24

LONGITUDE: 34-55-00  
 LATITUDE: 120-31-00  
 RECORD BEGAN: 1898

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1898	0.67	0.03	0.55	1.44	1.06	0.65	0.02	1.14	0.00	0.00	0.00	0.36	5.92
1899	0.30	0.05	0.64	3.49	0.52	3.88	1.02	0.00	0.44	0.00	0.00	0.00	10.34
1900	1.36	1.02	0.73	0.83	0.13	1.94	0.67	1.10	0.00	0.00	0.00	0.00	7.78
1901	0.47	3.53	0.11	3.96	2.75	0.31	1.53	0.45	0.00	0.00	0.00	0.00	13.11
1902	1.77	0.74	0.00	1.47	4.03	2.07	1.92	0.04	0.00	0.00	0.03	0.00	12.07
1903	0.81	1.75	1.00	1.76	1.87	3.36	0.87	0.00	0.00	0.00	0.00	0.00	11.42
1904	0.00	0.08	0.15	0.38	3.84	2.38	1.20	0.10	0.00	0.00	0.18	2.44	10.75
1905	1.32	0.00	1.30	1.95	6.12	4.46	0.49	2.00	0.00	0.03	0.00	0.10	17.77
1906	0.00	1.36	0.29	3.25	3.21	6.39	0.73	2.30	0.00	0.00	0.00	0.12	17.65
1907	0.00	0.73	4.59	8.60	0.68	3.82	0.19	0.11	0.00	0.00	0.00	0.11	18.83
1908	0.95	0.00	2.33	4.54	3.86	0.23	0.24	0.18	0.00	0.00	0.00	1.02	13.35
1909	0.40	0.98	0.66	13.27	6.73	5.03	0.00	0.00	0.00	0.00	0.00	0.00	27.07
1910	0.54	1.60	6.72	2.38	0.25	3.52	0.15	0.00	0.00	0.00	0.00	0.49	15.65
1911	0.63	0.32	0.42	6.75	4.52	5.89	1.10	0.08	0.00	0.00	0.00	0.00	19.71
1912	0.00	0.19	1.91	1.44	0.14	3.50	1.18	1.19	0.00	0.00	0.00	0.08	9.63
1913	0.02	0.42	0.25	2.86	1.66	0.60	0.48	0.00	0.15	0.36	0.97	0.00	7.77
1914	0.00	2.32	3.40	10.30	3.04	1.06	0.24	0.10	0.00	0.00	0.00	0.00	20.46
1915	0.00	0.71	4.85	4.82	7.08	0.20	1.04	1.35	0.00	0.00	0.00	0.00	20.05
1916	0.00	0.56	3.74	7.86	1.20	1.33	0.10	0.00	0.00	0.00	0.00	2.09	16.88
1917	1.78	0.49	6.06	1.69	1.87	0.37	0.07	0.26	0.00	0.00	0.00	0.00	12.59
1918	0.08	0.12	0.36	0.36	8.55	5.77	0.05	0.00	0.00	0.00	0.12	0.23	15.64
1919	0.67	3.46	2.01	0.91	2.45	1.77	0.00	0.47	0.00	0.00	0.12	0.21	12.07
1920	0.17	0.12	1.99	0.18	1.43	4.16	0.85	0.00	0.00	0.00	0.00	0.00	8.90
1921	0.65	1.08	1.57	3.11	1.96	1.60	0.26	1.32	0.00	0.00	0.00	0.49	12.04
1922	0.12	0.17	3.68	3.71	3.18	2.44	0.31	0.47	0.00	0.00	0.00	0.00	14.08
1923	0.45	1.16	3.06	1.87	1.39	0.09	4.66	0.00	0.07	0.00	0.00	0.18	12.93
1924	0.10	0.10	0.54	0.90	0.38	3.21	1.04	0.00	0.00	0.00	0.00	0.00	6.27
1925	0.69	0.56	1.92	1.73	1.73	3.40	2.63	1.30	0.17	0.00	0.00	0.00	14.13
1926	0.15	0.26	2.06	1.95	3.75	0.64	2.15	0.05	0.00	0.00	0.00	0.00	11.01
1927	0.63	3.37	0.98	2.10	5.02	1.24	1.46	0.11	0.06	0.00	0.00	0.00	14.97
1928	2.14	1.01	3.88	0.19	2.70	2.28	0.16	0.61	0.00	0.00	0.00	0.00	12.97
1929	0.00	2.26	2.56	1.62	1.63	1.37	0.74	0.00	0.16	0.00	0.00	0.00	10.34
1930	0.00	0.00	0.08	3.86	1.19	2.80	0.94	0.49	0.07	0.00	0.00	0.28	9.71
1931	0.00	2.10	0.04	4.18	1.43	0.16	0.56	0.57	0.00	0.00	0.00	0.00	9.04
1932	0.11	2.24	6.56	3.25	3.26	0.23	0.09	0.22	0.00	0.00	0.67	0.32	16.95
1933	0.00	0.06	1.29	6.60	0.39	0.71	0.20	0.25	1.80	0.00	0.00	0.00	11.30
1934	0.30	0.00	2.79	1.07	1.80	0.29	0.00	0.03	0.60	0.00	0.00	0.00	6.88
1935	1.84	2.19	1.01	3.92	1.25	3.23	0.70	0.00	0.00	0.00	0.00	0.25	14.39
1936	0.35	2.03	1.44	1.20	5.20	0.77	0.72	0.02	0.13	0.00	0.40	0.00	12.26
1937	1.32	0.00	5.84	3.28	3.93	3.76	0.34	0.00	0.00	0.11	0.07	0.00	18.65
1938	0.33	0.41	2.79	4.38	6.49	4.01	1.41	0.00	0.00	0.00	0.00	0.93	20.75
1939	0.31	0.31	1.79	3.56	1.99	2.72	0.26	0.04	0.00	0.00	0.00	2.01	12.99
1940	0.53	0.86	1.50	3.96	2.76	1.89	0.54	0.00	0.00	0.00	0.00	0.00	12.04
1941	0.62	0.16	5.16	5.09	7.48	7.55	3.03	0.07	0.00	0.00	0.00	0.00	29.16
1942	1.04	0.32	7.33	1.48	1.19	2.26	0.15	0.00	0.00	0.04	0.09	0.00	13.90
1943	1.05	0.71	1.68	6.39	1.24	2.20	1.08	0.10	0.00	0.00	0.00	0.00	14.45
1944	1.05	0.22	3.20	1.29	4.99	0.66	1.59	0.09	0.00	0.00	0.00	0.00	13.09
1945	0.32	2.03	1.33	0.87	2.43	3.76	0.09	0.00	0.16	0.00	0.00	0.00	10.99
1946	0.52	0.64	2.94	0.45	1.69	0.97	0.21	0.18	0.00	0.00	0.00	0.27	7.87
1947	0.14	3.38	1.43	0.34	0.83	1.22	0.18	0.18	0.03	0.00	0.00	0.04	7.77
1948	0.46	0.07	0.52	0.03	1.42	3.27	1.70	0.65	0.00	0.00	0.00	0.00	8.12
1949	0.07	0.00	3.26	1.48	2.04	2.57	0.22	0.91	0.00	0.00	0.00	0.00	10.55
1950	0.17	0.92	2.35	2.78	3.39	1.61	0.76	0.09	0.00	0.00	0.00	0.00	12.07
1951	0.77	1.00	0.70	2.57	1.81	0.16	1.79	0.01	0.00	0.98	0.00	0.13	9.92

**Precipitation Data, In Inches**

STATION NAME: BETTERAVIA UNION SUGAR CO.  
 LOCATION: BETTERAVIA  
 GAGE NO: BET387  
 ELEVATION: 160.0 FEET

BASE & MERIDIAN: SAN BERNARDINO  
 TOWNSHIP: 10 NORTH  
 RANGE: 35 WEST  
 SECTION: 24

LONGITUDE: 34-55-00  
 LATITUDE: 120-31-00  
 RECORD BEGAN: 1898

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1952	0.75	1.37	4.34	5.66	0.72	5.21	0.34	0.00	0.06	0.00	0.00	0.00	18.45
1953	0.00	3.63	4.36	1.37	0.00	1.04	1.62	0.00	0.00	0.00	0.00	0.00	12.02
1954	0.00	2.51	0.12	3.39	1.57	3.54	0.38	0.00	0.04	0.00	0.00	0.00	11.55
1955	0.00	1.00	1.91	4.47	1.70	0.39	2.44	0.29	0.00	0.00	0.00	0.00	12.20
1956	0.00	2.05	5.15	3.81	0.81	0.00	1.48	0.37	0.00	0.00	0.00	0.00	13.67
1957	0.50	0.00	0.61	2.55	2.02	0.58	1.21	0.97	0.19	0.00	0.00	0.00	8.63
1958	1.07	0.33	2.34	2.68	5.09	5.90	3.03	0.13	0.00	0.00	0.00	0.93	21.50
1959	0.00	0.31	0.22	2.05	5.34	0.00	0.41	0.00	0.00	0.00	0.00	0.32	8.65
1960	0.00	0.00	0.32	3.38	5.50	0.88	1.95	0.00	0.00	0.00	0.00	0.00	12.03
1961	1.24	3.64	0.93	0.94	0.17	0.97	0.25	0.15	0.00	0.00	0.00	0.03	8.32
1962	0.00	2.11	1.51	3.12	10.26	1.60	0.00	0.20	0.05	0.00	0.07	0.00	18.92
1963	0.72	0.06	0.41	1.59	3.47	3.84	2.19	0.45	0.00	0.00	0.00	0.40	13.13
1964	1.39	1.71	0.22	1.13	0.05	2.87	0.15	0.27	0.14	0.00	0.05	0.00	7.98
1965	1.87	2.75	1.86	0.96	0.58	1.82	3.28	0.00	0.00	0.01	0.14	0.00	13.27
1966	0.10	3.72	2.97	1.07	0.94	0.23	0.00	0.00	0.06	0.00	0.00	0.15	9.24
1967	0.00	2.31	3.83	3.28	0.54	2.72	3.83	0.23	0.30	0.00	0.00	0.29	17.33
1968	0.00	2.57	1.68	0.96	0.98	2.37	0.57	0.04	0.00	0.00	0.00	0.00	9.17
1969	1.90	1.13	2.12	9.10	7.72	0.59	1.89	0.00	0.00	0.00	0.00	0.10	24.55
1970	0.28	1.10	0.47	2.66	3.03	1.36	0.00	0.00	0.05	0.00	0.00	0.00	8.95
1971	0.05	3.13	3.67	1.01	0.12	0.45	0.94	0.67	0.00	0.00	0.00	0.10	10.14
1972	0.30	0.80	2.99	0.21	0.45	0.00	0.28	0.00	0.00	0.00	0.00	0.00	5.03
1973	1.19	4.20	1.20	5.40	5.99	3.06	0.00	0.02	0.00	0.00	0.00	0.09	21.15
1974	0.58	2.64	2.61	4.65	0.08	5.74	0.56	0.00	0.00	0.00	0.00	0.00	16.86
1975	1.02	0.16	4.33	0.08	3.75	3.55	1.02	0.00	0.00	0.00	0.00	0.00	13.91
1976	0.80	0.39	0.47	0.00	3.90	1.40	1.06	0.00	0.00	0.00	1.08	2.75	11.85
1977	0.44	0.59	1.35	2.59	0.10	1.35	0.00	2.19	0.00	0.00	0.00	0.00	8.61
1978	0.00	0.29	4.18	6.01	7.00	6.56	2.67	0.00	0.00	0.00	0.00	1.62	28.33
1979	0.00	1.04	1.45	4.10	3.99	3.57	0.09	0.10	0.00	0.00	0.00	0.30	14.64
1980	0.58	0.43	1.28	4.63	6.13	2.35	0.64	0.38	0.06	0.00	0.00	0.00	16.48
1981	0.02	0.00	1.43	3.49	2.45	6.25	0.29	0.00	0.00	0.00	0.00	0.00	13.93
1982	1.00	1.05	0.92	2.95	1.29	4.15	3.51	0.00	0.20	0.00	0.21	0.31	15.59
1983	1.39	3.84	1.48	6.64	6.26	6.04	2.23	0.10	0.00	0.00	0.33	0.00	28.31
1984	1.71	1.89	3.08	0.59	0.55	0.61	0.00	0.00	0.00	0.00	0.00	0.00	8.43
1985	0.60	2.36	2.98	1.15	1.34	2.13	0.12	0.00	0.00	0.00	0.00	0.00	10.68
1986	0.43	2.02	2.06	0.85	3.64	4.55	0.46	0.00	0.00	0.00	0.00	0.98	14.99
1987	0.00	1.19	1.24	1.87	1.97	3.64	0.24	0.00	0.00	0.00	0.00	0.00	10.15
1988	2.13	1.18	2.59	1.80	1.97	0.36	2.88	0.15	0.15	0.00	0.00	0.00	13.21
1989	0.00	1.27	4.37	0.55	1.29	0.79	0.15	0.06	0.00	0.00	0.00	0.82	9.30
1990	0.01	0.58	0.03	2.34	0.66	0.00	0.00	0.37	0.00	0.00	0.00	0.34	4.33
1991	0.00	0.16	0.75	1.13	1.72	10.23	0.14	0.00	0.00	0.00	0.00	0.00	14.13
1992	0.31	0.27	3.51	2.26	5.71	1.76	0.00	0.00	0.00	0.00	0.00	0.00	13.82
1993	0.93	0.00	3.14	6.01	3.51	4.18	0.04	0.00	0.00	0.00	0.00	0.00	17.81
Sum	51.48	111.98	205.82	278.18	261.29	234.39	86.45	25.77	5.14	1.53	4.53	21.68	1288.25
N	96	96	96	96	96	96	96	96	96	96	96	96	96
Mean	0.54	1.17	2.14	2.90	2.72	2.44	0.90	0.27	0.05	0.02	0.05	0.23	13.42
Max	2.14	4.20	7.33	13.27	10.26	10.23	4.66	2.30	1.80	0.98	1.08	2.75	29.16
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.33
STD	0.58	1.13	1.70	2.39	2.23	2.01	1.00	0.48	0.20	0.11	0.17	0.52	5.04

**Precipitation Data, In Inches**

STATION NAME: PURITAN ICE COMPANY  
 LOCATION: GUADALUPE  
 GAGE NO: PUR352  
 ELEVATION: 80.0 FEET

BASE & MERIDIAN: SAN BERNARDINO  
 TOWNSHIP: 10 NORTH  
 RANGE: 35 WEST  
 SECTION: 16

LONGITUDE: 34-57-00  
 LATITUDE: 120-34-00  
 RECORD BEGAN: 1921

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1921	0.43	2.54	1.59	1.38	2.33	0.64	0.32	1.46	0.00	0.00	0.00	0.44	11.13
1922	0.05	0.65	5.31	3.90	2.97	2.50	0.22	0.35	0.00	0.00	0.00	0.00	15.95
1923	0.33	1.66	3.58	1.91	1.06	0.18	3.97	0.05	0.00	0.00	0.00	0.23	12.97
1924	0.12	0.06	0.62	0.63	0.50	3.14	1.00	0.01	0.00	0.00	0.00	0.06	6.14
1925	0.76	0.78	1.85	2.56	1.34	3.61	2.09	1.71	0.05	0.00	0.00	0.01	14.76
1926	0.16	0.07	1.81	1.72	2.99	0.23	0.00	0.00	0.00	0.00	0.00		
1927													
1928													
1929													
1930													
1931	0.00	1.13	0.00	4.26	1.33	0.14	0.36	0.55	0.00	0.00	0.51	0.00	8.28
1932	0.06	2.56	5.88	3.22	2.18	0.05	0.10	0.30	0.05	0.00	0.00	0.05	14.45
1933	0.00	0.07	1.22	5.45	0.45	0.61	0.10	0.27	1.53	0.00	0.00	0.00	9.70
1934	0.41	0.00	3.20	0.00	1.75	0.19	0.05	0.04	0.94	0.00	0.00	0.07	6.65
1935	1.67	1.73	1.19	4.39	1.09	3.22	3.12	0.00	0.00	0.00	0.00	0.17	16.58
1936	0.33	1.83	1.21	1.10	6.39	2.47	0.55	0.70	0.25	0.13	0.00	0.10	15.06
1937	0.69	0.00	4.76	2.97	3.10	3.90	0.27	0.00	0.00	0.00	0.00	0.00	15.69
1938	0.12	0.27	2.24	4.24	6.27	3.26	1.28	0.03	0.00	0.00	0.00	0.58	18.29
1939	0.35	0.32	1.38	3.08	1.61	2.07	0.32	0.05	0.00	0.00	0.00	1.27	10.45
1940	0.75	0.90	1.19	3.39	2.00	1.39	0.35	0.00	0.00	0.00	0.00	0.00	9.97
1941	0.39	0.16	3.98	4.95	6.04	5.84	2.68	0.00	0.00	0.00	0.00	0.00	24.04
1942	1.06	0.20	6.75	1.20	0.69	1.22	2.28	0.08	0.00	0.00	0.00	0.00	13.48
1943	0.72	0.42	1.42	4.43	1.09	1.48	0.97	0.00	0.00	0.00	0.00	0.00	10.53
1944	0.91	0.32	2.70	1.17	2.67	0.00	1.24	0.09	0.00	0.00	0.00	0.00	9.10
1945	0.05	1.47	1.45	0.40	2.94	2.46	0.00	0.00	0.00	0.00	0.02	0.39	9.18
1946	0.25	0.51	1.53	0.37	1.31	2.73	0.00	0.11	0.00	0.00	0.00	0.22	7.03
1947	0.10	2.25	1.22	0.34	0.57	0.88	0.31	0.40	0.01	0.00	0.00	0.42	6.50
1948	0.13	0.39	0.02	1.40	0.84	0.24	0.40	0.07	0.00	0.00	0.00	0.00	3.49
1949	0.06	0.00	2.70	0.83	0.99	2.97	0.20	1.09	0.00	0.00	0.00	0.00	8.84
1950	0.03	0.63	2.26	2.00	1.34	0.73	0.14	0.07	0.89	0.00	0.00	0.00	8.09
1951	0.81	1.18	0.67	2.14	1.62	0.30	1.25	0.00	0.01	0.00	0.00	0.01	7.99
1952	0.36	1.07	2.22	5.15	0.78	4.89	0.56	0.00	0.03	0.00	0.00	0.00	15.06
1953	0.00	3.06	3.86	0.84	0.00	0.45	1.03	0.02	0.00	0.00	0.00	0.00	9.26
1954	0.00	1.78	0.19	2.76	1.27	3.76	0.31	0.00	0.00	0.00	0.00	0.00	10.07
1955	0.00	0.96	1.62	3.53	1.69	0.31	2.27	0.57	0.00	0.00	0.00	0.00	10.95
1956	0.00	1.72	5.65	2.55	0.72	0.01	1.08	0.48	0.00	0.00	0.00	0.00	12.21
1957	0.36	0.00	0.51	2.72	2.28	0.76	1.24	0.69	0.20	0.00	0.00	0.00	8.76
1958	2.18	0.22	2.09	1.63	4.76	6.39	4.23	0.22	0.00	0.00	0.00	0.87	22.59
1959	0.00	0.20	0.19	2.37	4.48	0.01	0.58	0.00	0.00	0.00	0.00	0.54	8.37
1960	0.00	0.00	0.49	3.47	5.79	0.54	3.06	0.00	0.00	0.00	0.00	0.00	13.35
1961	0.88	3.80	0.30	0.96	0.18	0.67	0.39	0.19	0.00	0.00	0.24	0.00	7.61
1962	0.00	2.49	1.22	1.79	10.35	1.32	0.10	0.07	0.01	0.00	0.00	0.00	17.35
1963	0.43	0.03	0.49	0.82	3.63	4.20	2.62	0.46	0.00	0.00	0.02	0.47	13.17
1964	1.13	1.89	0.19	1.93	0.00	3.10	0.13	0.53	0.04	0.04	0.16	0.00	9.14
1965	1.80	2.32	2.05	1.16	0.33	1.67	3.65	0.00	0.00	0.00	0.00	0.00	12.98
1966	0.03	5.88	2.28	0.96	1.13	0.00	0.01	0.00	0.01	0.21	0.03	0.21	10.75
1967	0.00	1.89	2.87	3.53	0.02	3.31	5.17	0.00	0.00	0.00	0.00	0.34	17.13
1968	0.00	2.40	1.50	0.69	1.10	1.97	0.83	0.00	0.00	0.00	0.00	0.00	8.49
1969	2.14	0.96	1.99	13.01	8.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.91
1970	0.29	1.00	0.78	2.34	0.81	2.66	0.04	0.00	0.00	0.00	0.00	0.00	7.92
1971	0.00	3.11	3.76	1.18	0.19	0.26	0.80	0.98	0.00	0.00	0.00	0.06	10.34
1972	0.17	1.01	2.85	0.26	0.35	0.00	0.21	0.02	0.05	0.03	0.00	0.03	4.98
1973	0.96	4.53	1.29	4.82	5.19	2.98	0.01	0.03	0.00	0.00	0.09	0.00	19.90
1974	0.66	3.42	1.50	4.92	0.26	4.99	1.03	0.00	0.00	0.03	0.00	0.00	16.81



**Precipitation Data, In Inches**

STATION NAME: PURITAN ICE COMPANY  
 LOCATION: GUADALUPE  
 GAGE NO: PUR352  
 ELEVATION: 80.0 FEET

BASE & MERIDIAN: SAN BERNARDINO  
 TOWNSHIP: 10 NORTH  
 RANGE: 35 WEST  
 SECTION: 16

LONGITUDE: 34-57-00  
 LATITUDE: 120-34-00  
 RECORD BEGAN: 1921

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1975	1.11	0.13	4.54	0.65	3.03	2.61	1.09	0.00	0.00	0.00	0.00	0.00	13.16
1976	0.79	0.28	0.15	0.00	4.75	0.94	0.98	0.00	0.08	0.00	0.72	2.64	11.33
1977	1.21	1.15	2.45	1.02	0.11	1.62	0.02	2.22	0.00	0.00	0.00	0.00	9.80
1978	0.14	0.24	3.61	6.09	6.82	4.62	3.25	0.00	0.00	0.00	0.00	1.41	26.18
1979	0.00	1.10	1.10	5.18	3.21	2.82	0.08	0.14	0.00	0.00	0.00	0.50	14.13
1980	0.50	0.48	2.18	3.28	6.79	1.41	0.59	0.33	0.00	0.09	0.00	0.00	15.65
1981	0.00	0.00	1.06	3.12	3.42	4.71	0.38	0.02	0.00	0.00	0.00	0.00	12.71
1982	0.68	1.84	1.20	1.97	1.39	5.17	1.67	0.00	0.05	0.00	0.00	0.39	14.36
1983	0.92	3.32	0.75	6.04	5.63	3.93	1.83	0.11	0.00	0.00	0.37	1.37	24.27
1984	0.56	1.76	2.93	0.09	0.37	0.61	0.51	0.00	0.02	0.00	0.00	0.00	6.85
1985	0.43	1.83	2.42	0.86	0.88	1.37	0.02	0.00	0.00	0.00	0.00	0.00	7.81
1986	0.60	3.63	0.72	1.04	3.12	5.86	0.48	0.03	0.00	0.00	0.00	0.66	16.14
1987	0.06	0.98	1.02	1.75	1.82	3.63	0.25	0.02	0.00	0.00	0.00	0.00	9.53
1988	1.71	1.01	2.68	1.71	1.97	0.10	2.49	0.27	0.06	0.00	0.00	0.00	12.00
1989	0.00	0.81	3.98	0.49	0.84	0.81	0.41	0.12	0.00	0.00	0.00	1.20	8.66
1990	0.54	0.42	0.00	2.92	2.04	0.33	0.47	0.50	0.00	0.00	0.00	0.35	7.57
1991	0.00	0.10	0.76	1.10	2.55	8.39	0.37	0.00	0.11	0.00	0.02	0.03	13.43
1992	0.39	0.15	3.23	2.01	6.10	1.62	0.08	0.00	0.00	0.16	0.00	0.00	13.74
1993	0.35	0.00	3.46	4.04	4.55	3.51	0.00	0.25	0.07	0.00	0.00	0.00	16.23
Sum	32.12	85.07	139.86	170.18	170.97	144.76	67.89	15.70	4.46	0.69	2.18	15.09	841.99
N	69	69	69	69	69	69	69	69	69	69	69	68	68
Mean	0.47	1.23	2.03	2.47	2.48	2.10	0.98	0.23	0.06	0.01	0.03	0.22	12.38
Max	2.18	5.88	6.75	13.01	10.35	8.39	5.17	2.22	1.53	0.21	0.72	2.64	26.91
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.49
STD	0.53	1.24	1.52	2.05	2.27	1.89	1.18	0.42	0.24	0.04	0.12	0.45	4.95

**Precipitation Data, In Inches**

STATION NAME: SANTA MARIA CITY  
 LOCATION: SANTA MARIA  
 GAGE NO: SMC380  
 ELEVATION: 224.0 FEET

BASE & MERIDIAN: SAN BERNARDINO  
 TOWNSHIP: 10 NORTH  
 RANGE: 34 WEST  
 SECTION: 14

LONGITUDE: 34-57-00  
 LATITUDE: 120-26-00  
 RECORD BEGAN 1886

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1886	0.00	8.80	1.60	1.83	0.97	2.55	3.37	0.00	0.00	0.00	0.00	0.00	19.12
1887	0.06	0.59	0.72	0.50	5.95	0.25	1.07	0.22	0.00	0.00	0.00	0.30	9.66
1888	0.40	1.09	2.69	4.62	0.43	1.98	0.12	0.14	0.00	0.00	0.00	0.00	11.47
1889	0.00	2.59	5.86	0.42	1.35	4.20	0.97	0.60	0.05	0.00	0.00	0.00	16.04
1890	7.53	1.80	6.71	7.02	3.64	0.88	0.10	0.13	0.00	0.06	0.00	0.55	28.42
1891	0.70	0.70	3.40	0.63	3.57	0.71	1.58	0.20	0.00	0.00	0.00	0.03	11.52
1892	0.00	0.33	2.77	0.56	2.18	2.36	0.45	1.15	0.00	0.00	0.00	0.00	9.80
1893	0.35	1.95	2.52	2.08	3.10	6.84	0.80	0.05	0.00	0.00	0.00	0.00	17.69
1894	0.65	0.22	2.95	1.16	1.78	0.62	0.25	0.73	0.16	0.06	0.00	1.05	9.63
1895	0.68	0.07	3.86	4.43	1.22	1.25	0.53	0.51	0.00	0.00	0.00	0.01	12.56
1896	0.65	1.26	0.60	4.60	0.00	2.59	1.77	0.03	0.00	0.11	0.03	0.02	11.66
1897	0.60	1.82	2.34	3.55	4.00	2.52	0.14	0.01	0.00	0.03	0.00	0.10	15.11
1898	0.67	0.03	0.55	1.44	1.06	0.65	0.02	1.14	0.00	0.00	0.00	0.96	6.52
1899	0.30	0.05	0.64	3.49	0.46	4.88	0.99	0.75	0.00	0.00	0.00	0.00	11.56
1900	1.86	1.21	0.89	0.87	0.05	1.41	0.97	1.97	0.00	0.00	0.00	0.00	9.23
1901	0.65	5.40	0.35	4.51	3.17	0.25	1.82	0.13	0.00	0.00	0.00	0.12	16.40
1902	1.60	0.56	0.01	1.73	4.03	2.37	1.70	0.20	0.00	0.00	0.00	0.00	12.20
1903	1.02	2.59	0.79	1.80	1.91	3.97	0.71	0.00	0.00	0.00	0.00	0.00	12.79
1904	0.00	0.19	0.16	0.55	5.39	3.06	1.73	0.10	0.00	0.00	0.86	2.55	14.59
1905	1.25	0.03	1.55	1.85	5.83	4.46	0.69	1.58	0.00	0.02	0.00	0.07	17.33
1906	0.15	1.37	0.31	2.64	3.40	6.94	0.55	2.39	0.02	0.00	0.01	0.01	17.79
1907	0.00	0.63	4.35	7.78	1.02	3.95	0.23	0.00	0.04	0.00	0.00	0.06	18.06
1908	3.57	0.00	1.80	3.98	3.76	0.35	0.26	0.18	0.00	0.00	0.00	1.03	14.93
1909	0.52	0.97	0.61	10.31	4.98	4.39	0.00	0.00	0.00	0.00	0.00	0.00	21.78
1910	0.75	2.14	5.89	3.47	0.50	3.82	0.01	0.00	0.00	0.00	0.00	0.65	17.23
1911	0.72	0.15	0.45	6.42	3.80	6.68	1.82	0.00	0.00	0.00	0.00	0.00	20.04
1912	0.00	0.00	1.77	1.34	0.10	4.13	0.69	1.60	0.00	0.00	0.00	0.00	9.63
1913	0.00	0.40	0.20	2.20	1.27	0.63	0.42	0.00	0.34	0.00	0.00	0.00	5.46
1914	1.00	2.45	2.95	9.36	2.20	0.90	0.00	0.00	0.00	0.00	0.00	0.00	18.86
1915	0.00	0.00	5.40	4.05	6.31	0.54	1.11	1.52	0.00	0.00	0.00	0.00	18.93
1916	0.00	0.60	3.31	8.95	2.12	1.49	0.19	0.00	0.00	0.00	0.00	2.51	19.17
1917	1.92	0.52	4.15	2.53	2.01	0.50	0.11	0.23	0.00	0.00	0.00	0.00	11.97
1918	0.09	0.00	0.31	0.53	9.39	5.87	0.00	0.00	0.00	0.00	0.00	0.00	16.19
1919	0.63	3.55	1.46	0.68	2.36	1.57	0.00	0.74	0.00	0.00	0.00	0.41	11.40
1920	0.00	0.15	1.88	0.24	1.78	4.02	1.12	0.00	0.00	0.00	0.00	0.00	9.19
1921	0.73	0.94	1.24	3.13	1.65	1.57	0.32	1.45	0.01	0.00	0.00	0.44	11.48
1922	0.05	0.13	5.32	4.90	2.97	2.50	0.22	0.35	0.00	0.00	0.00	0.00	16.44
1923	0.32	1.34	3.59	1.91	1.06	0.18	3.97	0.05	0.01	0.01	0.00	0.22	12.66
1924	0.30	0.00	0.62	0.64	0.46	3.01	1.00	0.01	0.00	0.00	0.03	0.04	6.11
1925	0.76	0.78	1.85	2.56	1.67	3.28	2.34	1.71	0.05	0.02	0.01	0.01	15.04
1926	0.16	0.12	1.81	1.72	2.99	0.41	2.68	0.11	0.01	0.02	0.01	0.04	10.08
1927	0.55	3.37	0.91	1.88	5.21	2.10	1.26	0.06	0.20	0.02	0.01	0.02	15.59
1928	3.08	0.81	3.80	0.22	2.51	3.99	0.19	0.71	0.00	0.00	0.01	0.02	15.34
1929	0.04	2.31	2.16	2.28	1.22	1.61	0.94	0.00	0.16	0.00	0.00	0.01	10.73
1930	0.02	0.00	0.15	3.42	1.18	2.70	0.94	0.68	0.08	0.00	0.00	0.16	9.33
1931	0.02	1.55	0.00	4.16	1.13	0.28	0.42	0.94	0.06	0.01	0.31	0.09	8.97
1932	0.04	2.46	6.56	4.25	2.14	0.31	0.31	0.26	0.04	0.02	0.02	0.07	16.48
1933	0.09	0.09	1.31	6.08	0.30	0.94	0.18	0.38	1.96	0.00	0.00	0.02	11.35
1934	0.32	0.03	2.91	1.11	1.52	0.20	0.00	0.26	1.30	0.01	0.01	0.01	7.68
1935	3.14	2.19	1.78	4.16	1.64	3.11	3.09	0.00	0.00	0.01	0.26	0.17	19.55
1936	0.50	2.02	1.71	1.31	5.32	1.23	1.06	0.13	0.03	0.02	0.01	0.14	13.48
1937	1.83	0.00	5.69	3.59	4.83	4.65	0.22	0.00	0.00	0.01	0.00	0.00	20.82
1938	0.16	0.26	2.88	4.72	7.39	4.09	2.01	0.04	0.02	0.00	0.02	0.59	22.18
1939	0.18	0.23	1.53	3.25	2.18	2.39	0.22	0.03	0.00	0.00	0.00	1.50	11.51

**Precipitation Data, In Inches**

STATION NAME: SANTA MARIA CITY  
 LOCATION: SANTA MARIA  
 GAGE NO: SMC380  
 ELEVATION: 224.0 FEET

BASE & MERIDIAN: SAN BERNARDINO  
 TOWNSHIP: 10 NORTH  
 RANGE: 34 WEST  
 SECTION: 14

LONGITUDE: 34-57-00  
 LATITUDE: 120-26-00  
 RECORD BEGAN 1940

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1940	0.46	1.03	1.30	5.41	2.67	1.98	1.74	0.00	0.00	0.00	0.00	0.02	14.61
1941	0.73	0.12	5.25	5.04	6.83	8.72	3.86	0.07	0.00	0.09	0.03	0.01	30.75
1942	1.04	0.32	7.50	1.35	1.30	2.04	2.82	0.08	0.00	0.00	0.02	0.02	16.49
1943	0.82	0.84	2.94	7.23	1.27	3.04	1.06	0.02	0.00	0.00	0.00	0.00	17.22
1944	1.05	0.47	3.09	1.32	4.69	1.26	2.46	0.11	0.01	0.00	0.00	0.00	14.46
1945	0.12	2.26	1.90	0.61	2.87	3.27	0.11	0.04	0.11	0.00	0.02	0.00	11.31
1946	0.53	0.88	3.11	0.50	1.63	4.13	0.20	0.10	0.00	0.00	0.00	0.00	11.08
1947	0.24	3.71	1.98	0.35	1.10	1.27	0.28	0.30	0.13	0.00	0.00	0.06	9.42
1948	0.58	0.04	0.29	0.06	1.29	3.21	1.89	0.81	0.03	0.00	0.00	0.00	8.20
1949	0.08	0.01	2.92	1.37	1.29	2.54	0.06	0.82	0.00	0.00	0.00	0.00	9.09
1950	0.03	0.71	2.78	2.54	1.50	1.37	0.73	0.15	0.00	0.62	0.00	0.04	10.47
1951	0.85	1.50	0.88	2.01	1.10	0.87	1.36	0.01	0.00	0.00	0.01	0.07	8.66
1952	0.57	1.17	4.05	5.69	0.69	5.30	0.42	0.00	0.68	0.00	0.00	0.00	18.57
1953	0.02	2.97	4.73	1.45	0.00	0.27	1.23	0.12	0.07	0.00	0.00	0.01	10.87
1954	0.01	2.34	0.29	3.48	1.44	4.20	0.33	0.00	0.02	0.01	0.00	0.00	12.12
1955	0.00	0.97	2.08	3.95	1.35	0.40	1.98	0.60	0.01	0.00	0.00	0.00	11.34
1956	0.00	1.60	4.50	2.84	0.64	0.00	1.89	0.54	0.00	0.00	0.00	0.00	12.01
1957	0.61	0.00	0.74	2.17	1.95	0.79	1.00	0.98	0.22	0.00	0.00	0.00	8.46
1958	1.70	0.55	1.78	2.41	4.70	4.25	4.27	0.18	0.00	0.00	0.00	1.43	21.27
1959	0.00	0.30	0.13	1.75	4.57	0.00	0.23	0.00	0.00	0.00	0.00	0.00	6.98
1960	0.00	0.00	0.65	3.55	4.13	0.85	2.15	0.00	0.00	0.00	0.00	0.00	11.33
1961	1.75	2.50	0.80	0.80	0.10	0.68	0.23	0.21	0.00	0.02	0.00	0.02	7.11
1962	0.00	1.63	1.50	2.13	10.08	1.02	0.04	0.03	0.02	0.00	0.00	0.00	16.45
1963	0.36	0.00	0.21	0.54	3.75	3.15	2.29	0.53	0.01	0.00	0.00	0.46	11.30
1964	1.49	1.92	0.19	1.00	0.00	1.70	1.13	0.31	0.07	0.00	0.00	0.00	7.81
1965	1.64	2.41	1.63	0.84	0.51	1.59	2.87	0.00	0.00	0.10	0.12	0.00	11.71
1966	0.00	4.34	2.37	0.95	0.80	0.26	0.03	0.00	0.14	0.00	0.00	0.22	9.11
1967	0.00	2.10	2.88	2.90	0.39	2.57	3.68	0.21	0.26	0.00	0.00	0.36	15.35
1968	0.00	2.78	1.35	0.63	0.91	2.03	0.51	0.04	0.00	0.00	0.00	0.00	8.25
1969	1.95	1.05	1.58	7.47	6.92	0.45	1.36	0.00	0.00	0.00	0.00	0.06	20.84
1970	0.33	0.98	0.53	2.65	0.42	4.64	0.04	0.00	0.00	0.00	0.00	0.00	9.59
1971	0.00	3.45	3.46	0.77	0.09	0.25	1.02	0.74	0.00	0.00	0.00	0.04	9.82
1972	0.38	0.64	3.37	0.19	0.45	0.00	0.26	0.16	0.00	0.00	0.00	0.00	5.45
1973	0.53	3.56	1.73	4.92	5.44	3.20	0.00	0.05	0.00	0.00	0.00	0.16	19.59
1974	0.64	2.50	2.36	3.90	0.15	4.78	0.88	0.00	0.00	0.00	0.00	0.00	15.21
1975	1.87	0.13	4.05	0.04	3.22	2.39	0.75	0.00	0.00	0.00	0.00	0.00	12.45
1976	0.72	0.15	0.06	0.00	4.47	0.61	1.25	0.00	0.02	0.02	1.20	3.47	11.97
1977	1.37	0.32	0.55	2.48	0.02	1.59	0.05	2.09	0.00	0.00	0.00	0.04	8.51
1978	0.00	0.13	3.94	4.94	7.30	4.62	1.98	0.00	0.00	0.00	0.00	1.55	24.46
1979	0.00	1.10	1.29	4.02	3.04	2.65	0.16	0.07	0.00	0.00	0.00	0.18	12.51
1980	0.45	0.21	0.98	4.19	5.08	2.14	0.46	0.28	0.00	0.00	0.00	0.00	13.79
1981	0.00	0.00	1.19	3.57	3.79	3.77	0.49	0.00	0.00	0.00	0.00	0.00	12.81
1982	0.90	1.26	0.85	2.90	1.27	5.04	1.76	0.00	0.23	0.00	0.07	0.59	14.87
1983	1.27	3.67	1.21	5.52	5.43	3.82	2.24	0.02	0.00	0.00	0.27	1.41	24.86
1984	0.35	2.10	2.63	0.02	0.37	0.48	0.57	0.00	0.00	0.00	0.00	0.00	6.52
1985	0.60	1.93	2.91	0.98	0.85	1.38	0.04	0.00	0.00	0.00	0.00	0.04	8.73
1986	0.39	2.72	0.78	1.12	2.96	4.62	0.80	0.00	0.00	0.00	0.00	0.88	14.27
1987	0.00	0.44	1.29	1.26	1.15	3.45	0.35	0.02	0.03	0.00	0.00	0.00	7.99
1988	2.32	0.61	2.60	1.71	2.36	0.02	2.21	0.05	0.03	0.00	0.00	0.00	11.91
1989	0.00	0.75	3.87	0.21	0.59	0.62	0.08	0.06	0.00	0.00	0.00	0.57	6.75
1990	0.16	0.49	0.01	2.27	1.55	0.18	0.23	0.48	0.00	0.00	0.00	0.29	5.66
1991	0.00	0.19	0.43	1.03	2.05	8.38	0.27	0.00	0.08	0.00	0.03	0.00	12.46
1992	0.30	0.26	3.60	1.77	5.98	2.22	0.00	0.00	0.00	0.49	0.00	0.00	14.62

### Precipitation Data, In Inches

STATION NAME: SANTA MARIA CITY  
LOCATION: SANTA MARIA  
GAGE NO: SMC380  
ELEVATION: 224.0 FEET

BASE & MERIDIAN: SAN BERNARDINO  
TOWNSHIP: 10 NORTH  
RANGE: 34 WEST  
SECTION: 14

LONGITUDE: 34-57-00  
LATITUDE: 120-26-00  
RECORD BEGAN 0

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1993	0.51	0.00	2.53	5.56	3.97	3.92	0.00	0.17	0.05	0.00	0.00	0.00	16.71
1994	0.22	0.75	1.01	2.08	3.42	1.94	0.96	0.59	0.00	0.00	0.00	0.08	11.05
1995	0.48	1.43	0.50	8.72	1.85	6.95	0.25	0.64	0.76	0.00	0.00	0.00	21.58
<i>For 1886-1995 Water Years</i>													
Sum	70.85	132.90	233.22	303.32	278.02	266.61	106.75	35.12	7.52	1.78	3.37	24.56	1464.02
N	110	110	110	110	110	110	110	110	110	110	110	110	110
Mean	0.65	1.21	2.13	2.79	2.55	2.45	0.97	0.32	0.07	0.02	0.03	0.24	13.41
<i>Mean for 1984-95</i>													
Water Years*	0.44	0.97	1.85	2.23	2.26	2.85	0.48	0.17	0.08	0.04	0.00	0.16	11.52
Max	7.53	8.80	7.50	10.31	10.08	8.72	4.27	2.39	1.96	0.62	1.20	3.47	30.75
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.45
STD	0.97	1.36	1.69	2.25	2.13	1.94	1.00	0.50	0.24	0.08	0.15	0.56	4.92
1996	0.00	0.37	1.66	1.86	7.55	0.97	0.63	0.33	0.00	0.00	0.00	0.00	13.37
1997	1.36	2.35	4.03	3.90	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.30	12.01
1998	0.00	3.67	2.60	4.26	13.08	3.35	3.55	1.80	0.00	0.00	0.00	0.35	32.66
1999	0.30	1.65	0.30	2.02	1.07	6.61	2.77	0.00	0.00	0.00	0.00	0.00	14.72
2000	0.00	1.20	0.00	1.60	9.16	1.33	3.35	0.00	0.00	0.00	0.00		
<i>For 1886-2000 Water Years</i>													
Sum	72.69	142.37	243.34	320.21	311.13	281.26	117.27	37.28	7.52	1.78	3.37	26.71	1548.29
N	115	115	115	115	115	115	115	115	115	115	115	114	114
Mean	0.63	1.24	2.12	2.78	2.71	2.45	1.02	0.32	0.07	0.02	0.03	0.23	13.58
Max	7.53	8.80	7.50	10.31	13.08	8.72	4.27	2.39	1.96	0.62	1.20	3.47	32.66
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.45
STD	0.96	1.36	1.68	2.21	2.44	1.96	1.05	0.51	0.24	0.07	0.14	0.55	5.16

\*Hydrologic base period for this study

**Precipitation Data, In Inches**

STATION NAME: SANTA MARIA HWY. MAINT. YARD  
 LOCATION: SANTA MARIA  
 GAGE NO: SMH400  
 ELEVATION: 220.0 FEET

BASE & MERIDIAN: SAN BERNARDINO  
 TOWNSHIP: 10 NORTH  
 RANGE: 34 WEST  
 SECTION: 14

LONGITUDE: 34-57-00  
 LATITUDE: 120-26-00  
 RECORD BEGAN: 1955

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1955	0.00	1.00	2.23	4.38	1.72	0.46	1.72	1.11	0.00	0.00	0.00	0.00	12.62
1956	0.00	1.63	5.07	2.98	0.63	0.00	2.18	0.61	0.00	0.00	0.00	0.00	13.10
1957	0.00	1.63	5.07	2.98	0.63	0.00	2.18	0.61	0.00	0.00	0.00	0.00	13.10
1958	0.69	0.00	0.84	2.54	1.88	1.01	1.19	1.12	0.27	0.00	0.00	0.00	9.54
1959	2.45	0.07	1.98	2.56	5.27	4.89	4.42	0.23	0.00	0.00	0.00	0.35	22.22
1960	0.00	0.00	0.45	3.70	4.40	1.00	2.21	0.00	0.00	0.00	0.00	0.00	11.76
1961	2.07	2.68	0.89	0.83	0.26	0.79	0.23	0.19	0.00	0.00	0.00	0.00	7.94
1962	0.00	1.77	1.76	2.46	10.41	1.08	0.00	0.00	0.05	0.00	0.00	0.00	17.53
1963	0.50	0.00	0.25	0.69	4.30	3.36	2.70	0.59	0.00	0.00	0.00	0.46	12.85
1964	1.54	2.08	0.18	1.24	0.00	1.77	1.13	0.37	0.10	0.00	0.00	0.12	8.53
1965	1.77	2.01	1.83	0.90	0.53	1.34	3.59	0.00	0.00	0.00	0.00	0.00	11.97
1966	0.06	4.66	2.57	1.24	0.86	0.43	0.07	0.00	0.00	0.00	0.00	0.21	10.10
1967	0.00	2.04	3.46	3.40	0.46	2.18	4.13	0.22	0.38	0.00	0.00	0.23	16.50
1968	0.00	2.09	1.78	0.74	1.21	2.02	0.65	0.00	0.00	0.00	0.00	0.00	8.49
1969	1.95	0.88	1.71	7.18	7.27	0.95	1.65	0.02	0.00	0.00	0.00	0.08	21.69
1970	0.25	1.05	0.44	2.69	0.53	3.98	0.04	0.00	0.04	0.00	0.00	0.00	9.02
1971	0.01	3.25	3.99	0.80	0.09	0.38	1.04	1.11	0.00	0.00	0.00	0.13	10.80
1972	0.30	0.57	2.99	0.27	0.32	0.00	0.29	0.03	0.02	0.03	0.00	0.00	4.82
1973	0.60	3.61	1.53	4.81	6.08	3.44	0.00	0.03	0.02	0.00	0.00	0.05	20.17
1974	0.53	2.33	3.12	4.20	0.15	4.33	1.79	0.00	0.00	0.00	0.00	0.00	16.45
1975	1.22	0.23	4.47	0.17	3.50	3.17	0.92	0.00	0.00	0.00	0.00	0.00	13.68
1976	1.02	0.33	0.18	0.00	4.11	1.22	1.16	0.03	0.05	0.03	1.15	3.30	12.58
1977	0.57	0.35	0.66	2.23	0.06	1.54	0.06	2.41	0.03	0.00	0.01	0.06	7.98
1978	0.00	0.18	4.31	5.54	7.78	5.87	2.63	0.00	0.00	0.00	0.00	1.69	28.00
1979	0.00	1.23	1.10	3.93	4.22	3.18	0.06	0.11	0.00	0.00	0.00	0.27	14.10
1980	0.60	0.40	1.29	4.37	5.76	1.92	0.56	0.29	0.00	0.00	0.00	0.00	15.19
1981	0.00	0.00	1.30	3.66	2.54	5.47	0.47	0.00	0.00	0.00	0.00	0.00	13.44
1982	0.99	1.31	0.84	2.95	1.18	3.81	3.25	0.00	0.15	0.00	0.32	0.50	15.30
1983	0.67	4.53	1.36	6.48	5.04	6.57	2.12	0.39	0.00	0.00	0.45	0.00	27.61
1984	1.23	2.53	2.69	0.12	0.59	0.51	0.75	0.00	0.00	0.00	0.00	0.00	8.42
1985	0.54	1.96	3.29	0.94	2.27	0.02	0.00	0.00	0.00	0.00	0.00	0.00	9.02
1986	0.43	3.35	0.87	0.90	3.55	5.29	1.30	0.00	0.00	0.00	0.00	0.90	16.59
1987	0.00	0.85	1.48	1.73	1.58	3.90	0.42	0.00	0.00	0.00	0.00	0.00	9.96
1988	2.06	1.46	3.18	1.75	2.00	0.47	2.76	0.31	0.01	0.00	0.00	0.00	14.00
1989	0.00	0.81	4.04	0.52	0.92	0.83	0.23	0.10	0.00	0.00	0.00	0.41	7.86
1990	0.23	0.50	0.00	2.50	1.91	0.20	0.12	0.30	0.00	0.00	0.00	0.30	6.06
1991	0.00	0.20	0.95	1.26	1.80	12.50	0.00	0.00	0.00	0.00	0.00	0.00	16.71
1992	0.50	0.04	3.80	2.15	6.05	2.85	0.00	0.00	0.00	0.75	0.00	0.75	16.89
1993	0.66	0.03	2.57	5.52	4.57	3.73	0.03	0.15	0.00	0.00	0.00	0.00	17.26
Sum	23.44	53.64	80.52	97.31	106.43	96.46	48.05	10.33	1.12	0.81	1.93	9.81	529.85
N	39	39	39	39	39	39	39	39	39	39	39	39	39
Mean	0.60	1.38	2.06	2.50	2.73	2.47	1.23	0.26	0.03	0.02	0.05	0.25	13.59
Max	2.45	4.66	5.07	7.18	10.41	12.50	4.42	2.41	0.38	0.75	1.15	3.30	28.00
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.82
STD	0.69	1.26	1.43	1.82	2.52	2.45	1.24	0.47	0.08	0.12	0.20	0.59	5.26

**Precipitation Data, In Inches**

STATION NAME: UNION OIL BATTLES PLANT  
 LOCATION: SANTA MARIA  
 GAGE NO: UBA410  
 ELEVATION: 255.0 FEET

BASE & MERIDIAN: SAN BERNARDINO  
 TOWNSHIP: 10 NORTH  
 RANGE: 33 WEST  
 SECTION: 20

LONGITUDE: 34-56-00  
 LATITUDE: 120-24-00  
 RECORD BEGAN: 1953

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1953	0.18	3.42	4.03	1.01	0.00	0.55	0.82	0.13	0.00	0.03	0.00	0.00	10.17
1954	0.00	2.04	0.24	3.60									
1955	0.00	0.94	2.31	4.59	1.41	0.32	2.26	0.26	0.00	0.00	0.00	0.00	12.09
1956	0.00	1.69	4.80	2.69	0.60	0.00	2.41	0.62	0.00	0.00	0.00	0.00	12.81
1957	0.93	0.00	0.40	2.15	2.22	0.49	1.09	0.90	0.18	0.00	0.00	0.10	8.46
1958	2.14	0.41	1.66	2.91	5.46	3.85	3.59	0.15	0.00	0.00	0.00	0.62	20.79
1959	0.00	0.27	0.17	1.45	4.28	0.00	0.00	0.30	0.00	0.00	0.00	0.28	6.75
1960	0.00	0.00	0.41	3.47	4.16	1.00	1.78	0.02	0.00	0.00	0.00	0.00	10.84
1961	1.97	2.79	0.88	0.79	0.16	0.38	0.00	0.00	0.00	0.00	0.00	0.00	6.97
1962	0.00	1.81	1.83	2.07	9.06	0.92	0.04	0.02	0.00	0.00	0.00	0.00	15.75
1963	0.47	0.00	0.30	1.06	3.12	3.06	2.72	0.39	0.03	0.00	0.00	0.58	11.73
1964	1.28	1.79	0.10	1.26	0.00	1.56	1.05	0.28	0.06	0.00	0.11	0.00	7.49
1965	1.52	2.01	1.42	0.75	0.36	1.46	3.66	0.00	0.00	0.00	0.00	0.00	11.18
1966	0.00	4.20	2.88	1.18	0.84	0.32	0.03	0.00	0.00	0.11	0.00	0.18	9.74
1967	0.02	1.87	3.22	3.39	0.36	2.48	3.79	0.00	0.00	0.00	0.00	0.00	15.13
1968	0.00	2.87	1.38	0.68	1.18	2.09	0.61	0.02	0.00	0.00	0.00	0.00	8.83
1969	1.95	1.04	1.42	7.77	7.02	0.38	0.00	0.00	0.00	0.00	0.00		
1970					0.69	3.40						0.00	
1971	0.01	3.13	3.73	0.49	0.07	0.39	1.07	0.82	0.00	0.00	0.00	0.03	9.74
1972	0.08	0.78	2.74	0.22	0.04	0.00	0.22	0.15	0.00	0.00	0.00	0.00	4.23
1973	0.31	4.22	1.69	4.84	5.95	3.29	0.00	0.02	0.01	0.00	0.00	0.07	20.40
1974	0.42	2.64	2.89	4.60	0.11	4.66	1.05	0.00	0.00	0.00	0.00	0.00	16.37
1975	1.12	0.13	4.60	0.02	3.43	3.39	1.14	0.00	0.00	0.00	0.00	0.00	13.83
1976	0.72	0.30	0.06	0.00	4.40	1.34	1.22	0.00	0.08	0.00	1.80	3.69	13.61
1977	0.77	0.16	0.90	1.93	0.00	1.72	0.00	2.26	0.00	0.00	0.00	0.05	7.79
1978	0.00	0.00	4.06	5.09	7.17	5.45	1.94	0.00	0.00	0.00	0.00	1.73	25.44
1979	0.00	1.13	1.31	3.28	3.65	3.42	0.11	0.08	0.00	0.00	0.00	0.26	13.24
1980	0.63	0.47	1.50	4.91	5.44	1.77	0.47	0.23	0.00	0.03	0.00	0.00	15.45
1981	0.00	0.00	1.70	3.67	2.38	5.27	0.49	0.00	0.00	0.00	0.00	0.00	13.51
1982	0.83	1.41	1.19	2.58	0.79	4.67	3.10	0.00	0.00	0.00	0.22	0.00	14.79
1983	1.64	3.81	1.47	6.38	5.90	4.46	2.21	0.39	0.00	0.00	0.00	0.00	26.26
1984	0.00	2.32	2.65	0.09									
1985												0.01	
1986	0.38	3.18	0.58	0.98	4.21	5.36	0.77	0.00	0.00	0.00	0.00	0.94	16.40
1987	0.00	0.46	1.43	1.46	1.49	3.76	0.75	0.00	0.00	0.00	0.00	0.00	9.35
1988	1.74	0.81	3.37	1.78	1.81	0.45	2.67	0.12	0.00	0.00	0.00	0.01	12.76
1989	0.00	0.86	4.18	0.56	0.88	0.75	0.06	0.06	0.00	0.00	0.00	0.72	8.07
1990	0.22	0.41	0.00	2.48	1.65	0.22	0.19	0.48	0.00	0.00	0.00	0.35	6.00
1991	0.00	0.20	0.40	1.09	1.15	8.94	0.21	0.00	0.04	0.00	0.03	0.00	12.06
1992	0.37	0.28	2.81	1.70	5.73	1.73	0.00	0.00	0.00	0.72	0.00	0.00	13.34
1993	1.31	0.00	2.58	6.11	3.19	3.80	0.05	0.16	0.00	0.00	0.00	0.00	17.20
Sum	21.01	53.85	73.29	95.08	100.36	87.10	41.57	7.86	0.40	0.89	2.16	9.62	458.57
N	39	39	39	39	38	38	37	37	37	37	37	38	36
Mean	0.54	1.38	1.88	2.44	2.64	2.29	1.12	0.21	0.01	0.02	0.06	0.25	12.74
Max	2.14	4.22	4.80	7.77	9.06	8.94	3.79	2.26	0.18	0.72	1.80	3.69	26.26
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.23
STD	0.67	1.29	1.37	1.92	2.43	2.04	1.17	0.41	0.03	0.12	0.29	0.66	4.95

**Precipitation Data, In Inches**

STATION NAME: UNION OIL CO. GUADALUPE  
 LOCATION: GUADALUPE OIL FIELD  
 GAGE NO: UGU407  
 ELEVATION: 40.0 FEET

BASE & MERIDIAN: SAN BERNARDINO  
 TOWNSHIP: 10 NORTH  
 RANGE: 36 WEST  
 SECTION: 35

LONGITUDE: 34-59-00  
 LATITUDE: 120-38-00  
 RECORD BEGAN: 1958

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1958	1.27	0.24	2.39	1.54	4.63	5.77	4.44	0.18	0.00	0.00	0.00	0.67	21.13
1959	0.00	0.26	0.16	3.42	4.09	0.01	0.52	0.00	0.00	0.00	0.00	0.55	9.01
1960	0.00	0.00	0.51	2.83	4.90	0.46	2.75	0.01	0.00	0.00	0.00	0.00	11.46
1961	0.95	3.65	0.92	0.99	0.20	0.79	0.27	0.20	0.00	0.09	0.04	0.03	8.13
1962	0.00	1.94	1.16	2.14	7.45	1.35	0.16	0.13	0.02	0.00	0.00	0.00	14.35
1963	0.67	0.00	0.63	0.92	3.32	4.16	2.42	0.34	0.02	0.00	0.06	0.32	12.86
1964	1.22	1.94	0.15	2.40	0.00	2.72	0.00	0.45	0.06	0.10	0.16	0.35	9.55
1965	1.17	2.02	2.63	1.49	0.41	1.43	2.38	0.00	0.00	0.00	0.00	0.00	11.53
1966	0.00	5.14	2.70	1.67	0.74	0.27	0.00	0.00	0.00	0.15	0.04	0.24	10.95
1967	0.00	2.22	2.33	2.87	0.50	3.27	4.65	0.33	0.00	0.00	0.00	0.29	16.46
1968	0.00	2.76	1.45	0.73	0.86	2.24	0.65	0.00	0.00	0.00	0.00	0.00	8.69
1969	2.23	0.80	1.64	7.79	7.75	0.43	1.85	0.00	0.00	0.00	0.00	0.00	22.49
1970	0.59	1.27	0.78	2.56	1.46	1.59	0.22	0.00	0.00	0.00	0.00	0.00	8.47
1971	0.22	3.00	4.53	1.26	0.20	0.40	0.88	0.92	0.00	0.00	0.00	0.11	11.52
1972	0.11	0.68	3.17	0.22	0.34	0.00	0.34	0.02	0.00	0.00	0.00	0.00	4.88
1973	0.77	4.32	1.19	4.22	4.44	3.32	0.00	0.00	0.00	0.00	0.00	0.00	18.26
1974	0.75	2.48	2.81	5.15	0.28	4.90	1.13	0.00	0.00	0.00	0.00	0.00	17.50
1975	1.42	0.10	4.12	0.24	3.20	2.21	1.14	0.00	0.00	0.00	0.00	0.00	12.43
1976	0.89	0.18	0.00	0.00	4.57	0.98	0.72	0.00	0.12	0.00	0.91	2.22	10.59
1977	0.22	1.52	1.90	0.87	0.06	1.94	0.00	2.15	0.00	0.00	0.00	0.00	8.66
1978	0.14	0.26	3.50	5.91	6.61	4.48	3.45	0.00	0.00	0.00	0.00	1.53	25.88
1979	0.00	2.07	1.10	5.18	3.67	3.98	0.05	0.10	0.00	0.00	0.00	0.50	16.65
1980	0.50	0.58	2.17	3.93	5.67	2.17	0.44	0.44	0.00	0.08	0.00	0.00	15.98
1981	0.00	0.00	1.05	2.69	2.37	6.58	0.42	0.00	0.00	0.00	0.00	0.00	13.11
1982	0.58	1.78	0.80	2.80	1.10	4.90	1.70	0.00	0.15	0.00	0.00	0.00	13.81
1983	0.27	3.84	0.20	5.89	5.29	4.73	1.71	0.00	0.00	0.00	0.40	0.95	23.28
1984	1.27	2.43	2.80	0.02	0.35	0.55	0.54	0.00	0.00	0.00	0.04	0.00	8.00
1985	0.00	2.68	1.40	3.02	1.16	8.33	0.13	0.00	0.00	0.00	0.00		
1986													
1987													
1988													
1989												0.75	
1990	0.35	0.40	0.01	2.42	1.00							0.22	
1991	0.00	0.15	0.62	1.19	1.86	8.63	0.44	0.00	0.17	0.00	0.05	0.06	13.17
1992	0.57	0.21	3.91	2.09	6.09	2.37	0.00	0.00	0.02	0.20	0.00	0.04	15.50
1993	0.51	0.03	2.82	5.18	4.82	3.19	0.06	0.39	0.03	0.00	0.00	0.00	17.03
Sum	16.67	48.95	55.55	83.63	89.39	88.15	33.46	5.66	0.59	0.62	1.70	8.83	411.33
N	32	32	32	32	32	31	31	31	31	31	31	32	30
Mean	0.52	1.53	1.74	2.61	2.79	2.84	1.08	0.18	0.02	0.02	0.05	0.28	13.71
Max	2.23	5.14	4.53	7.79	7.75	8.63	4.65	2.15	0.17	0.20	0.91	2.22	25.88
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.88
STD	0.55	1.41	1.26	1.92	2.40	2.31	1.28	0.41	0.04	0.05	0.17	0.49	4.96

**APPENDIX C**  
**GEOLOGIC TIME SCALE; WELL COMPLETION REPORTS,**  
**LOCATIONS, AND REFERENCE ELEVATIONS; DETERMINING**  
**HYDRAULIC PROPERTIES; AND SPECIFIC YIELD VALUES**



## GEOLOGIC TIME SCALE

Relative Durations of Major Geologic Intervals	Era	Period	Epoch	Duration In Millions of Years (Approx.)	Millions of Years Ago (Approx.)	
CENOZOIC	Cenozoic	Quaternary	Holocene	Approx. last 10,000 years		
MESOZOIC		Tertiary	Pleistocene	2	2	
			Pliocene	3	5	
			Miocene	18	23	
			Oligocene	15	38	
			Eocene	16	54	
PALEOZOIC		Mesozoic	Cretaceous	Paleocene	11	65
					71	136
				Jurassic	54	190
	Triassic			35	225	
	Paleozoic	Permian		55	280	
			Pennsylvanian	45	325	
			Mississippian	20	345	
			Devonian	50	395	
			Silurian	35	430	
			Ordovician	70	500	
	Cambrian	70	570			
	</					

(After: Eicher, 1976)

Formation of Earth's crust about 4,600 million years ago

## **WELL COMPLETION REPORTS, LOCATIONS AND REFERENCE ELEVATIONS**

Water well completion reports<sup>1</sup> and geophysical logs and oil well electric and geologic logs were used in this study to interpret hydrogeologic conditions and in the preparation of the cross-sections. No subsurface exploration or well testing was conducted for this study.

Well completion reports are to contain information such as name of well owner, driller's name and signature, dates drilled, well location description and map, a detailed geologic log of materials encountered during drilling of the well, drilling method, total depth of boring and of completed well, casing diameter, perforation details (such as type, size and depth), and gravel pack placement. The well completion report is also to contain information on planned use, depths to first water and standing or static water level, estimated yield of the completed well, type of yield test and length, and total drawdown.

Usefulness of well completion reports was frequently limited. Not all the required information on the reports was provided on many reports available for this study. The description of a well's location was often incomplete or inaccurate; thus the well's position could not be determined on a quadrangle sheet. The geologic logs on the reports varied in degree of detail and terminology used to describe the sediments. Wells with geophysical logs were more useful, but the number of wells with geophysical logs was limited. The information provided on the depth at which first water was encountered and static water level was often lacking or appeared to be inaccurate. The completeness and consistency of these reports varied between drilling companies and individual drillers. The deeper water wells were generally more useful for analyzing the hydrogeologic conditions.

Well locations and reference elevations are from field descriptions of the locations as plotted on USGS 7.5-minute quadrangles.<sup>2</sup> Reference elevations were approximated using either the 7.5-minute quadrangles or digital aerial surveys at 5- or 2-foot contour intervals, where the surveys were available. The sea water intrusion wells along the coast and a few other wells in the study area have surveyed reference elevations.

---

<sup>1</sup>Before 1991, these reports were called "Water Well Drillers Report."

<sup>2</sup>In 2000, San Luis Obispo County located the wells in their monitoring program using GPS (Global Positioning System). Unrectifiable problems with the GPS data resulted in erroneous well locations and elevations and thus could not be used in this study.

## DETERMINING HYDRAULIC PROPERTIES

Aquifer hydraulic tests provide in situ determinations of hydraulic properties. Both transmissivity and storativity can be determined from tests based on water level drawdown and recovery measurements versus time using various nonequilibrium flow equations based on Theis (1935). Through the relationship of  $K = T/b$ ,<sup>3</sup> hydraulic conductivity may also be calculated.

Aquifer hydraulic tests were not conducted for this study by the Department. However, several aquifer tests of wells had previously been conducted and analyzed by other agencies, consultants, or the Department. The hydraulic conductivity values determined from these tests are given in Table 20.

Pump efficiency tests and pumping-test data from drillers' reports not only provide information on the efficiency of the pump and the method of well construction, but also indirectly indicate the transmissivity and hydraulic conductivity of the aquifer material surrounding the well.

Data from these tests were used to compute specific capacity values. Using the specific capacity values, theoretical transmissivity values were empirically estimated employing the modified Thiem formula ( $T = c \times 1,700$ ).<sup>4</sup> From the transmissivity value and the saturated thickness penetrated by the well, an estimated value of hydraulic conductivity was derived using the formula given above. Values of hydraulic conductivity determined by this method are also given on Table 20.

It must be recognized that the calculations of transmissivity and hydraulic conductivity values from pump tests relate directly to the age, efficiency, condition, and design of the well and its perforations. This is because the key factor in the calculation is well drawdown(s). Wells that are old, have inefficient designs, contain precipitates or encrustation on perforations, or have limited open areas in their perforated intervals will have larger drawdowns, thus lower specific capacities, than wells with the opposite of such conditions.

To provide greater coverage of the groundwater basin and to serve as a comparative tool with the aquifer hydraulic tests and pump efficiency tests, values of hydraulic conductivity were estimated by correlating the lithology penetrated by selected wells as represented on drillers' reports with typical conductivity values of similar types of material from Figure 24. The various types of lithologic material described on the drillers' reports were assigned a range (low and high) of conductivity values. The values were weighted by the thickness of the material penetrated and then summed over the total saturated thickness to arrive at an estimated range of transmissivity values for the well. These values were divided by the entire saturated thickness penetrated by the well to arrive at an estimated range of average weighted hydraulic conductivity values for the

---

<sup>3</sup>K is hydraulic conductivity, T is transmissivity, and b is saturated thickness perforated by the well.

<sup>4</sup> $T = c \times 1,700$ , where T is transmissivity, c is tested specific capacity of the well, and 1,700 is a constant empirical factor. The factor 1,700 used in the modified Thiem formula in this study is based on studies of valley fill in California where it was found applicable for the type of well construction generally employed here (Thomasson et al., 1960, pp. 220-223).

well.

The thicknesses of the different deposits and formations penetrated by the wells were identified, thereby allowing the determination of estimated hydraulic conductivity values for the alluvium, the Paso Robles and Careaga Formations, and the Squire Member of the Pismo Formation. These values of hydraulic conductivity estimated by lithologic correlation are also presented on Table 20. The wide range in values estimated by the correlation method can be explained by the ranges for geologic materials seen on Figure 24.

## SPECIFIC YIELD VALUES

Specific yield values representative for the drillers' terms compiled by the Department are given in Tables C1 and C2.

**TABLE C-1 - SPECIFIC YIELD VALUES USED IN COASTAL PLAIN OF LOS ANGELES COUNTY, CALIFORNIA\***

[After State Water Rights Board Revised Values of Specific Yield as used for San Fernando Valley Reference, 7-9-59, which is based on values used in Bulletin 45, Geology and Ground Water Storage Capacity of Valley Fill]

Note : Specific yield values above base of Bellflower aquiclude=00

<b>00 Percent—Bellflower Aquiclude</b>		
<b>03 percent—Clay and shale</b>		
Adobe	Granite clay	Shale
Boulders in clay	Hard clay	Shaley clay
Cemented clay	Hard pan	Shell rock
Clay	Hard sandy shale	Silty clay loam
Clayey loam	Hard shell	Soapstone
Decomposed shale	Muck	
<b>05 percent—Clayey sand and silt</b>		
Chalk rock	Rotten conglomerate	Sediment
Clay and gravel	Rotten granite	Shaley gravel
Clayey sand	Sand and clay	Silt
Clayey silt	Sand and silt	Silty clay
Conglomerate	Sand rock	Silty loam
Decomposed granite	Sandstone	Silty sand
Gravelly clay	Sandy clay	Soil
Loam	Sandy silt	
<b>10 percent—Cemented or tight sand or gravel</b>		
Caliche	Dead gravel	Heavy rocks
Cemented boulders	Dead sand	Soft sandstone
Cemented gravel	Dirty pack sand	Tight boulders
Cemented sand	Hard gravel	Tight coarse gravel
Cemented sand and gravel	Hard sand	
<b>14 percent—Gravel and boulders</b>		
Cobbles and gravel	Heaving gravel	Silty sand
Coarse gravel	Heavy gravel	Tight fine gravel
Boulders	Large gravel	Tight medium gravel
Broken rocks	Rocks	Muddy sand
Gravel and boulders	Sand and gravel, silty	
<b>16 percent—Fine sand</b>		
Fine sand	Quicksand	Sand, gravel and boulders
Heaving sand	Sand and boulders	Tight sand
<b>21-23 percent—Sand and gravel</b>		
Dry gravel	Gravelly sand	Sand
Loose gravel	Medium gravel	Water gravel
<b>26 percent—Coarse sand and fine gravel</b>		
Coarse sand	Fine gravel	Medium sand

Value of one added to given value where streaks of sand or gravel occur in clay or clayey material.

\* California Department of Water Resources, 1961, Planned utilization of the ground water basins of the coastal plain of Los Angeles County: California Dept. Water Resources Bull. 104, app. A, p. 121, Attachment 2, p. 2-3, 2-4.

**TABLE C-2 - SPECIFIC YIELD VALUES OF WATER-BEARING SEDIMENTS IN  
SAN LUIS OBISPO COUNTY, CALIFORNIA\***

<i>Material</i>	<i>Specific yield (percent)</i>	
	<i>Alluvium</i>	<i>Paso Robles formation</i>
Soil, including silty clay.....	5	5
Clay, including adobe and hardpan.....	3	3
Clay and sand, including sandy silt.....	5	5
Clay and gravel.....	7	7
Sand.....	25	20
Tight sand, including cemented sand.....	18	15
Gravel, including gravel and sand.....	21	18
Tight gravel, including cemented gravel.....	14	13

\*California Department of Water Resources, 1958, San Luis Obispo County Investigation: Bulletin No. 18, vol. II, Appendix B, p. B-27.

This Page Intentionally Blank

**APPENDIX D**  
**NET WATER DEMAND AND**  
**PER CAPITA WATER USE**



## Net Water Demand

Table D1 depicts net water demand in the study area for 1975-2020 for urban, agricultural, environmental, and other categories. Net water demand is the sum of all applied water except that which returns for reuse. Total net water demand decreased by about 800 acre-feet (AF) from the 30,900 AF in 1975 to 30,100 AF in 1995. Year 2020 total net water demand is expected to increase about 8,600 AF over 1995 levels. The large increase in total net demand from 1995 to 2020 is attributable to increased urban demand of about 6,300 AF and increased environmental demand of 2,800 AF. Average annual decreases of about 40 AF for net water demand were realized in the 20-year period 1975-1995 and an average annual increase of about 345 AF of net water demand is expected between 1995 and 2020.

Total net water demand overlying the main Santa Maria Groundwater Basin for 1975-2020 is depicted in Table D1. The groundwater basin total net water demand increased by about 2,700 AF from the 19,100 AF in 1975 to 21,800 AF in 1995. Year 2020 groundwater basin total net water demand is expected to increase about 7,300 AF over 1995 levels.

TABLE D1  
NET WATER DEMAND IN STUDY AREA  
Thousands of acre-feet\*

Water Demand <i>Overlying the Main Santa Maria Groundwater Basin</i>	1975	1980	1985	1990	1995	2010	2020
Urban	5.2	6.5	9.6	10.6	9.1	13.1	15.4
<i>Groundwater Basin</i>	<i>5.0</i>	<i>6.2</i>	<i>9.1</i>	<i>10.3</i>	<i>8.5</i>	<i>12.4</i>	<i>14.5</i>
Agricultural	24.7	23.4	21.0	19.7	19.9	19.4	19.3
<i>Groundwater Basin</i>	<i>13.1</i>	<i>14.1</i>	<i>15.0</i>	<i>13.7</i>	<i>12.2</i>	<i>11.8</i>	<i>12.0</i>
Other**	1.0	1.0	1.1	1.1	1.1	4.0	4.0
<i>Groundwater Basin***</i>	<i>1.0</i>	<i>1.0</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>2.6</i>	<i>2.6</i>
Study Area Total	30.9	30.9	31.7	31.4	30.1	36.5	38.7
<i>Groundwater Basin Total</i>	<i>19.1</i>	<i>21.3</i>	<i>25.2</i>	<i>25.1</i>	<i>21.8</i>	<i>26.8</i>	<i>29.1</i>

\*All values rounded to the nearest 100 acre-feet.

\*\*Values for 2010 and 2020 include 2,800 AF of environmental demand.

\*\*\*Values for 2010 and 2020 include 1,400 AF of environmental demand.

## Per Capita Water Use

Per capita water use varies throughout the study area both temporally and spatially. Per capita water use data for the larger population centers were collected and analyzed to determine past, present, and future values. Water year values range from 106 gallons per capita per day in the

Guadalupe HA in 1995 to 379 gallons per capita per day in the Nipomo Mesa HSA in 1990. Table D2 depicts per capita water use for 1975-2020 by hydrologic area and hydrologic subarea. Per capita water use data for the major water agencies in the study area were weighted by population to determine the per capita water use by hydrologic area and hydrologic subarea. The maximum per capita water use for each hydrologic area and hydrologic subarea was attained in either 1985 or 1990, with rates steadily declining through 1995. Projections indicate that, in general, per capita rates will increase through 2000; however, the increases are not expected to reach the maximums attained in 1985 and 1990.

Values for per capita water use shown in Table D2 account for past, present, and future urban water conservation. The values have been adjusted by the Department's Land and Water Use staff to account for the area's water conservation measures that are currently in effect and those expected to be in the future.

TABLE D2  
PER CAPITA WATER USE

Water Year	Pismo/Oceano HSA		Nipomo Mesa HSA		Guadalupe HA	
	GPCD*	AFPCA**	GPCD	AFPCA	GPCD	AFPCA
1975	131	0.147	229	0.257	119	0.134
1980	153	0.171	269	0.302	113	0.126
1985	194	0.217	339	0.380	133	0.150
1990	174	0.195	379	0.425	139	0.156
1995	146	0.164	251	0.282	106	0.119
2010	154	0.173	246	0.275	115	0.129
2020	154	0.173	246	0.275	115	0.129

\*GPCD - Gallons Per Capita Per Day

\*\*AFPCA - Acre Feet Per Capita Annually

### Urban Net Demand

Urban net water demand for 1975-2020 is shown in Table D3. Urban net water demand was obtained by subtracting from the applied water demand the amount of water that was reusable (such as that which percolated to the groundwater basin). It is, in other words, the amount of applied water that was lost by evapotranspiration, percolation to saline sinks, flow to the ocean, or evaporation. Total urban net water demand increased by about 3,900 AF from the 5,200 AF in 1975 to 9,100 AF in 1995. Year 2020 urban net water demand is expected to increase 6,300 AF over 1995 levels. An average annual increase in urban net water demand of 195 AF was realized in the 20-year period 1975-1995. Average annual urban net water demand is projected to

TABLE D3  
URBAN NET WATER DEMAND  
Thousands of acre-feet

Hydrologic Area/Subarea <i>Division Within Main Santa Maria Groundwater Basin</i>	1975	1980	1985	1990	1995	2010	2020
Pismo/Oceano HSA	3.8	4.6	6.8	7.0	6.2	8.3	9.4
<i>Tri-Cities Mesa - Arroyo Grande Plain**</i>	3.7	4.4	6.5	6.5	5.8	7.9	8.9
Nipomo Mesa HSA							
<i>Nipomo Mesa***</i>	1.1	1.6	2.3	3.3	2.3	3.9	5.0
Guadalupe HA	0.2	0.2	0.4	0.5	0.4	0.6	0.7
<i>Santa Maria Valley</i>	0.2	0.2	0.3	0.5	0.4	0.6	0.6
Study Area Total	5.2	6.5	9.6	10.6	9.1	13.1	15.4
<i>Groundwater Basin Total</i>	5.0	6.2	9.1	10.3	8.5	12.4	14.5

Note: All values rounded to the nearest 100 acre-feet.

\*Demand values derived by multiplying population by per capita water use.

\*\*Division includes lower Pismo Creek and Los Berros Creek portions of the main groundwater basin.

\*\*\*This portion of the main groundwater basin lies entirely within the HSA.

increase by over 250 AF between 1995 and 2020. Population increases of 51 and 59 percent during the 1975 through 1995 and 1995 through 2020 periods account for the increased urban net water demand, respectively.

Total urban net water demand overlying the main Santa Maria Groundwater Basin for 1975-2020 is also depicted in Table D3. It increased by about the same amount as in the entire study area.

### Agricultural Net Demand

Agricultural net water demand by hydrologic area and hydrologic subarea for 1975-2020 is shown in Table D4. Agricultural net water demand depicted in Table D4 represents the amount of water that was needed to meet all agricultural requirements. Agricultural net water demand decreased by almost 25 percent from the 24,600 AF in 1975 to 19,700 AF in 1995. Year 2020 agricultural net water demand is expected to decrease about 600 AF from 1995 levels. The reduction in demand for the two periods is attributable to a reduction in crop acres and increased irrigation efficiency.

Total agricultural net water demand overlying the main Santa Maria Groundwater Basin for 1975-2020 is depicted in Table D4. It decreased about 900 AF between 1975 and 1995 and is expected to decrease by another 200 AF by 2020.

TABLE D4  
AGRICULTURAL NET WATER DEMAND  
Thousands of acre-feet

Hydrologic Area/Subarea <i>Division Within Main Santa Maria Groundwater Basin</i>	1975	1980	1985	1990	1995	2010	2020
Pismo/Oceano HSA*	7.5	7.5	6.9	7.1	7.2	7.0	6.8
<i>Tri-Cities Mesa - Arroyo Grande Plain**</i>	3.4	3.1	2.8	2.6	2.3	2.2	2.2
Nipomo Mesa HSA	1.1	1.4	1.7	1.5	1.3	1.3	1.3
<i>Nipomo Mesa***</i>	1.1	1.4	1.7	1.5	1.3	1.3	1.3
Guadalupe HA	16.0	14.5	12.5	11.1	11.2	10.9	11.0
<i>Santa Maria Valley</i>	8.6	9.6	10.5	9.6	8.6	8.3	8.5
Study Area Total	24.6	23.4	21.1	19.7	19.7	19.2	19.1
<i>Groundwater Basin Total</i>	13.1	14.1	15.0	13.7	12.2	11.8	12.0

Note: All values rounded to the nearest 100 acre-feet.

\*The irrigated cropped acres in Pismo HSA for 1975 were 11.4; 1985, 26.6; and 1995, 0.0. Demand associated with these acreages amounted to less than 100 AF; therefore, the demand was combined for the two HSAs.

\*\*Division includes lower Pismo Creek and Los Berros Creek portions of the main groundwater basin.

\*\*\*This portion of the main groundwater basin lies entirely within the HSA.

Values for agricultural net water demand shown in Table D4 account for past, present, and future agricultural water conservation. The values have been adjusted by the Department's Land and Water Use staff to account for the area's water conservation measures that are currently in effect and those expected to be in the future.

### Environmental Net Demand

Environmental net water demands are assumed to be equal to applied amounts shown in Table 2 of Chapter III. San Luis Obispo County is studying requirements for water to be released for steelhead trout to Arroyo Grande Creek below Lopez Dam. Until the study is complete, it is making proposed annual releases of 2,800 AF from Lopez Reservoir for maintaining steelhead habitat. Releases of 2,800 AF began in the fall of 1998 and are expected to continue indefinitely. They are included in the Pismo/Oceano HSA numbers for 2010 and 2020 in Table D5.

The stretch of Arroyo Grande Creek overlying the main groundwater basin is about half the creek's length from Lopez Dam to the confluence with the Pacific Ocean. Therefore, the 2010 and 2020 environmental demands depicted in Table D5 for the Tri-Cities Mesa and Arroyo Grande Plain are half the county's proposed release of 2,800 AFY.

TABLE D5  
OTHER NET WATER DEMAND\*  
Thousands of acre-feet

Hydrologic Area/Subarea <i>Division Within Main Santa Maria Groundwater Basin</i>	1975	1980	1985	1990	1995	2010	2020
Pismo/Oceano HSA**	0.05	0.05	0.09	0.09	0.09	2.92	2.94
<i>Tri-Cities Mesa - Arroyo Grande Plain***</i>	<i>0.05</i>	<i>0.05</i>	<i>0.09</i>	<i>0.09</i>	<i>0.09</i>	<i>1.52</i>	<i>1.54</i>
Nipomo Mesa HSA							
<i>Nipomo Mesa<sup>†</sup></i>	<i>0.95</i>	<i>0.95</i>	<i>0.96</i>	<i>0.96</i>	<i>0.97</i>	<i>0.97</i>	<i>0.98</i>
Guadalupe HA	0.03	0.04	0.04	0.05	0.06	0.07	0.08
<i>Santa Maria Valley</i>	<i>0.03</i>	<i>0.04</i>	<i>0.04</i>	<i>0.05</i>	<i>0.06</i>	<i>0.07</i>	<i>0.08</i>
Study Area Total	1.03	1.04	1.09	1.10	1.12	3.96	4.00
<i>Groundwater Basin Total</i>	<i>1.03</i>	<i>1.04</i>	<i>1.09</i>	<i>1.10</i>	<i>1.12</i>	<i>2.56</i>	<i>2.60</i>

Note: All values rounded to the nearest 10 acre-feet.

\*Values for 2010 and 2020 are estimated based on historical trends.

\*\*Values for 2010 and 2020 include 2,800 AF of applied environmental demand.

\*\*\*Values for 2010 and 2020 include 1,400 AF of applied environmental demand - half of the release is attributable to the area overlying the main groundwater basin. Division includes lower Pismo Creek and Los Berros Creek portions of the main groundwater basin.

<sup>†</sup>This portion of the main groundwater basin lies entirely within the HSA.

### Other Net Demand

The other net water demand category consists of conveyance losses, cooling, miscellaneous, and recreational water demands. Table D5 lists net other water demands by hydrologic area and hydrologic subarea for the study area for 1975-2020. Water demand for this category increased by about 90 AF from the 1,030 AF in 1975 to 1,120 AF in 1995, mostly attributable to increased use at recreational facilities. Year 2020 other net water demand is expected to increase about 2,800 AF over 1995 levels. Environmental net demand of 2,800 AF makes up the largest portion of the increase between 1995 and 2020 with increased use of the area's recreational facilities responsible for about 50 AF of the expected increase. Increased Lopez Reservoir deliveries to contractors resulting in increased conveyance losses, increased cooling requirements, and increased miscellaneous uses account for the remainder of the increase from 1995 through 2020. The recreational water demand at Lopez Lake is not included in this study because it is considered part of the natural supply of Lopez Reservoir and so does not enter into any of this study's calculations.

**APPENDIX E**  
**STREAM GAGING DATA AND**  
**ESTIMATED HISTORICAL UNIMPAIRED RUNOFF**

## STREAM GAGING DATA FOR ARROYO GRANDE CREEK AND TRIBUTARIES

Station Name:	Arroyo Grande Creek at Arroyo Grande	Lopez Creek near Arroyo Grande	Tar Spring Creek near Arroyo Grande	Wittenberg Creek near Arroyo Grande	Los Berros Creek near Nipomo	Arroyo Grande Creek above Phoenix Creek, near Arroyo Grande
Gage No:	11141500	11141280	11141400	11141160	11141600	11141150
Elevation, feet:	98	580	180	560	312	560
Latitude (DD-MM-SS):	35-07-28	35-14-08	35-07-56	35-13-02	35-05-17	35-11-19
Longitude (DDD-MM-SS):	120-34-05	120-28-17	120-32-30	120-27-17	120-30-32	120-26-03
Record Began (Water Year):	1940	1968	1968	1968	1968	1968
Drainage Area (sq. mi.):	102	21	18	3	15	13
Water Year	Stream Discharge in Acre-Feet					
1940	9,569					
1941	65,560					
1942	21,460					
1943	45,689					
1944	15,527					
1945	12,038					
1946	5,511					
1947	3,480					
1948	1,790					
1949	2,680					
1950	4,860					
1951	3,887					
1952	36,758					
1953	9,897					
1954	7,112					
1955	4,324					
1956	17,320					
1957	3,320					
1958	46,750					
1959	5,770					
1960	4,310					
1961	1,999					
1962	19,260					
1963	5,710					
1964	2,320					
1965	5,630					
1966	5,030					
1967	36,960					
1968	3,750	3,110	170	50	20	980
1969	24,016	24,997	10,176	3,131	4,990	7,825
1970	6,565	4,616	797	326	530	1,482
1971	4,510	3,890	660	300	500	1,110
1972	3,300	1,908	131	106	90	607
1973	10,690	12,216	2,133	1,332	2,810	1,663
1974	18,020	8,910	3,210	920	1,870	1,790
1975	4,010	4,696	883	N/A	730	1,039
1976	2,940	1,810	310	N/A	270	780
1977	2,570	1,370	70	N/A	200	570
1978	23,030	15,100	7,530	N/A	3,920	4,850
1979	4,940	4,400	1,180	N/A	630	1,390
1980	22,850	12,618	N/A	N/A	1,590	3,630
1981	4,560	6,420	N/A	N/A	830	1,790
1982	10,130	8,430	N/A	N/A	790	2,360
1983	92,070	26,980	N/A	N/A	6,660	5,220
1984	10,050	6,480	N/A	N/A	1,080	1,750
1985	2,750	3,780	N/A	N/A	330	810
1986	9,110	10,030	N/A	N/A	560	4,590
1987	2,210	3,390	N/A	N/A	30	870
1988	1,950 *	2,840	N/A	N/A	0	670
1989	2,600 *	2,430	N/A	N/A	0	600
1990	2,120	1,440	N/A	N/A	0	360
1991	5,010	2,769	N/A	N/A	908	512
1992	5,130	3,559	N/A	N/A	317 *	1,317 E

N/A: Not Available; E: Estimated; \*Incomplete Record

**STREAM GAGING DATA FOR ARROYO GRANDE CREEK AND TRIBUTARIES**

Station Name:	Arroyo Grande Creek at Arroyo Grande	Lopez Creek near Arroyo Grande	Tar Spring Creek near Arroyo Grande	Wittenberg Creek near Arroyo Grande	Los Berros Creek near Nipomo	Arroyo Grande Creek above Phoenix Creek, near Arroyo Grande
Gage No:	11141500	11141280	11141400	11141160	11141600	11141150
Elevation, feet:	98	580	180	560	312	560
Latitude (DD-MM-SS):	35-07-28	35-14-08	35-07-56	35-13-02	35-05-17	35-11-19
Longitude (DDD-MM-SS):	120-34-05	120-28-17	120-32-30	120-27-17	120-30-32	120-26-03
Record Began (Water Year):	1940	1968	1968	1968	1968	1968
Drainage Area (sq. mi.):	102	21	18	3	15	13
Water Year	Stream Discharge in Acre-Feet					
1993	9,010	8,469	N/A	N/A	1,056	N/A
1994	2,160 *	2,598	N/A	N/A	N/A	N/A
1995	18,110 *	14,304	N/A	N/A	1,136 *	N/A
	<i>For 1940-95 Water Years</i>	<i>For 1968-95 Water Years</i>	<i>For 1968-95 Water Years</i>	<i>For 1968-95 Water Years</i>	<i>For 1968-95 Water Years</i>	<i>For 1968-95 Water Years</i>
Sum	683,405	203,561	27,250	6,165	29,655	48,565
N	53	28	12	7	25	25
Mean	12,894	7,270	2,271	881	1,186	1,943
Mean for 1984-95 Water Years	4,548	5,174	N/A	N/A	358	1,275
Max	92,070	26,980	10,176	3,131	6,660	7,825
Min	1,790	1,370	70	50	0	360
STD	17,310	6,506	3,117	1,014	1,693	1,857
1996	15,500	7,676			968	
1997	60,599	16,755			3,253	
1998	81,114	26,033			8,385	
1999	8,591	5,350			512	
2000	7,922	6,852			924	
	<i>For 1940-2000 Water Years</i>	<i>For 1968-2000 Water Years</i>			<i>For 1968-2000 Water Years</i>	
Sum	886,411	266,227			45,782	
N	61	33			33	
Mean	14,531	8,067			1,387	
Max	92,070	26,980			8,385	
Min	1,790	1,370			0	
STD	19,389	7,094			1,981	

N/A: Not Available; E: Estimated; \*Incomplete Record



### STREAM DISCHARGE DATA FOR PISMO CREEK

Station Name:	Pismo Creek at Pismo Beach
Gage No:	None
Elevation, feet:	18.0*
Latitude (DD-MM-SS):	35-08-33
Longitude (DDD-MM-SS):	120-37-58
Record Began (Water Year):	1990
Drainage Area (sq. mi.):	25.00

Year	Month	Stream Discharge in Acre-Feet
1990	Oct	N/A
1990	Nov	N/A
1990	Dec	N/A
1990	Jan	19
1990	Feb	34
1990	Mar	22
1990	Apr	2
1990	May	N/A
1990	Jun	N/A
1990	Jul	N/A
1990	Aug	N/A
1990	Sep	N/A
1991	Oct	N/A
1991	Nov	N/A
1991	Dec	N/A
1991	Jan	N/A
1991	Feb	7
1991	Mar	1,982
1991	Apr	38
1991	May	7
1991	Jun	2
1991	Jul	2
1991	Aug	1
1991	Sep	1
1992	Oct	N/A
1992	Nov	N/A
1992	Dec	39
1992	Jan	148
1992	Feb	4,084
1992	Mar	263
1992	Apr	78
1992	May	25
1992	Jun	3
1992	Jul	1
1992	Aug	N/A
1992	Sep	N/A
Sum		6,760
N		21
Mean		322
Max		4,084
Min		0
STD		940

N/A: Data Not Available

\*Estimated from USGS Pismo Beach Quadrangle (1978)

**STREAM GAGING DATA FOR SANTA MARIA RIVER AND TRIBUTARIES**

Station Name:	Bradley Ditch near Donavan Road at Santa Maria	Santa Maria River at Guadalupe	Sisquoc River near Gary	Cuyama River below Twitchell Dam
Gage No:	11140600	11141000	11140000	11138100
Elevation, feet:	225	65	355	402
Latitude (DD-MM-SS):	35-00-42	34-58-35	34-53-38	34-56-40
Longitude (DDD-MM-SS):	120-16-43	120-34-15	120-18-20	120-17-30
Record Began (Water Year):	1971	1941	1942	1959
Drainage Area (sq. mi.):	----	1,741	471	1,132

Water Year	Stream Discharge in Acre-Feet			
1941		183,290		
1942		1,080	15,660	
1943		71,910	66,320	
1944		13,560	37,810	
1945		4,990	16,970	
1946		4,880	8,520	
1947		2,530	2,230	
1948		0	0	
1949		0	90	
1950		2,460	1,200	
1951		0	0	
1952		112,760	73,730	
1953		360	5,170	
1954		1,270	9,910	
1955		0	610	
1956		4,200	8,360	
1957		0	90	
1958		133,550	99,220	
1959		0	2,410	4300
1960		0	50	1060
1961		0	560	20
1962		24,280	46,440	58560
1963		0	280	2430
1964		0	0	1670
1965		0	3,190	3010
1966		930	9,870	5350
1967		32,040	95,450	75100
1968		100	3,280	44190
1969		179,660	287,760	149160
1970		780	5,180	111320
1971	340	0	3,930	5730
1972	280	0	1,020	0
1973	1,570	9,990	36,520	42190
1974	620	210	5,610	33330
1975	630	310	8,180	5820
1976	520	0	390	0
1977	390	10	60	0
1978	2,400	49,870	108,230	82630
1979	N/A	2,230	28,360	122560
1980	1,350	21,180	85,950	109990
1981	1,110	550	6,540	10280
1982	1,110	320	14,900	26580
1983	2,520	151,390	231,800	91630
1984	980	3,570	8,550	
1985	870	0	0	
1986	1,280	3,570	25,160	
1987	1,150	10	0	
1988	1,140		3,620	
1989	412		0	
1990	470		0	
1991	1,140		33,020	
1992	1,270		41,950	
1993	N/A		182,210	

N/A: Data Not Available

**STREAM GAGING DATA FOR SANTA MARIA RIVER AND TRIBUTARIES**

Station Name:	Bradley Ditch near Donavan Road at Santa Maria	Santa Maria River at Guadalupe	Sisquoc River near Gary	Cuyama River below Twitchell Dam
Gage No:	11140600	11141000	11140000	11138100
Elevation, feet:	225	65	355	402
Latitude (DD-MM-SS):	35-00-42	34-58-35	34-53-38	34-56-40
Longitude (DDD-MM-SS):	120-16-43	120-34-15	120-18-20	120-17-30
Record Began (Water Year):	1971	1941	1942	1959
Drainage Area (sq. mi.):	---	1,741	471	1,132
Water Year	Stream Discharge in Acre-Feet			
1994	N/A		4,140	
1995	N/A		216,810	
	<i>For 1971-92 Water Years</i>	<i>For 1941-87 Water Years</i>	<i>For 1942-95 Water Years</i>	<i>For 1959-83 Water Years</i>
Sum	23,748	1,021,587	12,990,078	990,403
N	23	50	58	28
Mean	1,033	21,656	223,967	35,372
Mean for 1984-95 Water Years	N/A	N/A	728,639	N/A
Max	2,520	183,290	11,140,000	149,160
Min	225	0	0	0
STD	638	47,077	1,459,786	45,872
1996			39,771	
1997			46,103	
1998	4,221		322,532	
1999	1,235		10,944	
2000			18,792	
	<i>For 1971-99 Water Years</i>		<i>For 1942-2000 Water Years</i>	
Sum	27,008		2,285,452	
N	23		59	
Mean	1,174		38,736	
Max	4,221		322,532	
Min	280		0	
STD	883		71,313	

N/A: Data Not Available

**ESTIMATED UNIMPAIRED RUNOFF WATER YEARS 1895 TO 1947\***  
**SANTA MARIA RIVER AND ARROYO GRANDE CREEK**

Water Year	Santa Maria River at Mouth	Arroyo Grande Creek at Arroyo Grande
	Stream Discharge in Acre-Feet	
1895	206,400	52,200
1896	8,700	6,200
1897	79,800	20,600
1898	100	1,100
1899	100	3,100
1900	500	4,200
1901	164,600	43,000
1902	2,400	5,100
1903	58,300	15,000
1904	24,400	8,100
1905	205,000	51,900
1906	161,100	42,100
1907	356,700	76,200
1908	158,700	41,600
1909	277,800	64,700
1910	125,600	33,100
1911	273,600	63,900
1912	45,600	12,000
1913	41,700	11,300
1914	278,200	64,700
1915	219,400	54,600
1916	167,000	43,500
1917	111,700	29,100
1918	190,400	48,900
1919	400	4,200
1920	49,900	13,000
1921	100	3,100
1922	142,300	37,200
1923	2,400	5,100
1924	100	1,100
1925	100	2,100
1926	72,400	22,900
1927	96,500	29,400
1928	27,100	8,500
1929	100	3,200
1930	3,500	2,100
1931	4,300	800
1932	108,000	32,500
1933	15,800	5,700
1934	10,700	7,300
1935	40,200	1,500
1936	43,300	11,000
1937	156,600	39,300
1938	214,500	51,700
1939	21,300	8,800
1940	16,500	9,000
1941	307,800	66,500
1942	40,900	21,500
1943	144,700	45,700
1944	71,100	15,500
1945	37,500	12,000
1946	20,300	5,500
1947	10,100	3,500
Sum	4,816,300	1,265,900
N	53	53
Mean	90,874	23,885
Max	356,700	76,200
Min	100	800
STD	95,727	21,810

\*From California State Water Resources Board, Bulletin No. 1

This Page Intentionally Blank

**APPENDIX F**  
**WATER QUALITY GUIDELINES FOR AGRICULTURE**  
**AND SELECTED GROUNDWATER QUALITY DATA**

# WATER QUALITY GUIDELINES FOR AGRICULTURE\*

Constituent	Unit	Suitability for Irrigation			Specific Crops Affected
		Suitable	Marginal	Unsuitable	
Electrical Conductivity	$\mu\text{mhos/cm}$	< 750	750-3,000	> 3,000	
Total Dissolved Solids	mg/L	< 500	500-2,000	> 2,000	
Boron	mg/L	< 0.50	0.50-2.00	> 2.00	Fruit and citrus trees 0.50-1.00 mg/L Field crops 1.00-2.00 mg/L Grasses > 2.00 mg/L
Chloride	mg/L	< 142	142-355	> 355	Tree crops and ornamentals: root adsorption Field and vegetable crops: foliar damage at 106 mg/L
Sodium Adsorption Ratio**	mg/L	< 3	3-9	> 9	Tree crops: root adsorption
Sulfate	mg/L	< 350	350-600	> 600	

\*From: Ayers, R. S., 1977, Quality of water for irrigation: Journal of the Irrigation and Drainage Division, Proceedings of the American Society of Civil Engineers, vol. 163, no. IR2, p. 135-154; and McKee, J. E. and Wolfe, H. W., eds., 1963, Water Quality Criteria: California State Water Resources Control Board, Pub. No. 3-A, 548 p.

\*\*Sodium Adsorption Ratio (SAR) is defined as:

$$\text{SAR} = \frac{\text{Na}}{[\frac{1}{2}(\text{Ca}+\text{Mg})]^{1/2}}$$

Where Na, Ca, and Mg are the concentrations of sodium, calcium, and magnesium in milliequivalents per liter.

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/day	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	Fl mg/L	Total Hard- ness, mg/L
<b>Tri-Cities Mesa</b>															
32S/12E-13J02 M	611108	7.2	4719	3019	197.0	159.0	591.0	15.0	654.7	241.0	1160.0	12.0	0.43	0.4	1146
32S/12E-13J02 M	621010	7.6	3900	2648	120.0	157.0	575.0	13.0	670.6	289.0	977.0	3.0	0.59	0.2	946
32S/12E-13J02 M	630306	7.4	4098	2670	185.0	159.0	512.0	13.0	821.8	341.0	825.0	7.5	0.70	0.3	1116
32S/12E-13J02 M	630926	7.4	3610	2600	170.0	160.0	515.0	14.0	749.8	260.0	922.0	0.0	0.37	0.1	1083
32S/12E-13J02 M	641013	8.1	3900	3024	198.0	151.0	565.0	15.0	686.4	281.0	1039.0	3.0	0.64	0.1	1116
32S/12E-13J02 M	651007	7.6	5144	3294	194.0	174.0	635.0	16.0	547.4	224.0	1353.0	5.0	0.45	0.4	1200
32S/12E-13J02 M	670926	8.2	4141	2643	134.0	147.0	552.0	14.0	599.9	301.0	939.0	9.5	0.45	0.4	940
32S/12E-13L01 M	671023	7.7	1573	757	44.0	41.0	162.0	3.0	231.7	135.0	162.0	100.0	0.19	0.3	279
32S/12E-13P01 M	600224	7.4	1389	850	15.0	12.0	268.0	3.0	265.8	137.0	167.0	100.0	0.15	0.4	87
32S/12E-13P01 M	610303	7.4	1500	924	29.0	16.0	276.0	4.0	268.2	149.0	208.0	100.0	0.28	0.0	139
32S/12E-13P01 M	621030	8.2	1340	916	20.0	12.0	281.0	3.0	353.6	117.0	177.0	55.0	0.23	0.2	100
32S/12E-13P01 M	630708	7.3	1665	1048	26.0	23.0	304.0	6.0	302.4	158.0	257.0	79.0	0.23	0.4	160
32S/12E-13P01 M	640708	8.2	1930	1156	29.0	26.0	395.0	6.0	399.9	169.0	326.0	73.0	0.38	0.1	180
32S/12E-13P01 M	670926	7.7	1738	1035	21.0	28.0	324.0	5.0	343.8	168.0	262.0	72.5	0.23	0.3	168
32S/12E-13R01 M	550921	7.6	7080		310.0	205.0	828.0	15.0	597.4	340.0	1844.0	6.8	0.44	0.4	1618
32S/12E-13R01 M	570829	7.7	5459	3178	204.0	174.0	626.0	15.0	534.0	234.0	1434.0	0.0	0.70	0.0	1225
32S/12E-13R01 M	580930	7.5	4274	2799	235.0	149.0	444.0	24.0	464.5	185.0	1089.0	0.0	0.28	0.3	1200
32S/12E-13R01 M	671005	7.4	5634	3640	369.0	205.0	455.0	14.0	376.7	183.0	1626.0	4.5	0.16	0.5	1765
32S/12E-24B01 M	660117	8.2	2985	1700	95.0	83.0	406.0	20.0	440.1	175.0	652.0	1.0	0.07	0.3	579
32S/12E-24B01 M	670309	8.3	3030	1690	76.0	110.0	414.0	16.0	464.5	159.0	701.0	4.2	0.00		643
32S/12E-24B01 M	670926	7.6	2974	1740	80.0	92.0	408.0	20.0	458.4	165.0	659.0	7.0	0.08	0.3	578
32S/12E-24B01 M	721013	7.9	2893	1699	93.0	93.0	392.0	18.0	449.9	159.0	679.0	6.3	0.13	0.2	615
32S/12E-24B01 M	760609	8.2	2914	1706	94.0	95.0	400.0	16.2	474.3	159.0	667.0	0.4	0.12	0.5	625
32S/12E-24B01 M	960326	7.8	3200	1870	125.0	95.4	380.0	24.0	426.7	154.0	773.0	<0.2	0.27		
32S/12E-24B02 M	650430	8.3	1155	800	81.0	37.0	98.0	6.0	218.2	163.0	162.0	1.0	0.08	0.5	354
32S/12E-24B02 M	660117	8.3	1035	651	101.0	32.0	79.0	5.0	380.4	147.0	62.0	0.0	0.05	0.3	384
32S/12E-24B02 M	670309	7.9	964	571	89.0	27.0	59.0	5.0	280.4	148.0	48.0	1.9	0.00		333
32S/12E-24B02 M	670926	8.0	919	610	87.0	31.0	70.0	5.0	365.8	142.0	39.0	1.3	0.05	0.2	345
32S/12E-24B02 M	721013	7.7		543	80.0	31.0	51.0	4.4	292.6	152.0	31.0	1.0	0.08	0.2	328
32S/12E-24B02 M	760609	7.9	855	565	104.0	27.0	52.0	4.0	336.5	153.0	34.0	0.6	0.02	0.5	371
32S/12E-24B02 M	960326	7.8	961	652	107.0	23.9	46.0	5.0	343.8	169.0	54.0	<0.2	0.10		
32S/12E-24B03 M	650501	8.2	960	638	49.0	64.0	79.0	5.0	354.8	155.0	73.0	3.0	0.13	0.1	386
32S/12E-24B03 M	660117	8.0	1065	670	103.0	36.0	74.0	5.0	345.0	158.0	79.0	1.0	0.00	0.2	405
32S/12E-24B03 M	670309	7.9	911	540	70.0	37.0	69.0	4.0	334.1	140.0	45.0	2.4	0.00		327

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, Fl: Fluoride.



Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
32S/12E-24B03 M	670926	7.7	978	652	95.0	40.0	57.0	4.0	370.6	162.0	41.0	0.0	0.03	0.2	402
32S/12E-24B03 M	721013	7.6	914	596	85.0	42.0	54.0	3.9	337.7	168.0	37.0	0.1	0.05	0.2	385
32S/12E-24B03 M	760609	7.8	878	569	85.0	39.0	53.0	3.7	330.4	165.0	36.0	0.0	0.06	0.4	373
32S/12E-24B03 M	960326	7.8	999	646	104.0	42.2	52.0	4.3	412.1	164.0	40.7	<0.2	0.12		
32S/12E-24J01 M	610928	7.8	580	408	33.0	17.0	52.0	4.0	42.7	56.0	64.0	96.0	0.07	0.1	153
32S/12E-24K01 M	610928	7.9	2445	1677	145.0	65.0	333.0	7.0	442.6	162.0	603.0	8.1	0.03	0.2	630
32S/12E-24K01 M	620713	7.8	2600	1514	158.0	58.0	312.0	6.0	445.0	192.0	550.0	0.0	0.08	0.1	633
32S/12E-24K01 M	671102	8.1	1197	748	81.0	51.0	109.0	8.0	481.6	95.0	107.0	3.0	0.14	0.2	412
32S/12E-24R01 M	650616	7.9	1500	898	69.0	63.0	160.0	6.0	341.4	110.0	268.0	33.0	0.12	0.1	431
32S/12E-24R01 M	660118	7.6	1687	1082	113.0	47.0	137.0	3.0	186.5	87.0	345.0	67.0	0.08	0.2	476
32S/12E-24R01 M	670310	8.2	4280	2410	106.0	89.0	664.0	21.0	983.9	48.0	871.0	5.5	0.70		631
32S/12E-24R01 M	670927	7.7	826	557	43.0	22.0	79.0	4.0	91.4	77.0	96.0	112.5	0.04	0.2	198
32S/12E-24R01 M	760609	7.9	1145	701	40.0	29.0	162.0	9.1	229.2	114.0	149.0	83.4	0.14	0.6	219
32S/12E-24R02 M	650616	7.9	745	500	61.0	40.0	45.0	2.0	225.6	132.0	64.0	10.0	0.10	0.1	317
32S/12E-24R02 M	660118	8.1	758	458	75.0	23.0	45.0	2.0	203.6	94.0	71.0	9.5	0.00	0.2	282
32S/12E-24R02 M	670927	7.9	912	580	82.0	30.0	53.0	3.0	206.0	85.0	121.0	29.0	0.00	0.2	328
32S/12E-24R02 M	760609	8.2	697	426	67.0	21.0	51.0	2.1	201.2	88.0	61.0	26.0	0.03	0.5	254
32S/12E-24R03 M	650616	7.7	1140	748	116.0	52.0	63.0	3.0	403.6	168.0	103.0	5.0	0.08	0.2	504
32S/12E-24R03 M	660119	7.8	1051	640	110.0	45.0	50.0	3.0	375.5	167.0	54.0	1.0	0.00	0.2	460
32S/12E-24R03 M	670926	7.6	922	612	80.0	46.0	44.0	3.0	338.9	163.0	32.0	0.0	0.03	0.2	389
32S/12E-24R03 M	760609	7.8	916	582	91.0	48.0	45.0	2.7	369.4	166.0	31.0	0.4	0.04	0.5	425
32S/13E-18P01 M	870911	6.6		850	52.0	30.0	150.0	4.0	121.9	120.0	270.0	0.4		1.3	260
32S/13E-18P01 M	900125	6.2	1600	1000	68.0	39.0	190.0	7.0	180.0	140.0	350.0	0.9		0.9	340
32S/13E-18P01 M	921208	6.9	2900	1464	144.2	82.6	302.5	10.5	388.0	210.3	552.8	1.0		1.3	700
32S/13E-18P01 M	950926	6.7	2150	1256	110.5	85.2	221.9	8.9	251.3	359.0	345.3	<1.0		1.1	596
32S/13E-19B01 M	870911	6.5	900	640	37.0	16.0	130.0	3.0	109.7	35.0	220.0	0.4		1.2	160
32S/13E-19B01 M	900125	6.0	1100	860	48.0	23.0	150.0	4.0	130.0	63.0	260.0	0.9		1.0	190
32S/13E-19B01 M	921208	7.0	2200	1108	104.1	43.7	260.0	6.4	307.4	106.0	460.5	<1.0		1.5	440
32S/13E-19B01 M	950926	6.9	570	284	27.7	11.4	65.9	2.1	91.3	21.0	110.0	<1.0		0.9	108
32S/13E-19J02 M	640306	7.0	290	248	12.0	4.0	48.0	2.0	30.5	2.0	46.0	69.0	0.05	0.1	47
32S/13E-19J02 M	671023	7.2	514	258	19.0	9.0	58.0	3.0	24.4	15.0	65.0	115.0	0.10	0.1	85
32S/13E-19L01 M	640306	7.1	400	198	24.0	8.0	50.0	1.0	45.1	37.0	50.0	76.0	0.02	0.1	93
32S/13E-19N01 M	540929	6.9	454		23.0	9.0	47.0	1.0	21.9	41.0	57.0	75.0	0.03	0.1	95
32S/13E-19N01 M	570829	6.5	596	336	22.0	15.0	64.0	2.0	21.9	58.0	73.0	86.0	0.20	0.0	117
32S/13E-19N01 M	580206	6.3	511	353	18.0	13.0	53.0	1.0	21.9	33.0	69.0	75.0	0.00	0.2	99

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
32S/13E-19N01 M	590922	7.3	620	407	26.0	17.0	65.0	1.0	24.4	58.0	75.0	114.0	0.30	0.0	135
32S/13E-19N01 M	610302	6.3	725		38.0	17.0	72.0	2.0	25.6	80.0	84.0	133.0	0.10	0.0	165
32S/13E-19Q01 M	640306	6.5	450	336	22.0	10.0	62.0	2.0	39.0	36.0	66.0	80.0	0.05	0.1	96
32S/13E-19Q02 M	730413	7.5	1020	666			47.0			162.0	31.0	0.3			480
32S/13E-19Q02 M	731123	7.5	740	545	81.0	42.0	57.0	4.4	378.0	145.0	28.0	0.6		0.4	360
32S/13E-19Q02 M	761012	7.9	682	377	69.0	34.0	24.0	3.9	259.7	109.0	24.0	1.0	0.06	0.4	313
32S/13E-19Q02 M	870826	7.2		700	93.0	51.0	55.0	4.0	451.0	150.0	25.0	0.4		0.2	480
32S/13E-19Q02 M	900125	6.6	1000	730	110.0	46.0	47.0	4.0	400.0	170.0	29.0	<0.4		0.3	470
32S/13E-19Q02 M	921208	7.4	1070	589	124.9	37.9	48.0	2.3	441.6	147.7	47.1	<1.0		0.2	468
32S/13E-19Q02 M	951107	7.5	1180	685	126.6	56.4	49.7	2.7	489.5	161.1	47.3	<1.0		0.1	548
32S/13E-19Q02 M	981103	7.4	1140	682	142.0	40.0	41.1	3.2	451.0	170.0	63.8	2.0		0.2	505
32S/13E-19R01 M	640306	6.8	630	449	43.0	16.0	73.0	2.0	18.3	74.0	76.0	155.0	0.07	0.1	174
32S/13E-20M01 M	640304	7.1	500	337	23.0	8.0	35.0	80.0	123.1	14.0	92.0	20.0	0.05	0.1	91
32S/13E-20M03 M	640617	6.7	650	470	26.0	28.0	74.0	1.0	28.0	77.0	85.0	133.0	0.05	0.1	180
32S/13E-20N01 M	640617	7.2	900	630	71.0	40.0	60.0	3.0	169.5	135.0	78.0	116.0	0.10	0.1	342
32S/13E-20N05 M	640305	7.0	600	450	29.0	19.0	70.0	2.0	37.8	93.0	63.0	107.0	0.05	0.1	151
32S/13E-20N05 M	671025	7.3	1114	697	45.0	33.0	115.0	2.0	36.6	105.0	187.0	132.5	0.05	0.1	248
32S/13E-28B01 M	711028	7.9	1786	1382	220.0	99.0	81.0	3.5	529.1	538.0	89.0	2.6	0.08	0.4	956
32S/13E-28E01 M	540929	7.4	1020		105.0	58.0	47.0	2.0	421.8	177.0	51.0	13.6	0.00	0.1	501
32S/13E-28E01 M	610303	7.5	1070		112.0	52.0	53.0	2.0	410.9	176.0	60.0	22.0	0.10	0.1	494
32S/13E-28E01 M	620823	7.4	1020	692	105.0	51.0	52.0	2.0	417.0	167.0	56.0	16.0	0.09	0.1	472
32S/13E-28E01 M	640617	7.7	1041	684	108.0	52.0	49.0	2.0	390.1	157.0	55.0	25.0	0.16	0.4	484
32S/13E-28E05 M	610303	6.8	630		40.0	28.0	52.0	1.0	135.3	127.0	40.0	45.0	0.00	0.1	215
32S/13E-28E05 M	640617	7.8	1061	705	106.0	53.0	50.0	2.0	392.6	157.0	56.0	26.0	0.20	0.4	483
32S/13E-28L01 M	691007	7.8	860	584	72.0	39.0	46.0	2.0	157.3	198.0	54.0	33.0	0.04	0.2	340
32S/13E-28L01 M	701014	8.0	877	611	77.0	39.0	50.0	2.0	167.0	201.0	57.0	53.0	0.04	0.3	353
32S/13E-28L01 M	871105	8.2	849	665	70.0	60.0	37.0	2.2	239.0	229.0	49.0	0.5	0.10	0.4	421
32S/13E-28Nx1 M	950419	7.2	1580	1080	185.0	81.0	56.0	3.0	483.0	363.0	80.0	42.1		0.3	795
32S/13E-28Nx2 M	950418	7.0	1430	950	152.0	68.0	59.0	2.3	429.0	268.0	93.3	53.1		0.3	659
32S/13E-28Nx2 M	960408											34.0			
32S/13E-29B01 M	691007	7.9	802	529	60.0	39.0	49.0	2.0	218.2	122.0	54.0	33.0	0.04	0.3	310
32S/13E-29B01 M	711029	8.2	880	583	82.0	40.0	54.0	2.2	289.0	152.0	52.0	37.5	0.06	0.2	369
32S/13E-29C02 M	741107	8.6	833	506	73.0	35.0	46.0	2.7	204.8	119.0	53.0	80.0	0.00	0.3	327
32S/13E-29C02 M	811016	8.1	938	579	77.0	42.0	50.0	2.9	270.7	133.0	56.0	41.6	0.00	0.3	364
32S/13E-29D01 M	540929	7.8	934		97.0	49.0	44.0	3.0	412.1	144.0	31.0	2.5	0.05	0.1	444

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
32S/13E-29D01 M	570305	7.4	787	481	67.0	42.0	44.0	4.0	342.6	112.0	27.0	0.0	0.06	0.0	340
32S/13E-29D01 M	610303	7.3	980		108.0	44.0	43.0	3.0	434.0	149.0	34.0	0.0	0.13	0.0	451
32S/13E-29D01 M	640617	7.6	971	626	108.0	46.0	42.0	3.0	420.6	143.0	32.0	6.0	0.05	0.3	459
32S/13E-29D02 M	610509	7.4	620		51.0	19.0	48.0	2.0	69.5	77.0	63.0	115.0	0.25	0.1	205
32S/13E-29D02 M	640617	7.1	650	478	48.0	19.0	61.0	2.0	69.5	62.0	81.0	116.0	0.08	0.1	198
32S/13E-29D03 M	610303	7.2	480		27.0	11.0	46.0	2.0	50.0	35.0	46.0	95.0	0.06	0.0	113
32S/13E-29D03 M	640617	7.6	575	408	32.0	15.0	51.0	2.0	46.3	41.0	68.0	95.0	0.50	0.2	142
32S/13E-29D04 M	691007	7.8	891	592	79.0	43.0	44.0	3.0	275.5	127.0	52.0	38.0	0.00	0.2	374
32S/13E-29D04 M	711029	7.4	862	547	80.0	38.0	47.0	2.4	243.8	122.0	55.0	73.5	0.04	0.2	356
32S/13E-29E01 M	561212	7.1		583	64.0	31.0	42.0	4.0	170.7	96.0	51.0	91.0	0.10	0.3	287
32S/13E-29E01 M	600512	7.2	785	593	67.0	29.0	54.0	3.0	114.6	155.0	62.0	78.0	0.02	0.2	286
32S/13E-29E01 M	610303	7.2	865		70.0	34.0	53.0	3.0	121.9	131.0	62.0	144.0	0.13	0.2	315
32S/13E-29E01 M	620416	7.0	932	536	67.0	32.0	58.0	3.0	147.5	123.0	63.0	108.0	0.20	0.2	299
32S/13E-29E01 M	640703	7.6	930	563	69.0	33.0	58.0	3.0	124.4	134.0	72.0	118.0	0.10	0.2	308
32S/13E-29E01 M	670126	7.4	952	601	70.0	35.0	58.0	3.0	110.9	134.0	76.0	135.0	0.07	0.2	319
32S/13E-29E01 M	720615	7.4		615	76.0	34.0	52.0	2.7	175.6	144.0	58.0	94.0		0.4	330
32S/13E-29E01 M	781004	7.8	730	526	69.0	23.0	55.0	3.4	101.2	154.0	51.0	101.0		0.2	305
32S/13E-29E01 M	860402	7.2	750	490	55.0	29.0	46.0		80.5	140.0	50.0	89.0		0.4	260
32S/13E-29E01 M	891228	6.3	700	470	54.0	28.0	54.0	4.0	95.0	130.0	50.0	93.0		0.3	240
32S/13E-29E01 M	900306	6.2	750	500	54.0	27.0	56.0	5.0	95.0	140.0	57.0	100.0		0.3	260
32S/13E-29E01 M	900713	6.6	600	450	56.0	28.0	54.0	3.0	100.0	120.0	110.0	71.0		0.2	250
32S/13E-29E01 M	920707	7.0	760	448	56.1	26.2	57.1	2.3	124.4	123.0	55.5	76.8		0.1	248
32S/13E-29E01 M	930915	7.2	750	441	59.3	24.8	49.7	2.0	97.6	129.0	51.6	76.5		0.2	250
32S/13E-29E01 M	960917	7.4	840	507	65.7	30.4	45.1	2.8	100.0	139.0	50.5	112.0		0.3	291
32S/13E-29E01 M	991214	7.0	760	461	69.2	23.8	44.0	3.0	109.0	122.0	42.0	103.0		0.1	271
32S/13E-29E02 M	561212	7.2		587	65.0	32.0	43.0	2.0	219.5	100.0	46.0	45.0	0.10	0.1	294
32S/13E-29E02 M	600512	7.0	834	589	71.0	34.0	44.0	3.0	197.5	121.0	56.0	58.0	0.04	0.2	317
32S/13E-29E02 M	620416	6.5	916	500	60.0	34.0	55.0	2.0	110.9	143.0	66.0	100.0	0.10	0.1	290
32S/13E-29E02 M	640703	7.4	1013	595	82.0	37.0	57.0	3.0	179.2	136.0	82.0	100.0	0.20	0.1	357
32S/13E-29E02 M	670126	7.2	980	598	79.0	39.0	53.0	3.0	206.0	127.0	68.0	95.0	0.07	0.2	358
32S/13E-29E02 M	720615	7.4		645	58.0	37.0	52.0	3.0	121.9	152.0	60.0	86.0		0.3	295
32S/13E-29E02 M	740425	7.4	720	566	76.0	35.3	51.0	3.4	200.0	150.0	54.0	56.4		0.5	337
32S/13E-29E02 M	911121	6.5	950	590	74.0	42.0	54.0	<3.0	110.0	180.0	59.0	120.0		<0.1	360
32S/13E-29E02 M	920707	7.4	920	557	77.7	35.3	57.0	2.5	124.4	147.7	60.2	125.0		0.1	339
32S/13E-29E02 M	941220	7.4	930	607	69.8	41.4	53.3	2.3	132.7	167.4	51.3	169.5		0.5	336

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/day	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
32S/13E-29E02 M	980603	6.5	890	576	88.1	32.0	45.9	1.0	103.0	144.0	51.4	163.0		0.4	354
32S/13E-29E03 M	590601	7.3	870		83.0	43.0	38.0	3.0	301.1	111.0	46.0	46.0	0.04	0.2	384
32S/13E-29E03 M	600512	7.1	888	628	81.0	37.0	42.0	3.0	209.7	128.0	69.0	50.0	0.01	0.2	354
32S/13E-29E03 M	601111	7.0	806		74.0	35.0	48.0	3.0	204.8	136.0	63.0	37.0	0.04	0.1	329
32S/13E-29E03 M	620416	7.0	948	763	74.0	36.0	52.0	3.0	169.5	139.0	62.0	98.0	0.10	0.1	333
32S/13E-29E03 M	640617	7.6	900	644	69.0	47.0	58.0	3.0	191.4	134.0	73.0	107.0	0.13	0.1	366
32S/13E-29E03 M	640703	7.4	977	566	82.0	38.0	32.0	3.0	181.7	133.0	72.0	59.0	0.20	0.2	361
32S/13E-29E03 M	670126	6.8	1000	615	76.0	39.0	57.0	3.0	175.6	136.0	77.0	105.0	0.11	0.2	350
32S/13E-29E03 M	711029	7.9	796	520	63.0	36.0	50.0	2.0	139.0	156.0	58.0	78.0	0.04	0.2	301
32S/13E-29E03 M	870909	6.8	900	620	75.0	39.0	53.0	3.0	120.0	170.0	60.0	120.0		0.1	370
32S/13E-29E03 M	891228	6.4	900	600	72.0	39.0	55.0	5.0	110.0	170.0	54.0	140.0		0.2	340
32S/13E-29E03 M	900306	6.1	900	570	69.0	36.0	54.0	6.0	120.0	180.0	59.0	130.0		0.1	350
32S/13E-29E03 M	900713	6.4	800	610	75.0	41.0	54.0	3.0	120.0	160.0	50.0	93.0		0.2	350
32S/13E-29E03 M	960522	7.3	990	667	80.0	49.5	54.3	2.5	112.0	195.0	61.4	167.0		1.6	368
32S/13E-29E03 M	000124	7.0	940	590	99.3	19.8	50.6	2.4	117.0	146.0	49.2	166.0		0.1	330
32S/13E-29E05 M	640617	7.1	755	558	62.0	28.0	56.0	3.0	97.5	84.0	69.0	156.0	0.08	0.2	270
32S/13E-29E07 M	790924	8.1	940		102.0	49.0	55.0	3.5	465.7	133.0	34.0	0.5		0.2	470
32S/13E-29E07 M	810902	8.1	790	612	112.8	48.8	25.7		473.7	86.0	25.0	0.0			480
32S/13E-29E07 M	891228	6.6	1000	640	110.0	54.0	42.0	4.0	400.0	150.0	29.0	7.5		0.3	500
32S/13E-29E07 M	900306	6.5	1000	690	120.0	58.0	44.0	3.0	420.0	160.0	30.0	8.0		0.3	510
32S/13E-29E07 M	900713	6.9	890	660	110.0	56.0	42.0	5.0	440.0	140.0	28.0	8.4		0.3	490
32S/13E-29E07 M	930915	7.6	1110	605	107.3	51.5	39.8	2.4	451.4	146.2	25.8	9.6		0.3	480
32S/13E-29E07 M	960924	7.6	1030	617	112.0	48.6	38.1	2.7	438.0	155.0	29.6	14.9		0.4	480
32S/13E-29E07 M	990907	7.1	1070	614	119.0	45.0	41.1	1.1	432.0	148.0	30.7	16.4		0.2	483
32S/13E-29F01 M	671024	7.6	1049	684	88.0	43.0	60.0	3.0	240.2	145.0	81.0	94.5	0.00	0.3	397
32S/13E-29F01 M	840222	7.6	987	470	49.0	43.4	53.0		179.2	126.0	60.3	64.6		0.3	300
32S/13E-29F01 M	880301	7.2	700	450	50.0	24.0	41.0	5.0	134.1	110.0	45.0	62.0		<0.1	250
32S/13E-29F01 M	910129	7.7	760	448	61.7	28.7	42.3	2.0	141.5	105.8	36.6	77.5		0.1	272
32S/13E-29F01 M	940308	7.6	690	415	67.3	19.2	43.9	2.0	151.3	114.9	47.9	45.2		0.2	247
32S/13E-29F01 M	970311	7.4	710	406	71.1	19.4	40.5	1.7	154.0	109.0	45.1	43.0		0.3	258
32S/13E-29F01 M	000321	7.0	675	417	87.0	8.0	47.0	2.0	150.0	116.0	43.0	41.0		0.0	259
32S/13E-29G01 M	501113	7.5	872	558	90.0	43.0	37.0	3.0	360.9	131.0	32.0	10.0	0.01		402
32S/13E-29G01 M	570306	7.4	945	591	102.0	45.0	38.0	3.0	382.8	146.0	35.0	8.7	0.01	0.2	440
32S/13E-29G01 M	590218	7.9	842	601	80.0	39.0	36.0	2.0	210.9	150.0	53.0	60.0	0.08	0.2	360
32S/13E-29G01 M	600803	7.2	939		99.0	46.0	38.0	2.0	331.6	153.0	41.0	18.0	0.11	0.3	436

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/day	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
32S/13E-29G01 M	611117	7.4	948	627	103.0	49.0	34.0	2.0	357.2	144.0	43.0	31.0	0.02	0.4	459
32S/13E-29G01 M	620823	7.4	810	638	77.0	33.0	41.0	4.0	175.6	143.0	54.0	60.0	0.05	0.4	328
32S/13E-29G01 M	621016	7.3	820	480	79.0	43.0	43.0	2.0	285.3	132.0	60.0	31.0	0.09	0.2	374
32S/13E-29G01 M	630925	7.2	937	705	104.0	45.0	42.0	3.0	360.9	146.0	44.0	28.0	0.08	1.1	445
32S/13E-29G01 M	640922	7.7	940	612	73.0	46.0	42.0	2.0	187.8	152.0	37.0	111.0	0.12	0.2	371
32S/13E-29G01 M	641013	7.6	869	670	82.0	40.0	42.0	2.0	260.9	136.0	48.0	44.0	0.06	0.4	369
32S/13E-29G01 M	690411	8.0		625	82.0	30.0	52.0	3.2	232.9	161.0	50.0	40.0		0.2	335
32S/13E-29G01 M	740912	7.9	889	670	88.0	43.0	42.0	2.0	262.1	152.0	53.0	35.0		0.2	395
32S/13E-29G01 M	840222	7.7	1009	544	41.0	50.8	62.5		236.5	140.0	43.1	41.2		0.4	311
32S/13E-29G01 M	840829	7.2	737	552	59.9	33.7	42.5		284.1	104.0	34.2				288
32S/13E-29G01 M	880301	7.3	700	420	58.0	26.0	49.0	4.0	182.9	130.0	45.0	39.0		<0.1	270
32S/13E-29G01 M	910129	7.7	840	487	82.5	24.8	43.0	2.1	225.5	129.4	34.9	25.1		0.3	308
32S/13E-29G01 M	940308	7.6	780	470	72.1	28.2	47.6	2.2	198.6	142.8	48.3	31.2		0.3	296
32S/13E-29G01 M	970311	7.3	850	494	87.9	27.3	44.3	2.4	218.0	148.0	45.0	31.0		0.3	332
32S/13E-29G01 M	000321	7.0	820	509	102.0	18.0	45.0	2.0	216.0	163.0	43.0	30.0		0.0	329
32S/13E-29G02 M	590218	8.1	984	661	110.0	53.0	33.0	3.0	414.5	165.0	32.0	3.9	0.09	0.2	493
32S/13E-29G02 M	640617	8.2	952	642	102.0	50.0	39.0	2.0	390.1	146.0	44.0	25.5	0.15	0.5	460
32S/13E-29G02 M	640922	7.6	900	640	74.0	59.0	46.0	2.0	343.8	160.0	46.0	20.0	0.55	0.1	427
32S/13E-29G02 M	651007	7.9	938	610	99.0	46.0	40.0	2.0	349.9	148.0	43.0	27.0	0.12	0.4	436
32S/13E-29G02 M	701023	7.8	788	522	60.0	48.0	39.0	3.0	253.6	160.0	40.0	10.0	0.02	0.4	347
32S/13E-29G02 M	711026	7.6	858	571	81.0	39.0	48.0	2.1	245.1	159.0	54.0	39.0	0.04	0.2	363
32S/13E-29G02 M	840222	7.6	1031	553	37.0	62.2	56.0		267.0	148.0	45.8	35.8		0.3	348
32S/13E-29G02 M	880301	7.4	850	550	70.0	33.0	48.0	5.0	219.5	140.0	55.0	58.0		<0.1	340
32S/13E-29G02 M	910129	7.6	850	519	78.5	33.1	45.2	2.1	213.7	131.7	39.4	38.1		0.2	332
32S/13E-29G02 M	940308	7.6	780	467	66.0	29.9	48.2	2.1	188.9	141.0	46.4	40.2		0.3	288
32S/13E-29G02 M	970311	7.6	890	513	90.3	27.6	47.5	1.9	239.0	150.0	44.8	33.0		0.3	339
32S/13E-29G02 M	000321	7.0	870	555	101.0	25.0	52.0	2.0	249.0	173.0	46.0	34.0		0.0	354
32S/13E-29G03 M	840222	8.3	1140	646	15.4	111.0	46.5		545.0	137.0	26.0	0.4		0.4	497
32S/13E-29G03 M	840829	7.4	1048	690	107.0	47.5	56.0		534.0	117.7	28.4				463
32S/13E-29G13 M	691007	7.8	848	572	60.0	46.0	41.0	3.0	180.4	153.0	57.0	42.0	0.05	0.3	339
32S/13E-29G14 M	761118	8.4		750	96.0	42.5	40.0	2.4	295.0	157.0	42.0	31.0		0.2	415
32S/13E-29G14 M	840222	7.6	1042	575	37.6	61.8	64.0		257.3	152.0	54.0	44.7		0.3	348
32S/13E-29G14 M	840829	7.3	871	572	24.5	60.9	63.0		262.1	128.2	46.5				311
32S/13E-29G14 M	880301	7.3	800	540	71.0	34.0	43.0	5.0	243.8	150.0	45.0	34.0		<0.1	350
32S/13E-29G14 M	910129	7.8	850	502	72.9	40.3	40.1	2.1	239.1	138.6	34.6	25.5		0.3	348

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/day	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
32S/13E-29G14 M	940308	7.4	810	499	83.3	29.2	45.1	3.2	221.1	154.0	47.1	28.2		0.3	328
32S/13E-29G14 M	970311	7.4	890	521	116.0	16.5	42.9	2.0	241.0	152.0	43.9	28.9		0.3	358
32S/13E-29G14 M	000321	7.0	870	545	101.0	30.0	48.0	2.0	242.0	172.0	44.0	29.0		0.0	373
32S/13E-29G15 M	850515	7.5	1021	677	104.0	47.4	54.5		465.7	133.0	29.6				456
32S/13E-29G15 M	880301	7.5		670	110.0	51.0	35.0	6.0	499.9	150.0	30.0	<0.4		<0.1	530
32S/13E-29G15 M	880322	7.2	1050	650	110.0	54.0	39.0	<3.0	487.7	130.0	25.0	<0.4		<0.1	530
32S/13E-29G15 M	910129	7.6	1150	713	112.1	58.0	37.0	2.3	490.4	127.0	20.3	<1.0		<0.1	519
32S/13E-29G15 M	940308	7.5	1040	638	120.1	50.3	38.9	2.3	500.7	149.7	30.1	<1.0		0.3	507
32S/13E-29G15 M	970311	7.6	1090	641	161.0	27.7	36.5	2.2	503.0	138.0	27.4	2.0		0.4	516
32S/13E-29G15 M	000321	7.0	1040	646	156.0	34.0	38.0	2.0	489.0	148.0	27.0	2.0		0.0	531
32S/13E-29G17 M	900615	6.8	850	540	85.0	39.0	45.0	3.0	270.0	140.0	48.0	39.0		0.1	390
32S/13E-29G17 M	930202	7.7	900	524	92.4	40.1	39.4	2.2	303.5	157.2	42.3	25.8		0.3	396
32S/13E-29G17 M	960416	7.7	880	550	86.4	45.3	38.8	2.6	292.0	165.0	41.6	26.2		0.2	392
32S/13E-29G17 M	990525	7.3	960	577	113.0	30.4	43.1	2.4	315.0	166.0	41.8	22.6		0.1	407
32S/13E-29G17 M	000321	7.0	915	579	130.0	19.0	44.0	3.0	307.0	168.0	42.0	22.0		0.0	402
32S/13E-29M04 M	871105	8.2	926	726	82.0	41.0	56.0	3.4	132.9	160.0	81.0	132.0	0.20	0.3	373
32S/13E-29P01 M	521112	7.5	559	374	66.0	17.0	33.0	2.0	180.4	98.0	32.0	2.6	0.02		235
32S/13E-30F01 M	650528	11.4	2620	2032	339.0	22.0	205.0	10.0	252.4	192.0	596.0	23.0	0.12	0.1	937
32S/13E-30F01 M	670310	7.7	2790	1960	213.0	87.0	232.0	6.0	137.8	437.0	541.0	26.0	0.00		890
32S/13E-30F02 M	650528	8.1	865	552	75.0	43.0	52.0	3.0	262.1	140.0	59.0	31.0	0.10	0.1	364
32S/13E-30F02 M	660120	7.6	970	580	94.0	38.0	47.0	2.0	280.4	152.0	68.0	27.0	0.08	0.2	391
32S/13E-30F02 M	670310	8.0	997	650	89.0	39.0	51.0	3.0	280.4	152.0	64.0	26.0	0.00		383
32S/13E-30F02 M	670927	7.6	932	636	88.0	40.0	49.0	3.0	286.5	153.0	58.0	30.0	0.05	0.2	384
32S/13E-30F02 M	760609	8.0	971	637	98.0	43.0	55.0	2.8	342.6	172.0	48.0	17.6	0.10	0.5	421
32S/13E-30F02 M	960327	7.4	998	678	97.8	41.6	52.0	3.8	304.8	166.0	49.2	48.7	0.16		
32S/13E-30F03 M	650528	8.0	1060	688	109.0	54.0	49.0	4.0	378.0	188.0	73.0	0.0	0.15	0.2	494
32S/13E-30F03 M	660119	7.8	1047	642	109.0	40.0	49.0	4.0	320.7	182.0	69.0	1.0	0.05	0.3	437
32S/13E-30F03 M	670410	8.2	958	600	87.0	37.0	45.0	3.0	264.6	178.0	48.0	1.1	0.00		370
32S/13E-30F03 M	670926	7.6	903	613	76.0	47.0	44.0	3.0	282.9	181.0	43.0	0.0	0.03	0.3	383
32S/13E-30F03 M	760609	7.8	943	616	96.0	49.0	41.0	2.6	332.8	190.0	43.0	0.4	0.05	0.5	441
32S/13E-30F03 M	960327	7.6	1004	686	109.0	48.0	40.0	3.4	379.2	197.0	40.9	<0.2	0.13		
32S/13E-30H01 M	580929	6.2	636	425	34.0	22.0	63.0	1.0	21.9	93.0	58.0	145.0	0.14	0.1	176
32S/13E-30H01 M	590218	6.1	587	448	31.0	18.0	62.0	1.0	18.3	94.0	53.0	133.0	0.02	0.1	152
32S/13E-30H01 M	590922	7.0	714	460	34.0	21.0	62.0	2.0	12.2	79.0	65.0	163.0	0.32	0.0	172
32S/13E-30H01 M	600920	6.6	725		35.0	22.0	62.0	1.0	15.8	97.0	58.0	155.0	0.00	0.1	178

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
32S/13E-30H01 M	610302	6.5	690		37.0	25.0	56.0	1.0	19.5	92.0	61.0	150.0	0.28	0.0	196
32S/13E-30H02 M	580929	7.4	690	460	56.0	30.0	43.0	2.0	97.5	80.0	65.0	124.0	0.18	0.2	263
32S/13E-30H02 M	590218	7.4	699	515	62.0	29.0	45.0	2.0	101.2	89.0	69.0	124.0	0.03	0.1	274
32S/13E-30H02 M	590922	7.3	652	440	47.0	25.0	40.0	2.0	85.3	55.0	64.0	107.0	0.46	0.2	221
32S/13E-30H02 M	610302	7.3	700		51.0	26.0	42.0	2.0	96.3	65.0	65.0	115.0	0.10	0.1	234
32S/13E-30H02 M	611109	7.4	664	448	50.0	24.0	41.0	2.0	113.4	50.0	71.0	94.0	0.06	0.2	224
32S/13E-30H02 M	621010	7.5	630	474	53.0	23.0	47.0	2.0	95.1	62.0	73.0	100.0	0.08	0.2	227
32S/13E-30H02 M	630926	7.2	734	500	57.0	21.0	54.0	2.0	102.4	73.0	68.0	118.0	0.05	0.3	229
32S/13E-30H02 M	640617	7.6	770	536	59.0	28.0	58.0	3.0	109.7	87.0	73.0	133.0	0.05	0.1	262
32S/13E-30H02 M	641013	7.9	690	610	53.0	27.0	58.0	3.0	93.9	80.0	71.0	127.0	0.06	0.1	243
32S/13E-30H02 M	651007	7.8	778	463	52.0	26.0	52.0	2.0	86.6	81.0	76.0	122.0	0.03	0.3	237
32S/13E-30H02 M	691007	7.7	864	662	60.0	29.0	60.0	3.0	81.7	108.0	84.0	123.0	0.06	0.3	269
32S/13E-30H02 M	701020	8.0	864	551	59.0	28.0	64.0	2.0	91.4	109.0	80.0	128.0	0.07	0.3	263
32S/13E-30H02 M	711025	7.2	822	525	55.0	29.0	70.0	2.8	98.8	127.0	70.0	130.0	0.06	0.1	256
32S/13E-30K01 M	650610	7.2	810	594	53.0	24.0	62.0	2.0	78.0	83.0	84.0	125.0	0.07	0.0	231
32S/13E-30K04 M	780623	7.7	1200	872	78.0	29.6	65.8		93.9	246.1	84.5	6.0		0.1	384
32S/13E-30K05 M	650610	7.7	1005	700	85.0	39.0	56.0	3.0	175.6	149.0	80.0	108.0	0.06	0.2	373
32S/13E-30K06 M	600803	7.6	998		87.0	41.0	54.0	1.0	196.3	142.0	100.0	62.0	0.13	0.2	386
32S/13E-30K06 M	621031	8.2	1140	904	49.0	86.0	79.0	4.0	217.0	158.0	184.0	67.0	0.13	0.2	476
32S/13E-30K06 M	671005	8.0	1235	801	98.0	44.0	82.0	3.0	214.6	165.0	143.0	85.0	0.08	0.3	426
32S/13E-30K06 M	780623	7.4	1150	952	76.2	30.0	69.7		104.9	231.6	106.7	6.1		0.0	404
32S/13E-30K10 M	650610	7.4	930	670	68.0	32.0	60.0	3.0	93.9	134.0	83.0	128.0	0.05	0.2	301
32S/13E-30K16 M	650831	7.3	1390	918	103.0	58.0	97.0		307.2	206.0	158.0	28.0		0.1	497
32S/13E-30K16 M	780623	7.5	1100	976	82.0	29.0	66.8		91.4	248.0	92.0	6.0		0.2	388
32S/13E-30K17 M	711029	7.5	984	638	80.0	39.0	62.0	2.8	93.9	159.0	96.0	148.5	0.04	0.2	360
32S/13E-30K19 M	900711	6.7	1000	660	100.0	46.0	74.0	4.0	317.0	200.0	63.0	1.3		0.3	450
32S/13E-30K19 M	930609	7.3	1130	696	81.9	68.0	69.3	3.5	385.0	220.1	62.9	<1.0		0.6	484
32S/13E-30K19 M	951107	7.6	1110	668	118.5	49.6	55.0	3.3	374.8	200.0	55.1	2.4		0.2	500
32S/13E-30K19 M	981103	7.3	1240	730	138.0	41.0	55.1	4.1	354.0	250.0	63.6	2.8		0.3	514
32S/13E-30L01 M	611109	8.0	925	605	98.0	46.0	41.0	1.0	336.5	138.0	53.0	27.0	0.04	0.2	434
32S/13E-30L01 M	621016	7.2	950	604	102.0	45.0	47.0	2.0	345.0	137.0	69.0	13.0	0.07	0.2	440
32S/13E-30L01 M	630926	7.4	991	730	94.0	51.0	50.0	3.0	326.7	132.0	85.0	25.0	0.06	0.3	444
32S/13E-30L01 M	641013	8.2	1080	814	96.0	54.0	52.0	2.0	308.5	144.0	111.0	22.0	0.11	0.1	462
32S/13E-30L02 M	540929	7.5	761		92.0	41.0	40.0	3.0	353.6	124.0	43.0	20.0	0.20	0.1	398
32S/13E-30L02 M	570829	7.8	901	637	76.0	40.0	41.0	2.0	317.0	115.0	51.0	4.7	0.30	0.1	354

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	Fl mg/L	Total Hard- ness, mg/L
32S/13E-30L02 M	580206	7.2	855	590	70.0	47.0	39.0	2.0	310.9	95.0	52.0	22.0	0.10	0.0	368
32S/13E-30L02 M	590218	7.4	741	529	72.0	35.0	45.0	2.0	217.0	103.0	59.0	67.0	0.03	0.1	324
32S/13E-30L02 M	590922	7.1	865	645	85.0	43.0	40.0	1.0	314.6	115.0	57.0	28.0	0.18	0.1	389
32S/13E-30L02 M	600224	7.3	950	590	90.0	44.0	48.0	2.0	290.2	125.0	85.0	35.0	0.12	0.3	406
32S/13E-30L02 M	600920	7.3	945		92.0	45.0	42.0	2.0	349.9	134.0	50.0	22.0	0.15	0.0	415
32S/13E-30L02 M	610302	7.1	1530		139.0	72.0	60.0	3.0	280.4	160.0	255.0	16.0	0.10	0.0	644
32S/13E-30L02 M	640617	7.5	1057	658	102.0	48.0	52.0	2.0	304.8	140.0	97.0	26.0	0.30	0.4	452
32S/13E-30L02 M	651007	8.0	1156	725	113.0	53.0	46.0	3.0	297.5	151.0	130.0	24.0	0.04	0.3	500
32S/13E-30L02 M	671005	7.8	1246	842	116.0	54.0	56.0	3.0	291.4	145.0	163.0	29.0	0.06	0.3	512
32S/13E-30L02 M	701020	8.1	1512	986	136.0	68.0	88.0	3.0	290.2	206.0	213.0	45.0	0.07	0.4	619
32S/13E-30L02 M	741108	8.3	1206	758	106.0	51.0	56.0	2.3	230.4	157.0	129.0	80.0	0.54	0.5	473
32S/13E-30N01 M	670413	8.7	1150	696	41.0	48.0	94.0	37.0	112.2	278.0	132.0	1.7	0.00		300
32S/13E-30N01 M	670927	8.3	864	531	30.0	38.0	67.0	33.0	137.8	153.0	100.0	1.5	0.12	0.5	232
32S/13E-30N02 M	660121	7.5	1376	1069	148.0	63.0	71.0	5.0	231.7	483.0	54.0	0.0	0.12	0.5	629
32S/13E-30N02 M	670413	8.2	1370	1050	137.0	64.0	71.0	4.0	219.5	486.0	50.0	1.4	0.10		605
32S/13E-30N02 M	670927	7.6	1353	1048	147.0	63.0	68.0	5.0	241.4	484.0	48.0	0.0	0.11	0.5	627
32S/13E-30N02 M	721011	7.7	1295	882	126.0	62.0	64.0	3.6	335.3	218.0	116.0	48.0	0.08	0.3	568
32S/13E-30N02 M	760607	7.9	1366	1093	150.0	60.0	62.0	4.7	247.5	484.0	48.0	0.0	0.13	0.7	624
32S/13E-30N02 M	960327	8.1	1394	1050	145.0	60.4	71.0	5.5	242.6	516.0	49.5	0.9	0.23		
32S/13E-30N03 M	650611	8.1	1145	804	97.0	75.0	57.0	3.0	423.1	231.0	73.0	0.0	0.08	0.1	551
32S/13E-30N03 M	660122	7.5	1226	804	132.0	59.0	54.0	3.0	409.7	250.0	57.0	1.0	0.08	0.5	572
32S/13E-30N03 M	670413	8.1	1220	778	121.0	43.0	56.0	3.0	318.2	238.0	62.0	0.6	0.00		479
32S/13E-30N03 M	670927	7.9	933	661	65.0	55.0	51.0	3.0	234.1	246.0	41.0	0.0	0.05	0.3	388
32S/13E-30N03 M	721011	7.8	1310	1038	145.0	62.0	74.0	4.0	242.6	493.0	47.0	0.8	0.15	0.4	617
32S/13E-30N03 M	760607	8.0	1065	705	99.0	43.0	54.0	2.9	189.0	168.0	90.0	112.5	0.08	0.5	424
32S/13E-30N03 M	960327	7.7	960	624	78.4	34.9	62.0	4.0	150.0	161.0	70.2	106.3	0.13		
32S/13E-30P01 M	501112	7.8	796	512	96.0	26.0	37.0	1.0	330.4	105.0	32.0	15.0	0.02		347
32S/13E-30P01 M	610303	7.5	910		94.0	43.0	38.0	2.0	324.3	110.0	76.0	20.0	0.04	0.1	412
32S/13E-30P01 M	620823	7.7	950	694	104.0	49.0	40.0	2.0	320.7	119.0	106.0	13.0	0.06	0.2	461
32S/13E-30P01 M	621030	7.5	960	682	100.0	47.0	42.0	3.0	319.4	120.0	99.0	15.0	0.14	0.2	443
32S/13E-30P01 M	660120	7.4	1099	653	106.0	48.0	43.0	2.0	306.0	134.0	105.0	27.0	0.04	0.4	462
32S/13E-30P01 M	671004	7.4	1099	736	104.0	48.0	49.0	3.0	293.8	147.0	108.0	35.0	0.04	0.4	457
32S/13E-30P03 M	610928	7.9	780	603	94.0	45.0	30.0	2.0	280.4	139.0	51.0	49.0	0.08	0.3	420
32S/13E-30P03 M	671006	7.0	1143	765	88.0	50.0	67.0	2.0	153.6	209.0	102.0	115.0	0.05	0.3	425
32S/13E-30Q02 M	650610	7.5	1082	793	89.0	43.0	62.0	3.0	168.3	185.0	91.0	104.0	0.05	0.2	399

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, Fl: Fluoride



Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
32S/13E-30Q04 M	650610	7.4	1018	733	81.0	39.0	65.0	2.0	136.6	156.0	94.0	118.0	0.05	0.2	363
32S/13E-30R01 M	581006	7.4	748	470	65.0	30.0	54.0	3.0	158.5	99.0	74.0	78.0	0.00	0.3	286
32S/13E-30R01 M	590218	7.3	680	489	65.0	29.0	44.0	3.0	186.5	96.0	57.0	62.0	0.15	0.2	281
32S/13E-30R01 M	590922	7.5	847	585	63.0	30.0	61.0	3.0	124.4	106.0	78.0	115.0	0.42	0.0	281
32S/13E-30R01 M	600224	7.3	892	560	87.0	32.0	46.0	2.0	158.5	122.0	82.0	98.0	0.03	0.3	349
32S/13E-30R01 M	600920	7.7	1005		99.0	41.0	38.0	2.0	226.8	150.0	79.0	62.0	0.03	0.1	416
32S/13E-30R01 M	610302	7.4	900		82.0	41.0	39.0	2.0	154.8	139.0	85.0	109.0	0.38	0.2	373
32S/13E-30R01 M	611109	7.2	980	659	90.0	41.0	48.0	3.0	212.1	150.0	73.0	85.0	0.07	0.3	393
32S/13E-30R01 M	620823	7.0	740	618	56.0	23.0	56.0	3.0	80.5	103.0	72.0	94.0	0.05	0.4	234
32S/13E-30R01 M	621010	7.4	700	488	56.0	21.0	55.0	2.0	81.7	101.0	71.0	87.0	0.05	0.2	226
32S/13E-30R01 M	630926	7.2	791	565	57.0	27.0	62.0	3.0	75.6	114.0	68.0	128.0	0.05	0.3	253
32S/13E-30R01 M	640617	7.2	806	533	58.0	26.0	61.0	3.0	70.7	117.0	70.0	123.0	0.28	0.3	252
32S/13E-30R01 M	651007	7.8	781	474	51.0	25.0	59.0	3.0	73.2	123.0	68.0	106.0	0.00	0.3	230
32S/13E-30R01 M	691007	7.9	828	554	59.0	27.0	63.0	3.0	81.7	136.0	73.0	108.0	0.00	0.3	258
32S/13E-30R01 M	711025	7.2	863	572	65.0	32.0	62.0	2.4	84.1	140.0	76.0	145.0	0.04	0.2	294
32S/13E-30R02 M	610302	7.1	780		57.0	25.0	63.0	2.0	58.5	106.0	67.0	175.0	0.04	0.0	245
32S/13E-30R02 M	640617	7.1	896	629	69.0	30.0	61.0	2.0	87.8	122.0	76.0	156.0	0.40	0.2	296
32S/13E-30R02 M	701014	7.4	896	613	64.0	29.0	69.0	3.0	65.8	145.0	77.0	134.0	0.02	0.2	279
32S/13E-30R02 M	871105	7.8	694	532	53.0	28.0	48.0	1.6	75.6	137.0	55.0	76.8	0.00	0.2	247
32S/13E-30R11 M	640617	7.8	710	580	55.0	21.0	63.0	2.0	69.5	121.0	61.0	120.0	0.10	0.1	224
32S/13E-31B01 M	530603	7.3	1114		107.0	37.0	73.0	4.0	258.5	183.0	91.0	89.9	0.10	0.0	419
32S/13E-31B01 M	610303	7.1	1180		107.0	55.0	67.0	3.0	249.9	210.0	99.0	107.0	0.15	0.0	493
32S/13E-31B03 M	621030	8.4	1440	942	126.0	67.0	118.0	3.0	387.7	286.0	145.0	50.0	0.16	0.2	590
32S/13E-31B04 M	650604	7.4	1214	786	91.0	51.0	82.0	2.0	219.5	181.0	103.0	117.0	0.07	0.3	437
32S/13E-31B05 M	650605	7.4	1140	760	87.0	42.0	80.0	2.0	178.0	159.0	103.0	121.0	0.08	0.3	390
32S/13E-31B06 M	650605	7.6	1185	784	89.0	51.0	76.0	2.0	208.5	178.0	101.0	115.0	0.07	0.3	432
32S/13E-31B07 M	650605	7.4	1081	696	66.0	55.0	70.0	1.0	162.2	199.0	93.0	81.0	0.02	0.3	391
32S/13E-31B09 M	650727	8.4	1162	817	96.0	50.0	76.0	3.0	229.2	184.0	99.0	113.0	0.10	0.3	445
32S/13E-31B10 M	650605	7.5	1193	819	97.0	47.0	78.0	3.0	214.6	178.0	100.0	120.0	0.06	0.3	436
32S/13E-31B12 M	650605	8.0	907	560	90.0	42.0	36.0	2.0	262.1	138.0	49.0	59.0	0.02	0.4	397
32S/13E-31B13 M	650727	8.2	1140	790	105.0	52.0	60.0	3.0	253.6	183.0	96.0	90.0	0.08	0.3	476
32S/13E-31C01 M	621030	7.9	1950	1468	66.0	62.0	325.0	41.0	479.2	36.0	523.0	0.0	0.35	0.2	420
32S/13E-31C01 M	650414	7.5	4255	2509	82.0	98.0	670.0	40.0	520.6	336.0	960.0	1.0	0.45	0.9	608
32S/13E-31C01 M	660122	7.8	4543	2592	100.0	108.0	708.0	45.0	551.1	355.0	1008.0	3.7	0.55	0.8	694
32S/13E-31C01 M	671004	7.9	4780	2871	100.0	115.0	752.0	47.0	516.9	410.0	1101.0	3.0	0.55	0.7	723

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/day	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
32S/13E-31F01 M	610928	8.2	1175	676	76.0	67.0	47.0	3.0	323.1	227.0	50.0	3.7	0.10	0.3	465
32S/13E-31F01 M	621102	7.5	1190	808	134.0	64.0	47.0	3.0	482.8	232.0	41.0	0.0	0.10	0.2	598
32S/13E-31F01 M	630708	8.1	1050	741	92.0	67.0	46.0	3.0	378.0	220.0	43.0	1.2	0.08	0.3	505
32S/13E-31F01 M	650727	8.1	1163	820	131.0	64.0	46.0	3.0	453.5	242.0	42.0	0.0	0.05	0.4	590
32S/13E-31F01 M	660718	8.0	1082	676	93.0	66.0	47.0	3.0	346.3	242.0	47.0	1.0	0.03	0.4	504
32S/13E-31F01 M	671003	7.6	1187	822	129.0	60.0	48.0	3.0	443.8	242.0	41.0	0.6	0.04	0.4	569
32S/13E-31F02 M	650512	8.1	1370	1006	128.0	73.0	67.0	4.0	353.6	394.0	52.0	0.0	0.11	0.1	620
32S/13E-31F02 M	660121	8.1	1298	952	138.0	62.0	62.0	4.0	337.7	364.0	48.0	1.0	0.08	0.5	600
32S/13E-31F02 M	670413	8.2	1330	958	136.0	63.0	62.0	3.0	347.5	372.0	46.0	1.5	0.40		599
32S/13E-31F02 M	670928	7.8	1283	949	137.0	66.0	60.0	4.0	353.6	374.0	44.0	0.5	0.07	0.4	611
32S/13E-31F02 M	721011	7.7	1371	1089	156.0	64.0	74.0	4.1	230.4	534.0	47.0	1.2	0.15	0.4	655
32S/13E-31F02 M	760526	7.9	1394	1069	160.0	63.0	73.0	3.9	236.5	523.0	50.0	1.4	0.16	0.7	658
32S/13E-31F03 M	650514	8.0	1370	1160	133.0	78.0	82.0	4.0	234.1	545.0	57.0	0.0	0.12	0.1	653
32S/13E-31F03 M	660121	7.4	1436	1055	158.0	63.0	72.0	4.0	225.6	521.0	50.0	1.0	0.13	0.4	654
32S/13E-31F03 M	670413	7.9	1430	1060	102.0	92.0	73.0	4.0	230.4	481.0	48.0	1.5	0.10		634
32S/13E-31F03 M	670928	7.5	1386	1089	157.0	62.0	72.0	4.0	241.4	514.0	48.0	1.0	0.12	0.4	647
32S/13E-31F03 M	721011	7.8	1286	980	147.0	65.0	59.0	3.6	331.6	430.0	36.0	0.7	0.12	0.3	634
32S/13E-31F03 M	760526	7.9	1384	1087	161.0	62.0	74.0	4.0	239.0	535.0	51.0	1.6	0.20	0.7	657
32S/13E-31F03 M	760608	8.2	1268	1105	154.0	61.0	72.0	4.3	230.4	524.0	46.0	0.0	0.10	0.7	637
32S/13E-31H01 M	610926	7.7	1500		166.0	88.0	55.0	1.0	398.7	404.0	74.0	50.0	0.10	0.4	777
32S/13E-31H01 M	640707	8.4	1640	1206	108.0	114.0	80.0	3.0	454.8	334.0	128.0	0.0	0.17	0.1	739
32S/13E-31H01 M	650727	8.5	1686	1375	198.0	99.0	62.0	2.0	417.0	460.0	93.0	85.0	0.02	0.6	902
32S/13E-31H02 M	650727	8.0	1466	1135	131.0	91.0	60.0	1.0	258.5	402.0	82.0	99.0	0.06	0.4	702
32S/13E-31H03 M	621030	8.2	1280	1074	133.0	85.0	53.0	1.0	445.0	281.0	85.0	31.0	0.13	0.2	682
32S/13E-31H03 M	651007	7.7	1403	995	148.0	74.0	61.0	1.0	408.4	291.0	89.0	48.0	0.12	0.6	675
32S/13E-31H03 M	660718	8.2	1570	1036	166.0	88.0	65.0	1.0	425.5	343.0	99.0	70.0	0.09	0.6	777
32S/13E-31H03 M	691007	7.9	1422	1119	132.0	85.0	62.0	1.0	356.0	315.0	105.0	75.0	0.10	0.4	679
32S/13E-31H03 M	701020	7.8	1598	1179	170.0	87.0	69.0	1.0	436.5	338.0	111.0	84.0	0.01	0.5	783
32S/13E-31H03 M	711028	8.0	1563	1100	173.0	83.0	74.0	1.3	487.7	310.0	98.0	87.6	0.08	0.3	773
32S/13E-31H04 M	610926	8.2	2180	1210	128.0	74.0	159.0	1.0	319.4	276.0	259.0	89.0	0.10	0.4	624
32S/13E-31H04 M	621030	7.3	1800	1338	126.0	75.0	190.0	1.0	360.9	307.0	268.0	42.0	0.15	0.2	623
32S/13E-31H07 M	660718	8.5	1788	1249	194.0	82.0	92.0	4.0	442.6	368.0	146.0	91.0	0.06	0.6	822
32S/13E-31H07 M	671005	7.8	2097	1562	216.0	95.0	116.0	5.0	495.0	421.0	172.0	142.5	0.06	0.6	930
32S/13E-31H07 M	701020	7.5	2013	1485	183.0	115.0	118.0	4.0	547.4	431.0	106.0	162.0	0.15	0.6	930
32S/13E-31H08 M	840707	7.4	860	635	103.0	54.3	42.0		507.2	129.0	25.8				480

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
32S/13E-31H08 M	850808	7.4	1025	661	119.0	54.0	41.0	3.0	482.8	143.0	32.0			0.3	518
32S/13E-31H08 M	881128	7.3	900	590	110.0	50.0	34.0	5.0	365.8	170.0	38.0	<0.4		0.3	440
32S/13E-31H08 M	920714	7.4	1110	577	134.6	39.6	38.7	2.3	468.5	140.8	28.5	<1.0		0.3	499
32S/13E-31H08 M	950718	7.7	1180	648	123.3	55.4	33.9	2.2	483.1	163.6	31.7	<1.0		0.2	560
32S/13E-31H08 M	951128	7.6	1200	647	116.1	60.8	37.4	2.2	463.6	167.6	35.0	<1.0		0.2	540
32S/13E-31H08 M	951128	7.6	1200	647	116.1	60.8	37.4	2.2	463.6	167.6	35.0	1.0		0.2	540
32S/13E-31H09 M	840712	7.8	1043	700	104.0	48.2	69.5		502.3	136.0	31.6				457
32S/13E-31H09 M	850808	7.3	1036	663	122.0	53.0	50.0	3.0	475.5	158.0	38.0			0.3	522
32S/13E-31H09 M	881128	7.1	1500	660	122.0	55.0	47.0	3.0	451.1	180.0	39.0	<0.4		<0.1	510
32S/13E-31H09 M	920714	7.2	1070	600	129.8	45.7	47.8	2.4	482.1	144.8	31.9	<1.0		0.2	512
32S/13E-31H09 M	950718	7.5	1160	652	120.1	54.1	43.7	2.3	458.7	171.3	35.0	<1.0		0.1	554
32S/13E-31H09 M	951128	7.6	1190	657	120.1	53.5	49.1	2.4	458.7	167.0	39.4	<1.0		0.2	520
32S/13E-31H09 M	981208	7.2	1100	650	130.0	46.5	39.3	2.0	455.0	169.0	39.4	2.0		0.2	516
32S/13E-31J01 M	640707	7.9	1170	808	51.0	102.0	50.0	1.0	397.5	229.0	52.0	12.0	0.05	0.1	547
32S/13E-31J02 M	610926	7.6	1750	1419	200.0	122.0	59.0	2.0	464.5	534.0	99.0	65.0	0.07	0.4	1001
32S/13E-31J02 M	620713	8.8	1380	1042	174.0	75.0	51.0	2.0	474.3	331.0	68.0	27.0	0.05	0.1	743
32S/13E-31J02 M	621030	8.2	1280	1108	137.0	91.0	50.0	2.0	465.7	327.0	62.0	29.0	0.13	0.2	717
32S/13E-31J02 M	630708	7.7	1110	816	127.0	57.0	43.0	1.0	393.8	242.0	50.0	11.0	0.01	0.4	552
32S/13E-31J02 M	650727	8.3	1359	1070	156.0	75.0	51.0	2.0	432.8	301.0	59.0	58.0	0.04	0.5	698
32S/13E-31J03 M	660718	7.9	2166	1595	222.0	135.0	82.0	2.0	397.5	644.0	131.0	126.0	0.08	0.6	1110
32S/13E-31K01 M	610926	8.1	2340	1447	186.0	132.0	89.0	9.0	635.2	494.0	124.0	9.3	0.10	0.4	1008
32S/13E-32A01 M	540611	7.4	868		77.0	38.0	39.0	1.0	242.6	117.0	53.0	63.0	0.00	0.2	349
32S/13E-32A01 M	570829	7.7	550	372	40.0	22.0	31.0	1.0	125.6	59.0	43.0	43.0	0.65	0.1	191
32S/13E-32A01 M	580206	7.5	351	240	10.0	21.0	22.0	1.0	69.5	21.0	35.0	33.0	0.00	0.7	112
32S/13E-32A01 M	590218	7.3	649	513	54.0	24.0	42.0	2.0	95.1	53.0	35.0	167.0	0.04	0.1	233
32S/13E-32A01 M	590922	7.7	654	451	50.0	22.0	44.0	2.0	102.4	124.0	51.0	50.0	0.29	0.1	216
32S/13E-32A01 M	600226	7.2	743	480	58.0	27.0	48.0	1.0	70.7	155.0	51.0	88.0	0.00	0.3	256
32S/13E-32A01 M	600920	7.0	842		69.0	34.0	44.0	2.0	134.0	176.0	55.0	48.0	0.05	0.0	312
32S/13E-32A01 M	610302	6.8	750		64.0	34.0	42.0	2.0	69.5	170.0	56.0	92.0	0.15	0.0	300
32S/13E-32A01 M	611117	7.1	830	576	80.0	34.0	39.0	2.0	113.4	151.0	57.0	124.0	0.01	0.2	340
32S/13E-32A01 M	620823	6.7	825	551	69.0	36.0	42.0	2.0	62.2			150.0	0.06	0.1	320
32S/13E-32A01 M	621016	6.7	840	560	72.0	36.0	46.0	1.0	48.8	158.0	57.0	172.0	0.07	0.2	328
32S/13E-32A01 M	630926	7.5	832	590	71.0	34.0	46.0	2.0	39.0	180.0	56.0	138.0	0.05	0.3	317
32S/13E-32A01 M	640604	7.1	822	560	70.0	38.0	46.0	2.0	39.0	185.0	56.0	144.0	0.04	0.3	331
32S/13E-32A01 M	651007	7.6	935	630	77.0	38.0	50.0	2.0	52.4	194.0	76.0	128.0	0.10	0.2	349

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/day	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
32S/13E-32C02 M	640617	7.9	555	290	33.0	30.0	36.0	2.0	208.5	57.0	40.0	0.5	0.21	0.2	206
32S/13E-32D01 M	650728	7.9	885	528	83.0	38.0	39.0	2.0	198.7	131.0	59.0	89.0	0.04	0.3	364
32S/13E-32D02 M	540919	7.6	813		87.0	38.0	28.0	2.0	314.6	111.0	39.0	23.6	0.00	0.2	374
32S/13E-32D02 M	590909	7.2	815		91.0	41.0	33.0	2.0	275.5	94.0	59.0	87.0	0.00	0.5	396
32S/13E-32D02 M	640425	7.2	752	527	81.0	39.0	34.0	2.0	229.2	124.0	53.0	55.0	0.11	0.3	363
32S/13E-32D02 M	660201	7.3	908	576	87.0	39.0	39.0	3.0	236.5	132.0	54.0	73.0	0.09	0.1	378
32S/13E-32D02 M	740430	7.7	895	684	103.4	51.9	38.9		378.0	167.0	42.8	15.0		0.4	471
32S/13E-32D02 M	741205	7.9	895	627	87.0	45.9	38.5		269.4	157.2	64.0	51.0		0.5	406
32S/13E-32D02 M	750603	7.6	736	730	92.8	55.6	39.6		378.0	169.9	45.5	4.8		0.3	629
32S/13E-32D02 M	760602	7.5	722	654	98.3	45.7	40.0		252.4	165.8	53.2	107.0		0.5	434
32S/13E-32D02 M	771122		1300	910	85.8	43.6	32.5		247.5	139.9	50.2	54.5		0.2	393
32S/13E-32D02 M	790823	8.3	755	604	52.6	64.0	30.0		270.7	147.0	44.7				394
32S/13E-32D02 M	800402	7.5	830	616	52.9	64.9	45.0		252.4	164.0	66.7				399
32S/13E-32D02 M	801008	8.1	783	564	86.0	39.0	33.0		265.8	119.0	44.5				376
32S/13E-32D02 M	810407	7.7	1033	625	82.5	37.0	50.0		324.3	143.0	49.5				357
32S/13E-32D03 M	590909	7.3	855		98.0	43.0	33.0	2.0	321.9	106.0	45.0	71.0	0.00	0.5	422
32S/13E-32D03 M	601110	7.1	863		104.0	36.0	34.0	2.0	319.4	120.0	41.0	41.0	0.11	0.2	408
32S/13E-32D03 M	620323	7.2	923		100.0	36.0	40.0	3.0	289.0	129.0	43.0	54.0	0.15	0.1	398
32S/13E-32D03 M	650728	8.1	866	561	83.0	38.0	35.0	2.0	197.5	130.0	53.0	89.0	0.06	0.3	364
32S/13E-32D03 M	660215	7.3	892	574	89.0	41.0	36.0	2.0	267.0	133.0	43.0	65.0	0.09	0.1	391
32S/13E-32D03 M	711029	7.9	840	561	86.0	39.0	40.0	2.1	242.6	150.0	51.0	48.0	0.03	0.3	375
32S/13E-32D03 M	740430	7.3	855	630	97.0	51.3	42.0		312.1	178.7	50.1	19.9		0.4	453
32S/13E-32D03 M	751201	8.2	752	629	89.7	46.5	58.0		292.6	170.4	32.4	51.4		0.3	415
32S/13E-32D03 M	760602	7.3	696	719	90.4	46.2	46.5		235.3	181.1	59.0	106.0		0.4	416
32S/13E-32D03 M	790823	8.1	833	665	64.0	60.6	40.0		257.3	161.0	63.0				409
32S/13E-32D03 M	800402	7.9	882	620	95.4	21.8	52.0		265.8	156.0	43.0				328
32S/13E-32D03 M	801008	7.9	884	629	85.0	45.0	46.0		256.0	148.0	57.0				396
32S/13E-32D03 M	810407	7.7	993	662	85.0	35.0	64.0		296.3	163.0	59.0				356
32S/13E-32D03 M	811014	8.3	887	626	34.1	71.0	51.0		308.5	164.0	49.0				396
32S/13E-32D03 M	820415	7.4	985	675	96.2	42.1	52.5		329.2	183.0	57.9				413
32S/13E-32D03 M	821018	7.7	953	636	92.9	36.7	52.0		280.4	164.6	56.2				383
32S/13E-32D03 M	830411	8.6	745	649	90.8	45.2	45.0		306.0	179.0	52.7				412
32S/13E-32D03 M	831003	8.6	992	674	19.0	83.2	48.5		304.8	180.0	43.0				389
32S/13E-32D03 M	840214	8.5	1088	656	46.8	78.8	46.0		335.3	181.0	42.9				441
32S/13E-32D03 M	881128	7.0	800	540	90.0	40.0	45.0	5.0	270.0	170.0	45.0	89.0		0.2	500

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/day	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
32S/13E-32D03 M	920714	7.3	840	483	75.3	36.5	44.1	2.2	226.9	133.5	38.2	60.0		0.2	338
32S/13E-32D03 M	950718	7.4	950	586	104.0	45.0	39.8	2.2	292.8	183.0	38.2	29.1		0.1	460
32S/13E-32D03 M	951128	7.6	940	594	96.1	46.2	45.2	2.2	283.0	184.8	45.8	33.4		0.2	430
32S/13E-32D03 M	981208	7.2	1100	683	137.0	43.9	39.3	2.4	338.0	219.0	47.7	27.0		0.4	523
32S/13E-32D04 M	591231	7.7	823	526	86.0	38.0	30.0	2.0	280.4	112.0	44.0	35.0	0.03	0.4	371
32S/13E-32D09 M	611003	7.3	1026	684	113.0	53.0	27.0	1.8	435.3	152.0	35.0	0.8	0.07	0.3	505
32S/13E-32D09 M	741108	8.5	844	535	60.0	52.0	32.0	2.0	214.6	205.0	40.0	0.8	0.02	0.4	367
32S/13E-32D10 M	590909	7.2	960		107.0	52.0	33.0	2.0	406.0	140.0	42.0	19.0	0.00	0.5	483
32S/13E-32D10 M	601110	6.9	1030		121.0	49.0	35.0	2.2	436.5	169.0	33.0	3.5	0.05	0.2	504
32S/13E-32D10 M	620323	7.0	1052	644	120.0	43.0	40.0	3.2	421.8	171.0	33.0	2.0	0.31	0.2	483
32S/13E-32D10 M	620815	7.1	959	609	101.0	49.0	38.0	2.5	347.5	158.0	42.0	38.0	0.10	0.3	454
32S/13E-32D10 M	640425		863	572	94.0	44.0	34.0	2.1	302.4	143.0	44.0	40.0	0.28	0.3	417
32S/13E-32D10 M	640813	8.0	900	640	89.0	56.0	43.0	2.0	347.5	154.0	45.0	34.0	0.10	0.1	450
32S/13E-32D10 M	660204	7.7	915	587	91.0	40.0	39.0	3.0	253.6	137.0	51.0	71.0	0.12	0.1	392
32S/13E-32D10 M	740430	7.4	940	685	101.8	60.8	39.3		388.9	168.3	44.4	12.0		0.4	504
32S/13E-32D10 M	741205	7.8	867	661	93.0	60.0	38.3		380.4	172.8	60.4	13.1		0.6	479
32S/13E-32D10 M	751201	8.1	722	631	83.8	51.8	64.0		378.0	173.2	47.3	25.0		0.4	422
32S/13E-32D10 M	760602	7.5	727	545	138.7	30.0	43.0		315.8	167.1	49.2	42.1		0.2	470
32S/13E-32D10 M	770517	7.7	803	687	99.5	61.2	38.5		361.0	170.0	55.0	27.0		0.4	500
32S/13E-32D10 M	771211		1195	654	105.0	52.3	34.3		340.2	152.0	53.0	43.3		0.4	478
32S/13E-32D10 M	800401	7.4	910	662	42.0	82.9	40.0		343.8	167.0	43.0				328
32S/13E-32D10 M	811014	8.3	967	662	29.9	85.5	49.0		333.0	172.0	60.0				426
32S/13E-32D10 M	820414	7.4	1018	697	108.0	47.9	51.0		392.6	145.0	57.0				467
32S/13E-32D10 M	831003	8.4	1007	702	24.7	88.3	41.5		346.3	167.0	38.0				425
32S/13E-32D10 M	840214	8.2	1115	669	31.4	94.7	40.5		407.2	179.0	35.9				468
32S/13E-32D10 M	890320	6.5	870	570	84.0	38.0	40.0	<3.0	230.0	160.0	43.0	66.0		0.2	390
32S/13E-32D10 M	920714	7.3	830	484	74.8	37.2	45.7	2.2	234.2	132.2	38.0	57.9		0.2	340
32S/13E-32D10 M	950718	7.5	920	570	100.0	44.1	37.6	2.0	298.2	173.8	35.8	29.8		0.1	432
32S/13E-32D10 M	951205	7.6	1050	617	104.1	53.1	39.0	2.3	331.8	185.3	41.7	25.6		1.1	478
32S/13E-32D10 M	990105	7.3	1060	641	131.0	39.8	32.8	2.0	342.0	208.0	44.9	13.7		0.3	491
32S/13E-32D11 M	810407	7.3	878	776	113.0	50.0	59.0		503.5	143.0	39.0				486
32S/13E-32D11 M	811014	7.9	938	694	110.0	62.0	49.0		509.6	139.0	39.0				542
32S/13E-32D11 M	821018	7.7	1072	698	121.0	51.2	48.5		542.6	113.5	37.7				513
32S/13E-32D11 M	840827	7.8	1049	703	97.5	53.5	48.0		518.2	116.0	26.8				463
32S/13E-32D11 M	881128	7.1	1000	630	120.0	58.0	38.0	3.0	487.7	150.0	26.0	<0.4		0.6	320

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	Fl mg/L	Total Hard- ness, mg/L
32S/13E-32D11 M	920714	7.2	1110	595	129.0	48.6	41.0	2.5	541.7	130.3	21.6	<1.0		0.2	522
32S/13E-32D11 M	950718	7.6	1200	619	115.3	58.4	34.9	2.4	487.5	146.7	21.5	<1.0		0.1	540
32S/13E-32D11 M	951128	7.6	1200	661	114.5	65.6	38.7	2.4	507.5	165.3	24.5	<1.0		0.2	556
32S/13E-32D11 M	981208	7.3	830	471	92.1	40.0	24.2	2.0	338.0	120.0	25.6	2.0		0.4	266
32S/13E-32E02 M	640617	7.7	928	618	57.0	31.0	79.0	2.0	58.5	142.0	87.0	150.0	0.26	0.2	270
32S/13E-32E13 M	640219	7.3	940	656	86.0	63.0	35.0	2.0	404.8	178.0	32.0	0.0	0.09	0.1	474
32S/13E-32F15 M	671026	7.5	890	639	61.0	31.0	57.0	2.0	39.0	110.0	104.0	147.5	0.12	0.1	280
32S/13E-32H01 M	570305	8.2	1410		160.0	76.0	53.0	2.0	418.2	311.0	69.0	74.0	0.09	0.3	712
32S/13E-32H01 M	570829	7.7	1469	1032	150.0	75.0	57.0	2.0	393.8	299.0	75.0	82.5	0.50	0.2	684
32S/13E-32H01 M	580929	7.8	1317	975	158.0	73.0	57.0	2.0	364.5	280.0	90.0	126.0	0.14	0.5	695
32S/13E-32H01 M	590218	7.5	1315	1043	165.0	74.0	48.0	2.0	403.6	313.0	66.0	110.0	0.04	0.3	717
32S/13E-32H01 M	590922	7.0	1567	1146	171.0	82.0	59.0	2.0	421.8	346.0	61.0	125.0	0.34	0.4	764
32S/13E-32H01 M	601006	7.4	1355		133.0	63.0	57.0	1.0	347.5	259.0	73.0	67.0	0.05	0.5	591
32S/13E-32H01 M	611109	8.0	729	485	64.0	28.0	45.0	1.0	75.6	147.0	57.0	106.0	0.02	0.2	275
32S/13E-32H01 M	620823	7.3	1060	808	106.0	52.0	49.0	2.0	270.7			92.0	0.06	0.2	479
32S/13E-32H01 M	621015	7.4	1040	682	108.0	47.0	52.0	2.0	264.6	179.0	66.0	104.0	0.11	0.2	463
32S/13E-32H01 M	630926	7.3	1314	950	135.0	66.0	62.0	2.0	312.1	232.0	99.0	112.0	0.08	0.5	609
32S/13E-32H01 M	640604	7.7	1252	860	130.0	66.0	63.0	2.0	307.2	230.0	85.0	136.0	0.08	0.6	596
32S/13E-32H01 M	651007	8.2	828	540	79.0	37.0	43.0	2.0	200.0	166.0	52.0	42.0	0.04	0.5	349
32S/13E-33D M	950419	7.3	1410	1000	161.0	71.0	52.0	2.6	450.0	310.0	68.7	27.4		0.4	694
<b>Arroyo Grande Plain</b>															
11N/35W-06C01 S	601103	8.0	1025	758	118.0	39.0	55.0	3.0	217.0	331.0	35.0	4.2	0.12	0.7	455
11N/35W-06C01 S	620822	7.6	850	580	85.0	31.0	56.0	3.0	180.4	232.0	49.0	9.5	0.10	0.4	340
12N/35W-29L01 S	711022	8.0	1789	1317	184.0	101.0	80.0	2.1	406.0	463.0	112.0	94.5	0.06	0.5	874
12N/35W-29M01 S	501112	7.4	1430	988	156.0	72.0	79.0	6.0	496.2	320.0	74.0	0.2	0.06		686
12N/35W-29N01 S	640618	7.2	1727	1474	206.0	91.0	66.0	2.0	423.1	480.0	112.0	0.0	0.00	0.7	889
12N/35W-29N01 S	811015	7.9	2190	1680	264.0	129.0	77.0	3.0	487.7	645.0	137.0	110.0	0.00	0.6	1190
12N/35W-29N01 S	871105	8.5	1830	1630	201.0	132.0	68.0	2.4	388.9	639.0	127.0	36.6	0.10	0.6	1040
12N/35W-29N02 S	610302	7.5	1460		158.0	89.0	69.0	2.0	407.2	389.0	120.0	0.0	0.10	0.3	761
12N/35W-29N02 S	630708	8.0	1860	1554	204.0	135.0	67.0	3.0	412.1	611.0	158.0	0.0	0.01	0.6	1065
12N/35W-29N03 S	620712	7.5	705	428	49.0	27.0	62.0	4.0	200.0	84.0	75.0	4.0	0.10	0.2	234
12N/35W-30K03 S	711022	8.0	2347	1836	272.0	137.0	78.0	2.6	460.9	737.0	134.0	90.0	0.09	0.5	1242
12N/35W-30L02 S	630707	7.7	1280	1398	128.0	162.0	67.0	1.0	574.3	519.0	89.0	18.0	0.12	0.2	986
12N/35W-30M01 S	610926	8.0	1985	1214	165.0	117.0	63.0	3.0	609.6	365.0	106.0	3.1	0.01	0.4	893

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, Fl: Fluoride

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
12N/35W-30M01 S	620713	7.7	1600	1140	151.0	105.0	61.0	5.0	599.9	355.0	59.0	0.0	0.00	0.1	809
12N/35W-30M01 S	640619	7.8	1775	1334	89.0	178.0	70.0	3.0	563.3	487.0	109.0	0.0	0.17	0.2	955
12N/35W-30M02 S	741108	8.2	1633	1144	152.0	102.0	57.0	2.0	297.5	491.0	98.0	52.0	0.07	0.8	799
12N/35W-30P02 S	701020	7.8	2128	1705	230.0	153.0	58.0	3.0	503.5	693.0	128.0	38.0	0.07	0.9	1204
12N/35W-31G01 S	761004	7.7	1774	1351	196.0	98.0	76.0	4.3	412.1	552.0	110.0	2.7	0.11	0.8	896
12N/35W-31G01 S	771018	7.7	1821	1346	210.0	96.0	72.0	3.3	442.6	526.0	106.0	2.2	0.11	0.6	919
12N/35W-31H01 S	610302	7.5	1020		91.0	39.0	71.0	4.0	275.5	217.0	81.0	0.0	0.20	0.2	388
12N/35W-31H01 S	620823	7.4	980	718	97.0	35.0	64.0	5.0	253.6	232.0	67.0	0.0	0.12	0.4	386
12N/35W-31H01 S	640619	7.4	980	638	64.0	47.0	72.0	4.0	246.3	198.0	69.0	3.0	0.18	0.2	353
12N/35W-32D01 S	610302	7.6	790		67.0	28.0	68.0	4.0	268.2	96.0	77.0	0.0	0.26	0.1	282
12N/35W-32N01 S	671101	7.2	426	246	6.0	8.0	66.0	2.0	52.4	9.0	87.0	27.0	0.04	0.2	48
32S/13E-32L02 M	501111	7.5	1010	658	116.0	55.0	35.0	2.0	454.8	151.0	33.0	2.9	0.01		516
32S/13E-32L02 M	640707	8.1	1046	724	56.0	91.0	36.0	2.0	414.5	192.0	37.0	0.0	0.05	0.2	514
32S/13E-32L02 M	711026	7.7	1239	792	112.0	55.0	72.0	3.1	258.5	163.0	165.0	67.5	0.05	0.3	506
32S/13E-32L05 M	640707	8.0	880	610	53.0	61.0	40.0	2.0	231.7	121.0	57.0	80.0	0.05	0.2	383
32S/13E-32L08 M	640617	8.0	1007	637	114.0	58.0	33.0	2.0	443.8	148.0	39.0	1.2	0.11	0.3	523
32S/13E-32L14 M	640217	7.8	1120	774	107.0	61.0	76.0	5.0	423.1	216.0	75.0	21.0	0.09	0.2	518
32S/13E-32L18 M	640218	8.0	1500	1144	154.0	86.0	89.0	4.0	486.5	288.0	123.0	85.0	0.14	0.1	738
32S/13E-32M01 M	640707	8.1	1200	844	77.0	98.0	46.0	2.0	446.2	233.0	59.0	22.0	0.08	0.1	595
32S/13E-32M03 M	871105	8.0	927	669	80.0	60.0	44.0	1.9	239.0	253.0	58.0	13.2	0.10	0.5	446
32S/13E-32M04 M	660718	8.3	1207	773	138.0	65.0	43.0	2.0	440.1	231.0	60.0	24.0	0.05	0.4	612
32S/13E-33A03 M	640624	7.9	2000	1614	212.0	137.0	78.0	2.0	597.4	545.0	119.0	81.0	0.12	0.2	1093
32S/13E-33E03 M	640618	8.0	1360	1042	138.0	85.0	54.0	2.0	375.5	300.0	60.0	125.0	0.15	0.2	695
32S/13E-33F01 M	640619	7.6	1370	934	90.0	113.0	55.0	3.0	471.8	288.0	53.0	46.0	0.17	0.2	690
32S/13E-33G01 M	640604	7.5	1761	1385	226.0	105.0	69.0	3.0	534.0	498.0	100.0	50.0	0.09	0.8	997
32S/13E-33K01 M	640604	7.4	1931	1599	240.0	126.0	74.0	3.0	587.7	540.0	110.0	71.0	0.08	0.8	1118
32S/13E-33K03 M	640604	7.9	1867	1524	229.0	116.0	74.0	2.0	566.9	510.0	105.0	62.0	0.08	0.9	1049
32S/13E-33K03 M	711022	8.2	2201	1693	253.0	133.0	79.0	1.8	491.3	606.0	126.0	160.0	0.09	0.6	1178
32S/13E-33M02 M	640618	8.1	1730	1444	208.0	117.0	67.0	2.0	562.1	481.0	74.0	93.0	0.10	0.6	1001
32S/13E-33M02 M	660718	8.0	1914	1411	212.0	105.0	61.0	2.0	423.1	501.0	85.0	138.0	0.08	0.8	962
32S/13E-33M02 M	670605	8.0	1713	1329	221.0	108.0	56.0	1.0	516.9	433.0	89.0	130.0	0.06	0.8	996
32S/13E-33M02 M	710602	8.2	1798		214.0	44.0	55.0	1.9	195.1	424.0	72.0	160.0	0.01	0.6	715
<b>Los Berros Creek</b>															
12N/35W-27N03 S	771006	8.1	1231	741	107.0	61.0	58.0	3.0	371.9	167.0	93.0	37.8	0.04	0.5	518

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
12N/35W-28J02 S	771014	6.6	1015	649	72.0	29.0	58.0	2.3	19.5	60.0	101.0	243.0	0.01	0.1	299
12N/35W-28J02 S	871105	7.3	662	570	54.0	21.0	50.0	2.6	36.6	94.0	62.0	153.0	0.10	0.2	221
12N/35W-28J06 S	771014	7.0	516	309	30.0	13.0	39.0	1.7	48.8	23.0	41.0	113.0	0.00	0.2	129
12N/35W-28L01 S	671030	7.0	319	234	12.0	9.0	33.0	2.0	15.8	4.0	26.0	102.5	0.00	0.1	67
12N/35W-34C03 S	711021	8.1	1176	752	101.0	64.0	59.0	3.5	380.4	167.0	103.0	16.7	0.04	0.4	515
12N/35W-34C03 S	731016	8.4	1234	789	98.0	66.0	59.0	3.9	385.3	161.0	102.0	25.0	0.00	0.4	517
12N/35W-34G04 S	640624	7.6	1160	730	104.0	55.0	55.0	3.0	376.7	183.0	74.0	18.0	0.08	0.2	486
12N/35W-35E03 S	640624	7.4	1100	716	94.0	59.0	57.0	3.0	365.8	197.0	71.0	5.0	0.10	0.2	477
12N/35W-35J01 S	620823	7.1	350	268	12.0	5.0	50.0	3.0	61.0	9.0	72.0	0.0	0.05	0.6	51
32S/13E-34G01 M	620823	7.1	1975	1706	240.0	120.0	71.0	1.0	365.8	730.0	144.0	0.0	0.14	0.6	1093
32S/13E-34G02 M	640624	7.4	1650	1044	121.0	77.0	162.0	2.0	352.4	403.0	167.0	25.0	0.18	0.4	619
32S/13E-34Q01 M	671030	7.7	841		38.0	20.0	89.0	1.0	56.1	22.0	106.0	195.0	0.16	0.1	177
<b>Nipomo Mesa</b>															
11N/34W-17N03 S	640717	7.1	220	168	13.0	2.0	32.0	1.0	51.2	7.0	35.0	15.0	0.00	0.1	41
11N/34W-18D01 S	620821	7.0	221	160	10.0	3.0	29.0	1.0	41.5	3.0	42.0	6.0	0.01	0.1	38
11N/34W-18H03 S	620821	7.4	937	590	70.0	35.0	90.0	4.0	321.9	125.0	89.0	0.5	0.08	0.3	319
11N/34W-18P01 S	711026	8.1	869	535	62.0	34.0	79.0	3.3	279.2	120.0	87.0	0.0	0.03	0.1	294
11N/34W-18P02 S	710323	7.5	778	444	53.0	24.0	73.0	5.0	237.7	88.0	75.0	0.0	0.04	0.1	232
11N/34W-18P02 S	710920	8.0	879	547	59.0	31.0	78.0	2.7	257.3	115.0	83.0	1.0	0.05	0.2	277
11N/34W-19E01 S	850703	7.5	1100	826	106.4	41.6	66.5	2.7	197.5	317.6	49.3	43.4		0.4	430
11N/34W-19E01 S	870902	7.5		730	138.4	15.5	57.6	4.2	180.5	276.4	39.0	36.8		0.3	409
11N/34W-19E01 S	900122	7.5	1120	661	115.7	36.3	55.4	2.9	232.3	252.6	44.6	45.2		0.8	438
11N/34W-19E01 S	930118	7.7	650	357	53.8	20.8	44.5	1.8	151.3	107.2	52.1	14.4		0.2	220
11N/34W-19E01 S	931018	7.7	850	526	74.5	33.5	57.1	2.2	170.8	202.5	45.5	26.6		0.5	324
11N/34W-19E01 S	960124	7.8	910	571	88.1	34.1	61.1	2.6	194.2	209.6	52.6	30.3		0.3	360
11N/34W-19E01 S	990113	7.4	1080	693	119.0	33.0	59.2	3.0	227.0	279.0	59.6	25.9		0.4	437
11N/34W-19F01 S	620821	7.5	1005	720	97.0	43.0	63.0	3.0	212.1	278.0	62.0	6.0	0.10	0.5	419
11N/34W-19L02 S	660619	7.4	754	462	45.0	26.0	70.0		221.9	82.0	83.0			0.1	217
11N/34W-19L02 S	750610	7.3	960	543	74.0	22.9	76.0	4.8	257.3	105.0	86.0	0.1		0.4	278
11N/34W-19L02 S	781016	7.5	950		65.0	32.0	85.0	4.1	278.0	122.0	88.0	1.0		<0.1	292
11N/34W-19L03 S	670805		714	404	46.0	16.0	69.0		181.7	81.0	77.0	1.2		0.1	181
11N/34W-19L03 S	670909	7.4	634	417	41.0	20.0	61.0		168.3	68.0	81.0	4.0		0.1	181
11N/34W-19L03 S	750630	7.3	1030	565	77.0	30.4	76.0	4.8	263.4	130.0	95.0	0.4		0.2	318
11N/34W-19L03 S	781016	8.1	940		62.0	32.8	80.0	4.2	258.5	135.0	75.0	1.0		<0.1	287

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride



Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/34W-19L03 S	820127	7.3	950	558	76.0	27.7	71.7	5.0	248.7	122.0	105.0	1.0	1.0	0.1	305
11N/34W-19L03 S	850703	7.4	910	638	64.2	28.8	81.7	3.6	240.2	125.0	93.8	0.1	0.1	<0.1	295
11N/34W-19L03 S	870902	7.2	940	637	88.4	17.7	75.7	4.2	219.8	122.8	109.4	1.4	1.4	1.2	294
11N/34W-19L03 S	900122	7.3	960	566	84.3	26.0	74.3	3.5	284.0	110.3	90.5	1.0	1.0	<0.1	318
11N/34W-19L03 S	930117	7.2	910	506	76.9	25.8	70.4	2.9	234.2	134.1	97.7	2.4	2.4	0.1	298
11N/34W-19L03 S	931018	7.5	920	522	61.7	35.7	81.1	3.0	246.4	121.2	95.5	2.7	2.7	0.4	301
11N/34W-19L03 S	960124	7.7	1050	582	72.1	38.9	89.5	3.3	291.8	138.3	94.7	2.0	2.0	0.1	340
11N/34W-19L04 S	890814	7.9	970	592	81.9	22.5	82.5	3.9	280.6	114.3	98.0	<1.0	<1.0	0.2	342
11N/34W-19L04 S	960222	7.6	950	547	83.1	30.1	65.0	3.8	279.6	130.0	97.0	2.0	2.0	0.2	336
11N/34W-19L04 S	990113	7.4	940	543	83.6	30.0	66.1	3.1	269.0	132.0	95.9	2.0	2.0	0.1	315
11N/34W-19Q01 S	580917	8.6	1025	743	100.0	45.0	58.0	3.0	201.2	291.0	64.0	8.9	0.06	0.2	435
11N/34W-19Q01 S	590421	8.0	1051	755	98.0	45.0	64.0	3.0	212.1	284.0	66.0	3.0	0.81	0.3	430
11N/34W-19Q01 S	590911	7.6	1085	770	99.0	45.0	64.0	3.0	214.6	282.0	66.0	6.0	0.18	0.3	432
11N/34W-19Q01 S	600408	8.0	1082	770	98.0	47.0	62.0	3.0	214.6	289.0	68.0	6.0	0.12	0.4	438
11N/34W-19Q01 S	601013	8.3	925	630	89.0	36.0	56.0	2.0	202.4	220.0	67.0	6.8	0.08	0.5	370
11N/34W-19Q01 S	611005	7.6	755	584	72.0	26.0	51.0	2.0	185.3	148.0	65.0	6.0	0.14	0.3	292
11N/34W-19Q01 S	620920	8.1	780	473	52.0	33.0	52.0	3.0	195.1	176.0	64.0	4.0	0.13	0.2	315
11N/34W-20E03 S	710521	7.9	781	473	52.0	28.0	66.0	3.0	231.7	95.0	71.0	0.0	0.05	0.1	245
11N/34W-20J01 S	620822	7.4	1350	900	94.0	62.0	122.0	3.0	392.6	232.0	137.0	1.0	0.06	0.4	490
11N/35W-01N01 S	620711	6.9	310	190	13.0	5.0	39.0	1.0	58.5	0.0	61.0	8.0	0.05	0.1	53
11N/35W-02F01 S	761001	7.2	288	161	15.0	4.0	34.0	1.6	59.7	8.0	45.0	8.0	0.03	0.2	53
11N/35W-02F01 S	771014	7.2	264	147	9.0	4.0	35.0	1.0	47.5	7.0	42.0	9.3	0.00	0.1	38
11N/35W-02N01 S	931109	7.6	720	420	58.5	22.8	50.8	2.3	129.3	167.2	48.8	5.8	5.8	0.3	240
11N/35W-02N01 S	931214	7.0	250	142	9.0	5.2	34.8	1.5	42.5	10.6	48.3	12.1	12.1	<1.0	44
11N/35W-03C01 S	620801	6.8	250	154	8.0	2.0	35.0	2.0	34.1	3.0	52.0	6.0	0.02	0.1	28
11N/35W-03C01 S	771014	7.3	364	182	7.0	4.0	50.0	1.0	47.5	6.0	65.0	13.5	0.00	0.1	32
11N/35W-04E01 S	971205	7.3	405	235	19.1	8.9	52.0	2.8	93.1	20.0	56.2	29.7	29.7	0.1	84
11N/35W-04E02 S	980108	7.6	470	262	37.5	7.8	45.0	3.4	119.0	32.3	62.9	14.7	14.7	0.1	126
11N/35W-05A01 S	980109	7.1	330	179	15.1	4.3	41.0	3.0	42.9	9.9	59.8	24.4	24.4	0.1	55
11N/35W-05B01 S	930317	6.7	360	210	7.0	5.0	52.0	1.0	40.0	9.0	64.0	29.0	29.0	0.2	10
11N/35W-05B01 S	960331	7.0	330	250	9.7	5.3	54.0	2.0	43.0	13.0	60.0	23.0	23.0	0.1	46
11N/35W-05B02 S	930317	6.8	380	230	8.0	5.0	53.0	2.0	50.0	13.0	65.0	29.0	29.0	<0.3	20
11N/35W-05B02 S	960331	7.2	350	260	12.0	6.2	58.0	1.0	43.0	18.0	67.0	18.0	18.0	0.2	55
11N/35W-05D06 S	671101	7.1	485	264	3.0	7.0	82.0	1.0	56.1	9.0	101.0	28.0	0.05	0.3	37
11N/35W-05F01 S	910918	6.8	760	458	55.0	22.0	45.0	2.0	129.0	135.0	56.0	13.5	13.5	0.2	228

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	Fl mg/L	Total Hard- ness, mg/L
11N/35W-05F01 S	941205	6.2	420	340	18.6	10.7	63.0	1.8	49.0	33.0	68.5			0.1	
11N/35W-05F01 S	980317	6.9	400	350	20.0	12.0	64.0	1.9	50.0	33.0	72.0	82.0		0.0	99
11N/35W-05G02 S	771020	7.0	494	252	13.0	8.0	64.0	1.1	45.1	12.0	70.0	69.8	0.09	0.2	66
11N/35W-05G02 S	811019	7.4	398	303	8.0	7.0	58.0	1.2	41.5	8.0	66.0	47.2	0.00	0.2	49
11N/35W-05G02 S	871105	7.5	327	197	6.0	4.0	62.0	1.3	56.1	6.0	62.0	33.0	0.10	0.2	32
11N/35W-05H01 S	980106	7.1	335	191	12.3	7.2	45.7	1.1	45.8	9.6	63.9	28.3		0.1	60
11N/35W-05J01 S	871105	8.0	1170	764	63.0	68.0	96.0	2.7	275.5	187.0	145.0	33.0	0.10	0.6	436
11N/35W-05L01 S	621019	7.4	690	570	64.0	24.0	48.0	3.0	168.3	148.0	48.0	6.0	0.12	0.2	258
11N/35W-05L01 S	630927	8.1	704	475	59.0	27.0	52.0	3.0	165.8	159.0	49.0	5.0	0.08	0.3	258
11N/35W-05L01 S	641015	7.8	711	485	60.0	28.0	47.0	3.0	157.3	158.0	53.0	6.7	0.03	0.2	265
11N/35W-05L01 S	651011	8.0	700	430	57.0	27.0	50.0	3.0	151.2	156.0	52.0	6.0	0.06	0.3	253
11N/35W-05L01 S	691008	7.6	690	396	55.0	26.0	43.0	2.0	139.0	150.0	51.0	7.0	0.06	0.3	245
11N/35W-05L01 S	701019	8.1	692	480	56.0	25.0	50.0	3.0	140.2	147.0	51.0	8.0	0.06	0.2	243
11N/35W-05L01 S	711026	7.9	670	440	56.0	26.0	48.0	2.6	145.1	153.0	50.0	7.0	0.03	0.2	247
11N/35W-05L01 S	741104	7.3	752	441	53.0	26.0	48.0	2.8	143.9	150.0	48.0	7.2	0.03	0.2	239
11N/35W-05L01 S	771020	8.3	718	447	57.0	24.0	48.0	2.1	147.5	146.0	48.0	7.1	0.05	0.3	241
11N/35W-05L01 S	791102	7.8	672	433	55.0	23.0	48.0	2.9	145.1	144.0	48.0	7.7	0.10	0.4	232
11N/35W-05L01 S	850419	8.2	650	459	53.0	23.0	46.0	2.8	148.7	136.0	48.0	0.9	0.10	0.3	226
11N/35W-05L02 S	671101	7.0	363	222	5.0	5.0	56.0	1.0	40.2	12.0	69.0	12.0	0.03	0.2	33
11N/35W-05N01 S	611106	7.1	315	220	9.0	6.0	42.0	1.0	36.6	5.0	50.0	48.0	0.04	0.2	47
11N/35W-05N01 S	620712	6.9	475	270	9.0	7.0	69.0	2.0	52.4	16.0	86.0	28.0	0.10	0.2	52
11N/35W-05N02 S	750315	8.0	1070	809	112.0	42.0	65.0	3.5	214.6	349.0	38.0	3.1	0.13	0.4	454
11N/35W-05R01 S	771020	7.2	306	174	13.0	5.0	35.0	1.6	73.2	5.0	48.0	3.3	0.00	0.1	53
11N/35W-06B01 S	970129			240	14.0	7.1	63.0	5.0	60.0	30.0	58.0	13.0			
11N/35W-06B01 S	971216	7.4	590	400	52.0	20.0	53.0	2.2	120.0	120.0	56.0	24.0		0.0	210
11N/35W-06H01 S	620712	6.9	475	302	9.0	8.0	70.0	4.0	50.0	22.0	86.0	27.0	0.10	0.1	56
11N/35W-07A01 S	531029	7.8	1070		121.0	46.0	62.0	4.0	223.1	360.0	46.0	1.9	0.32	0.2	491
11N/35W-07A01 S	540405	7.5			122.0	43.0	60.0		228.0	355.0	39.0				482
11N/35W-07A01 S	611106	7.7	1148	860	124.0	50.0	64.0	3.0	231.7	386.0	41.0	2.0	0.14	0.4	515
11N/35W-07A01 S	620712	7.5	1180	808	110.0	46.0	62.0	4.0	221.9	360.0	41.0	0.0	0.20	0.2	464
11N/35W-07R01 S	640618	7.5	1241	986	138.0	50.0	66.0	3.0	231.7	421.0	46.0	2.3	0.15	0.5	550
11N/35W-07R01 S	651008	8.0	1178	880	125.0	49.0	70.0	4.0	178.0	443.0	43.0	2.8	0.18	0.4	514
11N/35W-07R01 S	741107	7.9	1359	1005	138.0	60.0	76.0	3.4	234.1	477.0	43.0	2.4	0.17	0.5	591
11N/35W-09C S	960304	6.8	390	240	14.0	7.3	48.0		61.0	30.0	56.0	18.0		nd	65
11N/35W-09G01 S	651013	7.8	626	381	42.0	24.0	45.0	2.0	139.0	107.0	56.0	4.0	0.06	0.2	204

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, Fl: Fluoride

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/35W-09J02 S	921027	6.5	300	200	7.0	4.0	38.0	<3.0	41.0	7.0	50.0	9.3		<0.1	30
11N/35W-09J02 S	940510	7.2	460	340	18.0	9.0	56.0	3.0	63.0	47.0	71.0	20.0		0.1	82
11N/35W-09J02 S	960228	7.0	620	410	44.0	20.0	49.0	3.0	140.0	110.0	54.0	11.0	0.10	0.1	190
11N/35W-09J02 S	990223	7.0	1000	730	92.0	42.0	57.0	3.0	200.0	260.0	49.0	4.8	0.20	0.1	400
11N/35W-09K01 S	620712	6.9	300	206	13.0	6.0	38.0	2.0	62.2	6.0	53.0	6.0	0.05	0.2	57
11N/35W-09K02 S	761005	7.4	308	186	15.0	5.0	35.0	2.3	52.4	4.0	57.0	8.7	0.02	0.1	57
11N/35W-09K02 S	771020	7.6	317	159	12.0	5.0	35.0	2.0	56.1	5.0	54.0	9.3	0.01	0.0	51
11N/35W-09K02 S	771020	7.4	303	182	12.0	5.0	35.0	1.7	52.4	4.0	52.0	10.1	0.02	0.1	51
11N/35W-09K02 S	871105	7.3	311	210	16.0	8.0	33.0	2.2	59.7	15.0	54.0	8.5	0.00	0.2	73
11N/35W-09K04 S	741107	6.9	316	126	10.0	7.0	34.0	2.3	53.6	7.0	52.0	9.2	0.00	0.1	54
11N/35W-09K04 S	761006	7.5	337	197	23.0	5.0	33.0	2.3	79.2	6.0	54.0	9.1	0.02	0.1	77
11N/35W-09K04 S	811019	7.3	290	208	10.0	7.0	34.0	2.2	51.2	5.0	52.0	10.2	0.00	0.1	54
11N/35W-09K05 S	811120	7.3	250	175	11.0	5.4	35.0		40.2	10.0	48.0	22.0		0.1	80
11N/35W-09K05 S	920220	6.5	350	230	14.0	7.0	41.0	6.0	51.0	17.0	55.0	12.0		0.1	61
11N/35W-09K05 S	960228	6.4	320	220	15.0	7.0	37.0	3.0	77.0	18.0	52.0	12.0	0.10	0.1	63
11N/35W-09K05 S	990519	7.2	910	650	89.0	34.0	53.0	3.0	200.0	266.0	41.0	6.4	0.10	0.1	362
11N/35W-09P01 S	590727	6.6	286	213	11.0	5.0	34.0	2.0	42.7	4.0	53.0	8.0	0.16	0.0	48
11N/35W-09P01 S	620712	6.8	285	190	11.0	5.0	34.0	2.0	47.5	2.0	52.0	8.0	0.00	0.1	48
11N/35W-09P01 S	621011	7.2	265	206	16.0	4.0	35.0	4.0	58.5	11.0	48.0	7.0	0.05	0.2	57
11N/35W-09P01 S	630927	7.3	292	180	10.0	7.0	35.0	2.0	56.1	3.0	52.0	9.5	0.02	0.2	54
11N/35W-09P01 S	631206	7.0	250	179	14.0	3.0	36.0	2.0	47.5	15.0	48.0	4.4	0.05	0.1	48
11N/35W-09P01 S	641015	7.2	289	207	12.0	6.0	33.0	2.0	47.5	8.0	53.0	12.0	0.00	0.0	55
11N/35W-09P01 S	651011	7.8	293	206	12.0	5.0	34.0	2.0	48.8	11.0	50.0	11.0	0.01	0.1	51
11N/35W-09P01 S	701019	7.9	304	210	11.0	7.0	35.0	2.0	43.9	14.0	50.0	13.0	0.00	0.0	56
11N/35W-09P01 S	711026	7.2	290	171	11.0	6.0	35.0	2.1	46.3	11.0	50.0	12.0	0.00	0.0	54
11N/35W-09P01 S	850419	7.9	308	204	13.0	7.0	35.0	2.6	53.6	16.0	50.0	12.9	0.00	0.1	62
11N/35W-10G03 S	860429	8.3	824	522	53.0	29.2	77.0		217.0	105.0	82.5	2.6		0.3	252
11N/35W-10G03 S	870618	7.9	734	554	53.0	26.0	53.0		146.3	153.0	47.6				238
11N/35W-10G03 S	880812	7.5	781	487	52.7	28.3	78.0		263.4	92.0	77.8				248
11N/35W-10G03 S	890503	8.0	930	568	55.0	32.0	96.0		306.0	108.0	94.0	1.8			270
11N/35W-10G03 S	891106	8.0	957	610	58.0	36.0	100.0		320.7	104.0	84.0	0.4			293
11N/35W-10G04 S	870618	7.9	734	554	53.0	26.0	53.0		120.0	153.0	47.6				238
11N/35W-10G04 S	880812	7.1	698	474	57.0	29.0	60.0		174.3	167.0	48.0				261
11N/35W-10G04 S	890503	7.4	700	475	50.0	26.0	60.0		150.0	150.0	51.0	6.2			231
11N/35W-10G04 S	891106	7.5	530	352	31.0	19.0	54.0		75.0	106.0	52.0	1.7			158

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/35W-10G04 S	900524	7.3	639	470	55.0	28.0	54.0		139.0	167.0	50.0	5.3			251
11N/35W-10G04 S	901107	7.6	646	490	57.0	28.0	45.0		162.2	155.0	44.0	5.3			259
11N/35W-10G04 S	910805	7.0	549	492	55.0	29.0	50.5		163.4	170.0	41.0	6.1			256
11N/35W-10G04 S	920806	6.9	637	468	48.0	23.0	51.9	2.0	122.0	177.0	47.0	6.6			214
11N/35W-10G04 S	970416	6.2	560	420	37.0	18.0	47.0	3.0	90.0	100.0	45.0	9.5	0.10	0.1	170
11N/35W-10G04 S	000712	6.7	417	260	18.0	9.0	43.0	3.0	60.0	40.0	65.0	11.8	0.10	0.1	82
11N/35W-10G05 S	890627	6.0	720	480	33.0	29.0	58.0	<3.0	130.0	170.0	42.0	4.0		0.0	290
11N/35W-10G05 S	890628	6.0	550	420	33.0	16.0	50.0	3.0	120.0	100.0	100.0	6.0		0.0	180
11N/35W-10G05 S	900524	7.2	401	264	21.0	11.0	48.0		95.1	70.0	46.0	8.0			99
11N/35W-10G05 S	910805	7.0	288	248	18.0	11.0	38.8		72.1	45.0	41.0	11.2			91
11N/35W-10G05 S	920806	6.7	364	282	22.0	9.0	41.4	2.0	68.3	58.0	49.0	8.4			94
11N/35W-10G05 S	970416	6.6	770	580	66.0	32.0	53.0	3.0	180.0	190.0	50.0	5.8	0.10	0.1	290
11N/35W-10G05 S	000419	7.1	853	600	66.0	31.0	56.0	3.0	170.0	212.0	55.0	5.5	0.10	0.1	292
11N/35W-10G05 S	000720	6.6	829	550	64.0	31.0	53.0	3.0	170.0	194.0	52.0	5.3	0.10	0.2	287
11N/35W-10J01 S	840905	7.4	730	433	46.0	25.0	51.0	4.0	128.0	139.0	49.0	1.0		0.3	220
11N/35W-10J02 S	920220	7.1	800	510	60.0	34.0	70.0	7.0	210.0	24.0	68.0	22.0		<0.1	270
11N/35W-10J02 S	960226	7.2	790	520	54.0	28.0	65.0	3.0	220.0	130.0	79.0	3.7	0.10	0.1	250
11N/35W-10J02 S	990223	7.0	810	510	58.0	29.0	67.0	3.0	210.0	130.0	69.0	3.3	0.20	0.1	260
11N/35W-10M01 S	620821	6.9	270	160	9.0	4.0	39.0	2.0	51.2	3.0	53.0	5.0	0.02	0.1	39
11N/35W-10M01 S	640618	7.3	280	180	9.0	4.0	36.0	2.0	52.4	2.0	51.0	6.5	0.00	0.1	39
11N/35W-10R01 S	620822	7.0	229	150	7.0	2.0	35.0	2.0	31.7	4.0	48.0	7.0	0.01	0.1	26
11N/35W-10R01 S	640618	7.9	236	168	7.0	3.0	32.0	1.0	30.5	5.0	47.0	7.5	0.00	0.0	30
11N/35W-10R01 S	731012	6.6	241	161	5.0	3.0	32.0	1.6	24.4	8.0	44.0	8.2	0.00	0.0	25
11N/35W-10R01 S	741108	7.2	232	153	5.0	3.0	32.0	2.0	21.9	6.0	45.0	8.8	0.00	0.3	22
11N/35W-10R01 S	811021	7.0	198	172	6.0	3.0	33.0	2.3	29.3	4.0	47.0	7.8	0.00	0.1	28
11N/35W-10R02 S	741108	7.5	350	232	15.0	10.0	34.0	2.0	51.2	36.0	46.0	17.0	0.00	0.3	78
11N/35W-11B01 S	620801	6.9	243	156	11.0	2.0	30.0	1.0	43.9	2.0	46.0	3.0	0.00	0.1	36
11N/35W-11C01 S	761006	8.0	792	471	54.0	25.0	70.0	3.1	225.6	74.0	96.0	1.8	0.07	0.3	238
11N/35W-11C01 S	771021	8.3	850	469	57.0	28.0	74.0	2.4	228.0	72.0	108.0	3.0	0.03	0.2	257
11N/35W-11J01 S	620801	6.8	240	164	9.0	4.0	31.0	1.0	47.5	4.0	46.0	4.0	0.00	0.1	39
11N/35W-11J01 S	640618	6.8	254	192	9.0	5.0	30.0	1.0	36.6	5.0	48.0	6.5	0.00	0.1	43
11N/35W-11J01 S	731012	6.5	233	188	11.0	3.0	30.0	1.2	36.6	4.0	49.0	9.3	0.00	0.2	39
11N/35W-11J01 S	761006	7.5	247	150	9.0	4.0	30.0	1.2	34.1	6.0	48.0	6.2	0.02	0.3	38
11N/35W-11J01 S	771021	7.6	261	157	10.0	3.0	33.0	1.0	36.6	7.0	47.0	7.4	0.02	0.3	38
11N/35W-11J01 S	791105	7.3	244	174	10.0	4.0	31.0	1.3	36.6	6.0	48.0	6.6	0.00	0.4	42

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/35W-11J01 S	811021	7.3	262	183	8.0	5.0	30.0	1.1	36.6	4.0	47.0	5.9	0.00	0.3	40
11N/35W-11J01 S	871016	8.2	878	750	89.0	47.0	52.0	2.8	179.2	302.0	43.0	4.4	0.10	0.4	415
11N/35W-11J02 S	811120	8.2	900	630	59.0	32.0	85.0		200.0	140.0	92.0	13.0		0.1	320
11N/35W-11J03 S	881004	7.5	500	320	32.0	15.0	49.0	4.0	121.9	47.0	71.0	5.8		<0.1	130
11N/35W-11J03 S	920220	7.5	800	480	44.0	28.0	65.0	4.0	220.0	84.0	91.0	3.9		<0.1	240
11N/35W-11J03 S	960226	7.3	730	460	44.0	24.0	65.0	3.0	230.0	81.0	89.0	6.9	0.10	0.1	210
11N/35W-11J03 S	990223	7.3	630	390	37.0	20.0	62.0	3.0	170.0	48.0	73.0	7.2	0.00	0.0	170
11N/35W-12E01 S	531029	7.3	236	173	6.0	7.0	32.0	1.0	52.4	6.0	44.0	3.0	0.00	0.3	44
11N/35W-12E01 S	601006	7.0	256		10.0	6.0	27.0	1.0	48.8	7.0	46.0	1.6	0.00	0.2	50
11N/35W-12E01 S	611117	7.6	236	170	8.0	6.0	28.0	1.0	42.7	5.0	46.0	4.3	0.01	0.3	45
11N/35W-12E01 S	620711	6.8	313	190	15.0	6.0	35.0	2.0	63.4	7.0	54.0	1.0	0.02	0.1	62
11N/35W-12E01 S	621010	7.1	257	158	11.0	4.0	29.0	1.0	48.8	4.0	46.0	4.2	0.00	0.5	44
11N/35W-12E01 S	630927	7.1	339	242	21.0	6.0	39.0	2.0	73.2	11.0	60.0	3.1	0.14	0.2	77
11N/35W-12E01 S	631206	7.1	230	166	11.0	4.0	32.0	1.0	52.4	7.0	44.0	0.9	0.03	0.2	44
11N/35W-12E01 S	640618	6.9	447	295	27.0	10.0	42.0	2.0	82.9	17.0	82.0	2.0	0.06	0.3	109
11N/35W-12E01 S	651008	8.2	528	290	37.0	13.0	48.0	2.0	126.8	30.0	84.0	2.2	0.05	0.2	146
11N/35W-12E02 S	731012	7.8	706	474	51.0	25.0	65.0	2.7	224.3	59.0	95.0	0.1	0.00	0.0	228
11N/35W-12E02 S	761006	8.0	881	540	65.0	30.0	68.0	3.1	231.7	75.0	124.0	1.3	0.06	0.3	285
11N/35W-12E02 S	791105	7.1	295	188	8.0	4.0	42.0	1.4	39.0	4.0	52.0	27.0	0.00	0.3	36
11N/35W-12F01 S	791031	7.6	220	85	7.0	4.0	33.0	1.3	35.4	4.0	49.0	6.6	0.00	0.2	34
11N/35W-13C01 S	620802	6.8	260	170	10.0	6.0	31.0	2.0	48.8	2.0	42.0	19.0	0.02	0.1	50
11N/35W-13C01 S	761006	7.5	343	214	19.0	6.0	35.0	1.6	64.6	13.0	47.0	23.0	0.01	0.3	72
11N/35W-13C01 S	811021	8.0	589	362	36.0	18.0	51.0	2.2	160.9	48.0	58.0	12.2	0.00	0.3	164
11N/35W-13D01 S	620711	7.6	1145	752	81.0	47.0	96.0	4.0	347.5	171.0	111.0	0.0	0.10	0.1	396
11N/35W-13D01 S	640618	7.5	1143	724	77.0	50.0	91.0	3.0	321.9	174.0	106.0	1.5	0.00	0.1	398
11N/35W-13F01 S	920220	7.6	700	410	41.0	22.0	58.0	3.0	207.3	72.0	74.0	7.1		<0.1	210
11N/35W-13F01 S	960226	7.5	750	450	48.0	25.0	67.0	3.0	260.0	91.0	81.0	3.7	0.10	0.1	220
11N/35W-13G01 S	771021	8.1	525	292	33.0	14.0	47.0	1.6	136.6	40.0	54.0	14.4	0.02	0.3	140
11N/35W-13K01 S	761006	8.0	827	503	54.0	34.0	68.0	2.3	251.2	106.0	81.0	0.0	0.04	0.2	275
11N/35W-13M02 S	891201	6.9	750	510	69.0	31.0	56.0	3.0	180.0	150.0	150.0	5.3	0.20	0.2	270
11N/35W-14E01 S	980327	7.0	960	680	84.0	39.0	58.0	3.0	210.0	260.0	51.0	6.3	0.10	0.1	370
11N/35W-14J01 S	891201	7.0	850	600	80.0	36.0	62.0	3.0	180.0	210.0	39.0	5.3	0.20	0.3	320
11N/35W-14Q01 S	620822	8.1	1344	1020	138.0	71.0	78.0	3.0	282.9	461.0	55.0	29.0	0.17	0.6	637
11N/35W-14Q01 S	640618	7.9	568	395	40.0	19.0	42.0	2.0	131.7	75.0	56.0	8.5	0.05	0.1	178
11N/35W-15D S	940806	7.7	1185	700	120.0	38.0	48.0	3.8	211.0	314.0	68.0	3.1	0.44		456

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/day	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/35W-15R S	940806	7.6	1060	616	115.0	29.0	41.0	4.0	173.0	286.0	56.0	12.4	0.38		408
11N/35W-16J S	931216	6.9	610	442	54.0	21.0	43.0	2.0	95.0	140.0	42.0	16.0	<0.1		220
11N/35W-17D01 S	611106	7.6	1300	1025	150.0	56.0	67.0	4.0	239.0	471.0	45.0	3.5	0.16	0.6	605
11N/35W-17D01 S	620712	7.7	1270	980	139.0	57.0	64.0	3.0	235.3	460.0	45.0	2.0	0.20	0.2	582
11N/35W-22D01 S	620821	7.4	776	545	88.0	21.0	52.0	3.0	143.9	240.0	38.0	1.0	0.02	0.3	306
11N/35W-22M S	940806	7.2	1425	840	150.0	43.0	53.0	3.7	221.0	429.0	58.0	4.0	0.75		552
11N/35W-24A01 S	891030	7.2	1130	667	91.3	34.1	85.4	3.0	304.5	156.8	105.6	3.6		0.9	368
11N/35W-24A01 S	930118	7.6	1090	599	79.9	38.5	81.5	2.8	269.4	172.4	110.6	3.2		0.1	
11N/35W-24A01 S	931019	7.6	1000	574	64.1	38.9	87.3	2.6	280.6	136.4	102.2	3.9		0.4	320
11N/35W-24A01 S	960124	7.7	870	525	64.1	28.0	84.1	2.7	241.6	129.6	88.6	9.1		0.1	275
11N/35W-24A01 S	990113	7.5	915	528	78.3	19.2	85.0	2.1	243.0	122.0	95.7	6.3		0.1	274
11N/35W-24D01 S	620821	7.9	191	130	4.0	3.0	29.0	1.0	31.7	2.0	39.0	6.5	0.01	0.1	23
11N/35W-24J01 S	800701	7.8	800		53.0	28.0	67.0	1.6	209.7	116.0	75.0	1.0		0.2	250
11N/35W-24J01 S	820503	7.4	710	414	49.7	17.0	70.8	3.8	190.2	77.0	81.0	2.0		0.2	196
11N/35W-24J01 S	850703	5.7	990	725	83.3	38.5	69.2	2.6	217.0	241.0	67.0	4.5		0.2	388
11N/35W-24J01 S	870715	8.0	1120	710	132.0	25.5	58.0	2.5	217.0	303.0	46.8	7.9		0.4	434
11N/35W-24J01 S	870902	7.6		756	138.7	19.7	61.2	4.7	211.9	288.8	57.2	8.9		0.8	428
11N/35W-24J01 S	900122	7.5	1100	649	113.7	34.4	58.6	2.7	274.3	235.6	52.1	11.9		0.7	426
11N/35W-24J01 S	930117	7.6	930	558	92.1	31.6	52.8	2.3	190.3	212.6	67.3	21.2		0.3	360
11N/35W-24J01 S	931019	7.7	1060	696	107.3	40.3	65.6	2.6	226.9	298.1	50.1	19.3		0.7	434
11N/35W-24J01 S	960124	7.8	1010	616	92.9	38.4	64.6	2.6	207.4	244.8	48.7	24.2		0.2	390
11N/35W-24J01 S	990519	7.4	1120	745	119.0	43.1	59.2	2.9	208.0	361.0	48.0	9.2		0.3	414
11N/35W-24J01 S	990526	7.4	1100	698	124.0	29.0	65.0	2.6	223.0	312.0	47.9	8.1		0.2	428
11N/35W-24L01 S	850703	7.5	210	132	5.9	2.2	33.5	1.3	23.2	4.7	33.4	26.9		0.1	28
11N/35W-24L01 S	880628	6.7	200	118	7.2	2.2	30.9	1.5	24.1	3.6	30.9	28.5		<0.1	24
11N/35W-24L01 S	900129	7.3	320	182	22.9	7.1	33.7	1.7	52.2	53.0	34.8	26.6		<0.1	86
11N/35W-24L01 S	930118	7.2	210	122	7.5	1.3	32.0	1.2	22.9	7.4	31.8	31.2		0.1	24
11N/35W-24L01 S	930222	7.2	240	144	8.7	10.8	29.7	1.1	73.2	3.3	29.5	30.9		0.1	66
11N/35W-24L01 S	931018	7.2	190	123	7.7	1.9	32.6	1.2	40.5	4.7	27.5	27.0		<0.1	27
11N/35W-24L01 S	960124	7.5	220	131	7.5	3.2	34.0	1.5	39.0	3.8	28.9	35.9		0.1	32
11N/35W-24L01 S	990113	7.1	220	139	12.3	7.5	23.9	1.0	49.2	6.8	29.5	33.4		0.1	62
11N/35W-24L02 S	870716	7.3	160		10.4	1.1	23.7	1.1	22.8	2.4	28.5	28.1		0.1	30
11N/35W-24L02 S	870902	7.1	420	300	43.4	7.9	33.7	2.0	67.1	96.9	30.3	21.5		0.1	143
11N/35W-24L02 S	881012	6.8	210	124	10.1	3.9	28.2	3.0	70.1	<1.0	31.3	<1.0		<0.1	41
11N/35W-24L02 S	900122	7.2	430	254	32.2	16.7	31.9	1.6	98.6	67.4	31.7	23.1		<0.1	149

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/35W-24L02 S	930117	7.1	260	174	14.4	3.4	40.7	1.1	28.3	22.6	51.7	28.3		0.2	50
11N/35W-24L02 S	930301	6.7	210	113	9.6	2.9	25.8	1.1	23.4	6.1	31.9	25.7		0.1	36
11N/35W-24L02 S	930420	6.8	240	138	10.9	3.1	32.5	1.4	32.2	16.2	30.8	27.4		<0.1	40
11N/35W-24L02 S	931019	7.4	390	219	27.2	9.7	35.3	1.4	92.2	52.4	26.1	21.7		<0.1	108
11N/35W-24L02 S	960124	7.6	310	188	18.1	7.1	34.2	1.4	58.6	37.0	32.2	31.5		0.1	74
11N/35W-24L02 S	990113	7.3	605	371	60.4	20.0	34.2	1.7	84.8	155.0	35.5	22.2		0.1	203
11N/35W-24L03 S	910801	7.5	520	298	43.9	11.3	38.3	1.6	85.4	106.6	34.4	26.6		<0.1	156
11N/35W-24L03 S	931019	7.6	910	587	94.4	31.8	54.9	2.3	158.1	278.6	33.9	12.8		0.6	366
11N/35W-24L03 S	960124	7.6	780	508	76.9	27.2	57.7	2.4	146.4	212.6	36.7	26.1		0.2	304
11N/35W-24L03 S	990609	7.6	1000	636	116.0	31.5	52.4	2.6	183.0	296.0	39.2	14.2		0.1	390
11N/36W-12C01 S	760108	7.7	1194	925	130.0	47.0	72.0	3.6	209.7	438.0	39.0	1.5	0.16	0.4	518
11N/36W-12C01 S	760608	8.0	1209	920	139.0	47.0	72.0	3.5	219.5	439.0	40.0	1.4	0.14	0.7	540
11N/36W-12C01 S	960326	8.6	1260	962	136.0	49.0	70.0	4.7	207.3	474.0	38.4	1.8	0.25		
11N/36W-12C02 S	760108	7.8	1376	1043	141.0	60.0	88.0	4.2	251.2	505.0	45.0	2.7	0.17	0.6	599
11N/36W-12C02 S	760608	7.7	1258	1015	129.0	52.0	90.0	4.6	184.1	488.0	48.0	1.4	0.16	0.5	536
11N/36W-12C02 S	960326	8.1	1451	1090	150.0	52.1	80.0	5.2	246.3	552.0	46.2	1.2	0.27		
11N/36W-12C03 S	760108	10.9		357	46.0	1.0	82.0	3.4	143.9	81.0	54.0	29.0	0.00	0.9	119
11N/36W-12C03 S	760608	7.8	1170	813	89.0	43.0	98.0	5.9	292.6	235.0	94.0	0.4	0.24	0.4	399
11N/36W-12C03 S	960326	8.1	1230	790	96.6	50.8	92.0	6.0	317.0	246.0	91.0	<0.2	0.32		
12N/35W-29R01 S	620821	7.0	236	155	7.0	3.0	35.0	1.0	31.7	4.0	25.0	49.0	0.02	0.1	30
12N/35W-29R01 S	640414	6.2	205	174	8.0	2.0	36.0	1.0	36.6	4.0	23.0	46.0	0.07	0.2	28
12N/35W-29R01 S	640618	7.4	240	177	8.0	2.0	34.0	1.0	28.0	3.0	27.0	52.0	0.13	0.1	28
12N/35W-29R03 S	691008	7.7	252	117	7.0	3.0	37.0	0.0	50.0	8.0	26.0	34.0	0.04	0.2	30
12N/35W-29R03 S	711026	7.0	244	155	4.0	4.0	37.0	1.0	46.3	10.0	26.0	31.5	0.04	0.1	25
12N/35W-32F01 S	671102	7.8	796	487	55.0	31.0	68.0	3.0	225.6	106.0	81.0	13.0	0.08	0.3	265
12N/35W-32G S	960408	6.8	700	480	52.0	27.0	70.0		195.1	21.0	70.0	8.8		0.2	240
12N/35W-32P01 S	640619	7.6	370	210	13.0	4.0	65.0	2.0	63.4	11.0	76.0	20.0	0.15	0.2	49
12N/35W-32P01 S	671101	7.4	380	216	6.0	4.0	58.0	2.0	46.3	9.0	69.0	27.0	0.02	0.1	32
12N/35W-32Q S	950202	6.6	340	220	6.5	4.1	53.0	1.0	39.0	12.0	65.0	30.0		nd	33
12N/35W-32R02 S	930317	7.3	740	450	50.0	28.0	51.0	3.0	270.0	84.0	61.0	8.0		0.3	110
12N/35W-32R02 S	960414	7.4	640	460	53.0	28.0	53.0		180.0	60.0	64.0	9.7		0.2	250
12N/35W-32R04 S	910918	6.9	624	355	32.0	18.0	49.0	1.6	137.0	48.0	62.0	19.0		0.2	156
12N/35W-32R04 S	941205	6.6	530	380	45.0	25.0	50.0	2.2	150.0	65.0	63.0	13.0		0.1	
12N/35W-32R04 S	980317	7.3	360	290	18.0	11.0	55.0	1.8	90.0	28.0	59.0	25.0		0.0	88
12N/35W-33B02 S	671031	8.1	534	327	32.0	14.0	53.0	3.0	146.3	36.0		21.0	0.00	0.1	136

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/day	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
12N/35W-33J01 S	640618	7.1	244	206	8.0	5.0	28.0	2.0	29.3	3.0	46.0	17.0	0.04	0.0	41
12N/35W-33J01 S	671031	7.0	229	162	4.0	6.0	28.0	2.0	24.4	4.0	44.0	17.0	0.00	0.1	35
12N/35W-33J02 S	771014	8.1	937	558	81.0	46.0	42.0	2.1	291.4	137.0	58.0	29.2	0.03	0.4	391
12N/35W-33J02 S	811021	7.9	742	661	92.0	56.0	44.0	2.9	343.8	168.0	60.0	17.7	0.00	0.4	460
12N/35W-33J02 S	871105	8.2	843	579	61.0	56.0	45.0	2.9	251.2	175.0	64.0	15.3	0.10	0.4	382
12N/35W-33M01 S	871105	8.0	442	271	24.0	14.0	46.0	2.0	102.4	26.0	66.0	19.5	0.00	0.2	118
12N/35W-33Q02 S	761004	7.4	256	133	6.6	3.3	35.0	1.2	31.7	3.5	48.0	14.0	0.02	0.1	30
12N/35W-33R01 S	671103	7.3	293	181	9.0	7.0	36.0	2.0	50.0	9.0	51.0	14.0	0.00	0.1	52
12N/35W-34N01 S	620821	6.6	368	250	120.0	7.0	44.0	2.0	36.6	4.0	76.0	20.0	0.00	0.1	329
12N/35W-35P01 S	771014	6.9	227	132	7.0	2.8	31.0	0.9	35.4	4.1	41.0	5.9	0.03	0.1	29
12N/35W-35P01 S	871105	7.4	281	183	9.0	5.0	41.0	1.5	34.1	3.0	59.0	26.0	0.00	0.1	43
12N/36W-36L01 S	760608	7.9	1212	936	130.0	48.0	72.0	3.5	223.1	423.0	38.0	0.6	0.15	0.7	521
12N/36W-36L01 S	960326	7.8	1100	882	124.0	47.3	66.0	4.8	232.9	408.0	35.0	2.0	0.24		
12N/36W-36L02 S	760608	8.0	1301	820	94.0	44.0	118.0	6.6	392.6	184.0	126.0	0.0	0.36	0.5	414
12N/36W-36L02 S	960326	7.8	1290	772	85.8	35.8	130.0	8.7	390.1	148.0	127.0	<0.2	0.50		
<b>Santa Maria Valley</b>															
10N/35W-04C01 S	520425		1710		191.0	85.0	96.0	4.5	312.1	660.0	60.0				826
10N/35W-04C01 S	570405		1740		209.0	94.0	99.0	3.7	320.7		60.0				910
10N/35W-04C01 S	571121	7.5	1710	1350	175.0	88.0	84.0	4.0	201.2	709.0	66.0	7.4	0.17	0.0	799
10N/35W-04C01 S	580507	7.2	1824	1167	216.0	86.0	101.0	4.0	329.2	695.0	83.0	10.7	0.58	0.4	893
10N/35W-04C01 S	581119	7.8	1694	1472	206.0	91.0	96.0	5.0	309.7	709.0	68.0	12.0	0.16	0.8	889
10N/35W-04C01 S	590421	7.7	1684	1291	190.0	83.0	98.0	4.0	235.3	706.0	76.0	10.0	0.23	0.4	816
10N/35W-04C01 S	590911	7.3	1831	1385	212.0	89.0	91.0	4.0	320.7	687.0	74.0	11.0	0.20	0.7	896
10N/35W-04C01 S	620614	8.0	1770	1480	155.0	119.0	84.0	4.0	306.0	695.0	70.0	12.0	0.23	0.4	877
10N/35W-04C01 S	650709	7.9	1887	1581	221.0	97.0	99.0	4.0	348.7	721.0	74.0	19.0	0.21	0.6	951
10N/35W-04C01 S	651108	7.9	1776	1400	197.0	89.0	98.0	4.0	276.8	708.0	69.0	20.0	0.28	0.7	858
10N/35W-04C01 S	661019	8.3	1920	1460	245.0	54.0	99.0	4.0	297.5	691.0	72.0	16.0	0.20		834
10N/35W-04C01 S	670523	7.8	1746	1424	151.0	92.0	106.0	4.0	229.2	635.0	97.0	8.5	0.23	0.5	756
10N/35W-04C01 S	680503	8.3	1960	1600	224.0	95.0	109.0	4.0	345.0	752.0	73.0	17.0	0.20	0.4	950
10N/35W-04C01 S	680920	7.6	1886	1542	223.0	94.0	100.0	4.0	338.9	741.0	73.0	16.3	0.20	0.8	944
10N/35W-04C01 S	710913	7.8	1752	1420	191.0	90.0	93.0	2.7	290.2	674.0	87.0	19.5	0.20	0.6	845
10N/35W-04C01 S	720309	8.0	1670	1377	192.0	87.0	95.0	3.9	314.6	641.0	72.0	21.8	0.20	0.5	837
10N/35W-04C01 S	750515	8.1	1689	1350	146.0	81.0	108.0	3.9	156.1	662.0	91.0	20.0	0.22	0.6	735
10N/35W-04C01 S	771020		1780	1370	210.0	83.0	93.0	3.9		640.0	71.0		0.20		860

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride



Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
10N/35W-05J01 S	27/10/18			1000	126.0	50.0	96.0		214.6	443.0	45.0				520
10N/35W-05J01 S	53/12/17	7.7	1340		144.0	62.0	77.0	4.0	212.1		68.0				615
10N/35W-05J01 S	57/04/05	7.1	1360		146.0	69.0	81.0	3.0	242.6		64.0				649
10N/35W-05J01 S	58/05/07	7.8	1381	1075	140.0	68.0	80.0	3.0	241.4	467.0	71.0	25.2	0.10	0.6	630
10N/35W-05J01 S	58/09/17	8.0	1388	1048	144.0	70.0	71.0	4.0	225.6	473.0	71.0	22.0	0.09	0.4	648
10N/35W-05J01 S	59/05/26	7.8	1589	1065	132.0	65.0	78.0	3.0	200.0	483.0	67.0	27.0	0.46	0.3	597
10N/35W-05J01 S	60/11/17	7.9	1378		140.0	68.0	76.0	3.0	236.5	491.0	67.0	17.0	0.31	1.0	630
10N/35W-05J01 S	62/06/14	8.1	1480	1016	123.0	75.0	78.0	6.0	235.3	475.0	71.0	23.0	0.09	0.4	616
10N/35W-05J01 S	62/09/20	8.1	1330	1124	132.0	73.0	70.0	3.0	231.7	475.0	67.0	22.0	0.20	0.6	630
10N/35W-05J01 S	63/07/19	7.2	1414	1100	145.0	70.0	82.0	4.0	253.6	481.0	70.0	24.0	0.20	0.7	651
10N/35W-05J01 S	75/09/25		4000		160.0	64.0	77.0	3.8	263.4	480.0	65.0	38.5	0.18	0.4	660
10N/35W-06A01 S	64/02/06	8.1	1800	1455	128.0	148.0	154.0	4.0	496.2	591.0	76.0	9.8	0.40	0.8	804
10N/35W-06A03 S	64/02/06	8.2	1130	878	127.0	49.0	70.0	3.0	253.6	379.0	46.0	2.4	0.16	0.6	519
10N/36W-01H01 S	61/03/28	8.1	1600		173.0	72.0	96.0	3.0	243.8	580.0	111.0	9.1	0.25	0.4	728
10N/36W-01H01 S	61/10/09	7.7	1570		192.0	71.0	90.0	3.0	246.3	583.0	111.0	0.0	0.26	0.4	772
10N/36W-01H01 S	61/11/07	7.8	1642	1270	180.0	81.0	94.0	4.0	253.6	572.0	112.0	14.0	0.18	0.8	783
10N/36W-01H01 S	62/06/14	8.0	1550	1252	171.0	72.0	92.0	6.0	186.5	571.0	117.0	0.0	0.25	0.6	723
10N/36W-01H01 S	62/09/20	7.8	1550	1332	176.0	74.0	83.0	3.0	225.6	536.0	116.0	8.0	0.20	0.4	744
10N/36W-01H01 S	63/07/19	7.5	1704	1340	187.0	77.0	100.0	4.0	264.6	596.0	114.0	10.0	0.24	0.7	784
10N/36W-01H01 S	63/10/15	7.4	1550	1300	239.0	38.0	99.0	4.0	247.5	597.0	112.0	8.2	0.26	0.2	754
10N/36W-01H01 S	64/05/06	8.0	1600	1400	97.0	134.0	105.0	3.0	253.6	604.0	116.0	10.0	0.22	0.2	792
10N/36W-01H01 S	65/04/08	7.3	1760	1340	183.0	84.0	98.0	6.0	256.0	619.0		12.0	0.10	0.8	803
10N/36W-02G01 S	61/10/09	7.0	1350		192.0	36.0	86.0	3.0	258.5	498.0	67.0	0.0	0.30	0.4	628
10N/36W-02G01 S	61/11/07	7.3	1398	1052	139.0	62.0	87.0	3.0	248.7	462.0	64.0	6.3	0.19	0.8	602
10N/36W-02G01 S	62/04/24	7.3	1440	1041	148.0	58.0	84.0	4.0	235.3	464.0	67.0	11.0	0.07	0.7	608
10N/36W-02G01 S	63/05/01	7.7	1065	766	70.0	53.0	87.0	4.0	109.7	377.0	67.0	0.6	0.14	0.5	393
10N/36W-02G01 S	63/10/17	8.1	1270	1032	135.0	59.0	90.0	3.0	237.7	467.0	69.0	5.1	0.30	0.2	580
10N/36W-02G01 S	64/02/06	7.4	1347	1070	142.0	60.0	94.0	3.0	258.5	465.0	69.0	12.4	0.22	0.6	601
10N/36W-02G01 S	64/03/26	8.0	750	570	32.0	26.0	96.0	3.0	73.2	236.0	69.0	0.0	0.11	0.1	187
10N/36W-02G01 S	65/04/08	7.3	1389	1030	134.0	63.0	89.0	4.0	246.3	471.0	68.0	5.0	0.24	0.8	594
10N/36W-02G01 S	70/04/17	7.8	617	345	18.0	11.0	86.0	5.0	95.1	97.0	70.0	4.0	0.08	0.2	90
10N/36W-02G01 S	70/09/17	7.8	566	260	7.0	8.0	91.0	2.0	84.1	83.0	67.0	5.0	0.10	0.2	50
10N/36W-02G01 S	71/04/01	7.6	582	322	8.0	14.0	84.0	4.3	81.7	91.0	70.0	6.0	0.08	0.2	81
10N/36W-02G01 S	71/09/22	8.1	652	334	8.0	18.0	89.0	5.1	90.2	118.0	68.0	6.0	0.09	0.0	92
10N/36W-02G01 S	72/03/09	7.8	626	317	3.0	22.0	94.0	3.6	91.4	122.0	70.0	6.0	0.10	0.1	99

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
10N/36W-02G01 S	760922		670		5.0	20.0	89.0	5.3	113.4	100.0	74.0	1.0	0.15	0.1	96
10N/36W-02G02 S	640206	8.0	1800	1365	206.0	74.0	94.0	5.0	378.0	296.0	291.0	3.2	0.22	0.5	819
10N/36W-02G02 S	650408	7.4	1495	930	123.0	46.0	125.0	5.0	353.6	180.0	201.0	16.0	0.34	0.7	496
10N/36W-02Q01 S	670512	7.8	1129	900	109.0	57.0	62.0	4.0	256.0	366.0	30.0	1.3	0.11	0.4	507
10N/36W-02Q01 S	670929	7.9	1086	818	101.0	52.0	57.0	4.0	229.2	353.0	29.0	1.5	0.11	0.4	466
10N/36W-02Q01 S	760521	8.0	977	700	102.0	46.0	54.0	2.8	267.0	300.0	26.0	1.6	0.16	0.6	444
10N/36W-02Q01 S	770726		1100	890	120.0	51.0	56.0	3.1	249.9	360.0	28.0		0.10		500
10N/36W-02Q01 S	780803		1050		110.0	50.0	52.0	3.6	243.8	360.0	32.0	2.6	0.13	0.1	480
10N/36W-02Q01 S	791010		1030		110.0	51.0	61.0	3.6	268.2	370.0	28.0	2.3	0.13	0.2	480
10N/36W-02Q01 S	801015	7.5			120.0	51.0	57.0	3.6		360.0	43.0	2.1	0.14	0.2	510
10N/36W-02Q01 S	811016	7.6	1130		110.0	50.0	54.0	2.8		360.0	29.0	2.0	0.14	0.2	480
10N/36W-02Q01 S	821015	7.5	1040		110.0	49.0	54.0	3.1	256.0	360.0	30.0	2.1	0.13	0.2	480
10N/36W-02Q01 S	831012	7.4	1100		120.0	51.0	54.0	2.9	256.0	360.0	29.0	1.8	0.13	0.2	510
10N/36W-02Q01 S	841011	7.5	1100		110.0	52.0	56.0	3.5	313.3	360.0	28.0	1.9	0.14	0.2	480
10N/36W-02Q01 S	851016	7.7	1100		120.0	51.0	55.0	2.9	247.5	360.0	29.0	2.0	0.14	0.2	480
10N/36W-02Q01 S	861021	7.6	1070		110.0	51.0	53.0	3.0	252.4	370.0	29.0	2.0	0.13	0.2	480
10N/36W-02Q01 S	871028	7.7	1110	799	110.0	50.0	52.0	3.2	248.7	370.0	27.0	1.9	0.13	0.2	480
10N/36W-02Q01 S	880927	7.6	1060	805	110.0	55.0	59.0	3.0	257.3	370.0	27.0	2.1	0.15	0.2	480
10N/36W-02Q01 S	890920	7.5	1090	804	110.0	50.0	55.0	3.0		370.0	27.0	1.9	0.13	0.2	480
10N/36W-02Q01 S	900724	7.5	1050	782	110.0	50.0	55.0	3.3	253.6	370.0	30.0	1.8	0.14	0.3	480
10N/36W-02Q01 S	910826	7.6	1158	810	120.0	52.0	54.0	3.2	249.9	390.0	32.0	2.0	0.14	0.2	480
10N/36W-02Q01 S	920826	7.6	1090	784	110.0	51.0	54.0	3.3	273.1	330.0	31.0	2.2	0.14	0.3	480
10N/36W-02Q01 S	960327	7.2	1125	824	113.0	55.2	56.0	3.7	260.9	352.0	30.0	2.1	0.19		424
10N/36W-02Q01 S	961121	8.0	964	706	91.0	43.0	53.0	2.9	232.0	290.0	23.0	2.1	0.15	0.2	393
10N/36W-02Q01 S	971118	7.4	993	720	100.7	44.0	50.2	2.8	256.0	294.2	22.5	2.1	0.14	0.2	514
10N/36W-02Q01 S	981116	7.4	983	716	90.8	46.3	50.3	3.2	229.2	286.7	22.7	2.0	0.15	0.2	430
10N/36W-02Q02 S	670512	7.9	989	766	89.0	49.0	58.0	4.0	251.2	296.0	23.0	1.3	0.12	0.4	440
10N/36W-02Q02 S	670929	7.9	1014	726	90.0	41.0	67.0	4.0	253.6	294.0	24.0	1.3	0.11	0.4	405
10N/36W-02Q02 S	760521	8.2	1072	808	117.0	54.0	56.0	2.8	258.5	360.0	32.0	1.8	0.16	0.6	431
10N/36W-02Q02 S	770726		1000	780	99.0	44.0	59.0	3.2	259.7	300.0	24.0		0.10		449
10N/36W-02Q02 S	791010		960		100.0	46.0	53.0	3.7	268.2	300.0	23.0	1.4	0.13	0.3	405
10N/36W-02Q02 S	960327	8.0	1015	758	102.0	48.7	55.5	3.1	273.1	278.0	26.9	2.0	0.19		431
10N/36W-02Q03 S	670528	7.8	950	738	80.0	50.0	52.0	3.0	204.8	305.0	22.0	1.3	0.09	0.4	449
10N/36W-02Q03 S	670929	7.8	1008	741	95.0	47.0	53.0	3.0	248.7	303.0	22.0	1.0	0.09	0.4	449
10N/36W-02Q03 S	760521	8.1	977	727	99.0	49.0	51.0	2.7	253.6	311.0	24.0	2.2	0.11	0.5	449

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/day	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
10N/36W-02Q03 S	770726		980	800	100.0	47.0	53.0	2.9	249.9	310.0	24.0		0.10		440
10N/36W-02Q03 S	780803		940		99.0	44.0	49.0	3.4	243.8	300.0	25.0	2.3	0.13	0.1	430
10N/36W-02Q03 S	791010		950		100.0	48.0	52.0	3.4	256.0	320.0	22.0	2.5	0.12	0.2	450
10N/36W-02Q03 S	801015	7.6	940	728	100.0	47.0	52.0	3.3		290.0	24.0		0.13	0.2	440
10N/36W-02Q03 S	811016	7.7	1030	720	97.0	46.0	47.0	2.8		310.0	25.0		0.13	0.2	430
10N/36W-02Q03 S	821015	7.6	950		98.0	45.0	50.0	2.9	256.0	300.0	24.0	2.0	0.13	0.2	430
10N/36W-02Q03 S	831012	7.4	1050		100.0	46.0	53.0	2.9	268.2	310.0	24.0	2.0	0.14	0.2	430
10N/36W-02Q03 S	841011	7.5	1010		100.0	48.0	52.0	3.1	318.2	300.0	23.0	1.9	0.13	0.2	430
10N/36W-02Q03 S	851016	7.9	990		100.0	47.0	50.0	2.7	247.5	320.0	23.0	1.9	0.14	0.2	430
10N/36W-02Q03 S	861021	7.7	960		99.0	44.0	46.0	2.9	258.5	300.0	22.0	1.9	0.14	0.2	430
10N/36W-02Q03 S	871028	7.7	994	696	99.0	46.0	47.0	3.0	247.5	300.0	21.0	1.9	0.13	0.2	430
10N/36W-02Q03 S	880927	7.6	950	712	98.0	48.0	53.0	2.9	259.7	310.0	22.0	2.0	0.14	0.2	430
10N/36W-02Q03 S	890920	7.5	993	711	98.0	45.0	49.0	3.1	260.9	310.0	21.0	2.0	0.14	0.2	430
10N/36W-02Q03 S	910826	7.7	1058	717	100.0	48.0	50.0	2.9	242.6	340.0	28.0	1.9	0.13	0.2	430
10N/36W-02Q03 S	920826	7.7	992	730	100.0	47.0	50.0	3.0	229.2	300.0	25.0	2.0	0.18	0.4	430
10N/36W-02Q03 S	931118	7.4	991	706	100.0	46.0	49.0	3.0	256.0	310.0	25.0	1.8	0.13	0.2	430
10N/36W-02Q03 S	960327	7.2	1010	706	91.8	45.1	53.0	3.5	262.1	286.0	25.7	1.9	0.20		430
10N/36W-02Q03 S	961121	8.0	974	714	95.0	46.0	51.0	2.8	227.0	310.0	23.0	2.0	0.14	0.2	430
10N/36W-02Q03 S	971118	7.5	1001	717	102.8	46.4	46.8	2.7	253.0	303.7	21.9	2.0	0.13	0.2	430
10N/36W-02Q03 S	981116	7.4	987	727	92.3	48.6	49.5	3.0	243.4	297.3	22.1	2.0	0.14	0.2	430
10N/36W-02Q04 S	670528	7.9	1006	797	93.0	48.0	58.0	3.0	249.9	303.0	24.0	2.0	0.11	0.4	430
10N/36W-02Q04 S	670929	8.1	975	712	93.0	44.0	53.0	3.0	247.5	291.0	24.0	1.5	0.09	0.4	413
10N/36W-02Q04 S	760521	8.0	1038	754	107.0	52.0	54.0	2.4	271.9	318.0	31.0	2.6	0.14	0.6	481
10N/36W-02Q04 S	770726		970	750	100.0	46.0	49.0	2.6	249.9	290.0	23.0		0.10		440
10N/36W-02Q04 S	791010		980		96.0	46.0	50.0	3.0	243.8	300.0	22.0	2.4	0.12	0.2	430
10N/36W-02Q04 S	801015	7.6	930	704	100.0	47.0	52.0	3.0		290.0	23.0		0.13	0.2	440
10N/36W-02Q04 S	811016	7.7	1010	688	95.0	44.0	48.0	2.7		290.0	21.0		0.13	0.2	420
10N/36W-02Q04 S	821015	7.5	950		95.0	44.0	49.0	2.8	256.0	290.0	23.0	2.3	0.12	0.2	420
10N/36W-02Q04 S	831012	7.4	660		96.0	45.0	49.0	2.7	268.2	300.0	23.0	2.8	0.12	0.2	420
10N/36W-02Q04 S	851016	7.8	960		99.0	47.0	50.0	2.6	242.6	290.0	22.0	2.3	0.13	0.2	420
10N/36W-02Q04 S	871028	7.9	977	698	96.0	44.0	47.0	2.7	249.9	300.0	22.0	2.3	0.13	0.2	420
10N/36W-02Q04 S	880927	7.6	940	674	94.0	48.0	50.0	2.5	253.6	290.0	20.0	2.4	0.14	0.2	420
10N/36W-02Q04 S	890920	7.5	964	690	93.0	44.0	48.0	2.6	251.2	300.0	20.0	2.3	0.12	0.2	420
10N/36W-02Q04 S	900724	7.6	932	670	100.0	46.0	48.0	2.9	249.9	290.0	23.0	2.2	0.13	0.2	420
10N/36W-02Q04 S	910826	7.7	1018	719	100.0	47.0	48.0	2.8	243.8	320.0	36.0	2.3	0.13	0.2	420

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/day	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
10N/36W-02Q04 S	920826	7.7	960		97.0	46.0	48.0	2.8	253.6	280.0	25.0	2.4	0.12	0.2	
10N/36W-02Q04 S	931118	7.4	962	680	96.0	45.0	49.0	2.8	268.2	290.0	27.0	1.7	0.13	0.2	
10N/36W-02Q04 S	960327	7.0	984	730	97.8	45.6	49.0	2.7	254.8	312.0	22.7	2.7	0.19		
10N/36W-02Q04 S	961121	7.9	944	685	91.0	45.0	49.0	2.6	224.0	280.0	21.0	2.5	0.14	0.2	
10N/36W-02Q04 S	971118	7.5	962	680	97.3	44.8	45.7	2.5	243.0	285.1	21.6	2.6	0.13	0.2	
10N/36W-02Q04 S	981116	7.5	949	685	87.7	47.2	48.7	2.5	221.9	276.9	20.8	2.7	0.14	0.2	
10N/36W-02Q05 S	670527	7.6	1277	989	128.0	58.0	78.0	3.0	247.5	415.0	55.0	5.8	0.17	0.6	558
10N/36W-02Q05 S	670929	7.6	1292	973	131.0	54.0	75.0	3.0	245.1	417.0	56.0	5.3	0.14	0.5	549
10N/36W-02Q05 S	760521	8.0	1278	943	141.0	54.0	77.0	2.7	253.6	420.0	64.0	6.8	0.18	0.7	574
10N/36W-02Q05 S	960327	8.0	1630	1200	178.0	71.0	83.0	3.9	260.9	534.0	85.0	6.6	0.27		
10N/36W-02Q06 S	670526	8.1	1336	1047	129.0	61.0	90.0	3.0	243.8	451.0	61.0	3.3	0.19	0.7	573
10N/36W-02Q06 S	670929	7.8	1339	1000	139.0	54.0	82.0	3.0	249.9	439.0	61.0	3.5	0.18	0.6	569
10N/36W-02Q06 S	760521	7.9	1107	813	119.0	52.0	61.0	2.6	258.5	355.0	42.0	4.4	0.08	0.6	511
10N/36W-02Q06 S	960327	7.2	2004	1530	286.0	57.7	101.0	4.4	297.5	675.0	124.0	1.2	0.32		
10N/36W-02Q07 S	670526	7.6	1126	780	90.0	40.0	85.0	5.0	309.7	116.0	138.0	9.0	0.16	0.4	389
10N/36W-02Q07 S	670929	7.4	1134	747	103.0	44.0	74.0	4.0	319.4	214.0	81.0	11.0	0.14	0.5	438
10N/36W-02Q07 S	760604	8.2	1028	683	89.0	40.0	66.0	3.5	278.0	170.0	89.0	10.0	0.06	0.7	387
10N/36W-02Q07 S	811016	7.6	1090		89.0	37.0	66.0	3.7		160.0	110.0		0.14	0.5	370
10N/36W-02Q07 S	821015	7.5	1090		93.0	39.0	82.0	4.2	317.0	140.0	140.0		0.16	0.4	390
10N/36W-02Q07 S	831012	7.5	750		92.0	35.0	85.0	5.1	304.8	98.0	150.0		0.14	0.4	
10N/36W-02Q07 S	851016	7.7	1110		96.0	39.0	77.0	3.4	304.8	130.0	150.0		0.16	0.4	
10N/36W-02Q07 S	861104	7.6	1120		110.0	44.0	75.0	4.5	328.0	160.0	160.0		0.16	0.4	
10N/36W-02Q07 S	871028	7.5	1440	839	130.0	49.0	91.0	5.7	321.9	120.0	210.0		0.15	0.3	
10N/36W-02Q07 S	880927	7.6	1050	749	110.0	48.0	82.0	4.3	319.4	130.0	180.0		0.16	0.3	
10N/36W-02Q07 S	890920	7.4	1480	864	120.0	52.0	90.0	4.4	331.6	160.0	240.0		0.15	0.3	
10N/36W-02Q07 S	900724	7.2	1495	956	130.0	59.0	110.0	6.9	376.7	260.0	200.0		0.18	0.3	
10N/36W-02Q07 S	910826	7.3	2260	1350	180.0	72.0	160.0	6.7	334.1	210.0	500.0		0.17	0.4	
10N/36W-02Q07 S	920911	7.4	2040	1210	170.0	71.0	130.0	6.0	338.9	200.0	440.0	0.4	0.17	0.5	
10N/36W-02Q07 S	931118	7.2	1830	1080	150.0	61.0	130.0	5.7	392.6	220.0	300.0	<0.2	0.20	0.3	
10N/36W-02Q07 S	960327	7.2	2270	1310	195.0	32.0	190.0	11.5	414.5	190.0	387.0	0.3	0.40		
10N/36W-02Q07 S	961121	8.1	1670	1024	150.0	64.0	100.0	5.6	382.0	250.0	220.0	<0.2	0.21	0.4	
10N/36W-02Q07 S	971118	7.3	2050	1126	174.1	69.3	121.7	5.4	410.0	151.5	382.8	<0.2	0.23	0.4	
10N/36W-02Q07 S	981116	7.4	2030	1186	158.1	72.9	152.8	5.6	397.5	182.4	358.5	0.4	0.52	0.4	
11N/34W-29P02 S	420415		1190	863	123.0	51.0	65.0	3.0	214.6	368.0	68.0	2.0		0.3	517
11N/34W-29P02 S	580916	7.7	977	715	97.0	41.0	64.0	3.0	217.0	251.0	76.0	16.0	0.10	0.6	411

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/34W-29P02 S	590421	8.1	1006	715	95.0	39.0	61.0	2.0	203.6	240.0	69.0	16.0	0.19	0.3	398
11N/34W-29P02 S	620614	7.9	1050	764	105.0	41.0	61.0	2.0	218.2	244.0	73.0	45.0	0.14	0.2	431
11N/34W-29P02 S	620822	7.3	925	676	84.0	35.0	63.0	3.0	240.2	189.0	60.0	12.0	0.06	0.1	354
11N/34W-29P02 S	620919	8.0	1020	832	104.0	41.0	59.0	2.0	235.3	266.0	70.0	39.0	0.16	0.2	428
11N/34W-29P02 S	631014	7.8	1040	844	83.0	63.0	70.0	2.0	207.3	293.0	66.0	67.0	0.13	0.2	466
11N/34W-29P02 S	641006	7.4	1149	907	115.0	48.0	65.0	3.0	210.9	295.0	66.0	66.0	0.12	0.6	485
11N/34W-29P02 S	650709	7.4	1099	772	102.0	47.0	65.0	2.0	224.3	258.0	66.0	49.0	0.08	0.6	448
11N/34W-29P02 S	660412	8.0	1078	769	95.0	42.0	64.0	2.0	167.0	264.0	73.0	51.0	0.08	0.5	410
11N/34W-29P02 S	670516		1050	678	90.0	49.0	68.0	2.0	157.3	285.0	65.0		0.06	0.5	426
11N/34W-29P02 S	671012	7.9	1128	783	99.0	51.0	70.0	3.0	176.8	288.0	80.0	73.0	0.09	0.5	457
11N/34W-29P02 S	671019		1250	892	102.0	61.0	68.0	2.9	204.8	301.0	79.0		0.00		504
11N/34W-29P02 S	680920	7.7	1526	848	118.0	49.0	64.0	2.0	234.1	276.0	69.0	60.0	0.11	0.5	496
11N/34W-29P02 S	690516	8.0	1054	678	90.0	49.0	68.0	2.0	156.1	285.0	65.0	64.5	0.06	0.5	426
11N/34W-29P02 S	690924	7.5	1174	826	114.0	50.0	57.0	2.0	235.3	291.0	55.0	55.0	0.11	0.5	490
11N/34W-29P02 S	700409	8.1	962	661	80.0	44.0	62.0	2.0	180.4	264.0	45.0	36.0	0.11	0.6	381
11N/34W-29P02 S	700916	8.3	942	692	98.0	42.0	60.0	2.0	225.6	269.0	44.0	30.0	0.10	0.6	418
11N/34W-29P02 S	710324	7.7	1011	661	104.0	46.0	61.0	3.0	215.8	285.0	42.0	92.0	0.06	0.5	449
11N/34W-29P02 S	710920	8.1	996	724	102.0	43.0	63.0	2.3	214.6	298.0	40.0	34.0	0.11	0.5	430
11N/34W-29P02 S	720320	8.2	1028	785	111.0	45.0	62.0	2.7	209.7	315.0	44.0	45.0	0.10	0.6	462
11N/34W-29P02 S	730524	8.0	1072	789	100.0	47.0	59.0	2.4	156.1	323.0	48.0	56.0	0.09	0.6	444
11N/34W-29P02 S	740527	8.2	983	741	98.0	46.0	51.0	2.3	196.3	312.0	34.0	12.0	0.15	0.6	436
11N/34W-29P02 S	741030	8.0	1155	923	128.0	49.0	66.0	2.3	223.1	337.0	56.0	70.0	0.11	0.5	522
11N/34W-29P02 S	750515	8.3	1216	915	131.0	49.0	64.0	2.7	229.2	332.0	54.0	76.0	0.06	0.6	528
11N/34W-29P02 S	751204		1240		130.0	48.0	67.0	2.6	230.4	310.0	58.0	75.3	0.11	0.3	520
11N/34W-29P02 S	760922		1220		130.0	53.0	66.0	2.9	230.4	360.0	57.0	88.6	0.11	0.4	540
11N/34W-29P02 S	771020		1230	952	130.0	53.0	68.0	2.5	230.4	350.0	55.0		0.10		540
11N/34W-30D02 S	731011	8.2	1210	890	117.0	56.0	62.0	2.7	225.6	396.0	40.0	3.4	0.00	0.6	521
11N/34W-30D02 S	761007	8.0	1174	886	127.0	49.0	65.0	3.1	220.7	404.0	42.0	4.0	0.14	0.8	519
11N/34W-30D02 S	791106	8.1	1140	834	126.0	48.0	64.0	3.1	225.6	396.0	41.0	4.7	0.10	0.8	512
11N/34W-30D02 S	811020	7.7	1050	875	127.0	48.0	63.0	4.4	226.8	387.0	41.0	4.7	0.10	0.6	514
11N/34W-30Q01 S	620822	7.4	1260	1028	158.0	52.0	57.0	3.0	258.5		37.0	105.0	0.11	0.1	608
11N/34W-30Q01 S	850724	7.9	970	687	105.0	40.0	56.0	2.9	219.5	292.0		4.2	0.10	0.6	426
11N/34W-31C01 S	750925		1500		160.0	61.0	53.0	3.2	228.0	400.0	51.0	128.5	0.14	0.3	650
11N/34W-33J01 S	750926		1600		160.0	77.0	75.0	3.2	379.2	340.0	160.0	21.3	0.16	0.4	720
11N/34W-33K01 S	750928		1375		150.0	50.0	86.0	4.2	306.0	350.0	88.0	0.9	0.29	0.3	580

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/34W-34A04 S	920520		2400	1500						340.0	300.0	23.0		0.8	
11N/35W-18M01 S	570405	7.2	1280		123.0	66.0	83.0	4.0	187.8		47.0				579
11N/35W-18M01 S	580505	8.1	1368	1000	150.0	59.0	86.0	5.0	231.7	517.0	63.0	0.9	0.29	0.2	617
11N/35W-18M01 S	580917	8.2	1335	1090	145.0	63.0	78.0	4.0	217.0	528.0	46.0	4.4	0.27	0.2	621
11N/35W-18M01 S	590930	7.9	1307	983	135.0	60.0	82.0	4.0	202.4	514.0	53.0	0.0	0.24	0.0	584
11N/35W-18M01 S	600406	8.3	1389	1020	134.0	62.0	84.0	4.0	210.9	514.0	56.0	0.0	0.00	0.0	590
11N/35W-18M01 S	620920	8.0	1280	1140	141.0	60.0	74.0	4.0	235.3	485.0	14.0	0.0	0.20	0.1	599
11N/35W-18M01 S	631014	8.2	1220	1034	143.0	52.0	85.0	4.0	208.5	517.0	48.0	0.0	0.21	0.1	571
11N/35W-18M01 S	640506	8.0	1290	1168	83.0	101.0	88.0	4.0	241.4	538.0	50.0	0.0	0.16	0.2	623
11N/35W-18M01 S	641006	8.3	1380	1110	148.0	64.0	80.0	4.0	235.3	516.0	48.0	1.0	0.17	0.6	633
11N/35W-18M01 S	660412	8.3	1388	1026	142.0	64.0	81.0	4.0	215.8	509.0	53.0	1.0	0.14	0.0	618
11N/35W-18M01 S	661018	8.0	1430	1130	150.0	60.0	75.0	4.0	230.4	526.0	48.0	1.5	0.20		621
11N/35W-18M01 S	671013	8.1	1353	1087	146.0	57.0	87.0	5.0	223.1	582.0	50.0	1.0	0.14	0.4	599
11N/35W-18M01 S	680503	8.3	1420	1090	143.0	74.0	81.0	5.0	223.1	520.0	47.0	0.4	0.10	0.1	662
11N/35W-18M01 S	680920	8.1	1350	1110	147.0	61.0	82.0	4.0	229.2	521.0	45.0	0.5	0.16	0.4	618
11N/35W-18M01 S	690516	8.4	1336	1064	152.0	62.0	79.0	4.0	240.2	521.0	48.0	0.5	0.14	0.5	635
11N/35W-18M01 S	690924	8.0	1384	1081	138.0	74.0	71.0	4.0	230.4	528.0	48.0	1.0	0.15	0.4	649
11N/35W-18M01 S	700409	7.7	1386	1065	149.0	63.0	82.0	4.0	236.5	517.0	46.0	0.6	0.16	0.5	631
11N/35W-18M01 S	700916	8.3	1379	1096	148.0	66.0	105.0	8.0	326.7	455.0	84.0	5.0	0.20	0.7	641
11N/35W-18M01 S	710324	7.9	1570	1077	151.0	75.0	106.0	6.6	319.4	476.0	98.0	0.0	0.20	0.6	683
11N/35W-18M01 S	730524	8.7	1734	1329	176.0	78.0	128.0	5.5	379.2	550.0	103.0	2.0	0.21	0.7	762
11N/35W-18M01 S	731018	7.8	1173	900	118.0	54.0	66.0	2.3	219.5	331.0	50.0	73.0	0.96	0.5	517
11N/35W-19C02 S	640206	7.4	2139	1738	215.0	119.0	152.0	5.0	498.7	767.0	113.0	5.2	0.40	1.0	1027
11N/35W-19E02 S	520425		1260		140.0	52.0	80.0	4.9	259.7	410.0	49.0				550
11N/35W-19E02 S	540920	7.3	1240		49.0	108.0	85.0	4.0	259.7	426.0	50.0	2.0	0.26	0.3	567
11N/35W-19E02 S	570405		1260		140.0	57.0	79.0	3.4	259.7		44.0				580
11N/35W-19E02 S	580917	8.1	1209	906	105.0	58.0	73.0	4.0	158.5	446.0	50.0	5.0	0.05		501
11N/35W-19E02 S	590610	8.0	1308	960	136.0	52.0	76.0	3.0	253.6	429.0	48.0	3.0	0.54	0.1	554
11N/35W-19E02 S	611005	6.8	2100		226.0	92.0	160.0	14.0	423.1	761.0	112.0	2.6	0.36	0.4	943
11N/35W-19E02 S	620614	8.2	1285	1014	147.0	52.0	72.0	4.0	265.8	451.0	51.0	2.0	0.17	0.1	581
11N/35W-19E02 S	630718	7.5	1211	900	130.0	49.0	80.0	4.0	260.9	407.0	43.0	2.8	0.15	0.4	526
11N/35W-19E02 S	650709	7.5	1322	1000	133.0	58.0	85.0	4.0	262.1	433.0	52.0	1.0	0.16	0.5	571
11N/35W-19E02 S	671013	7.9	1234	965	113.0	56.0	86.0	5.0	213.4	443.0	53.0	1.5	0.15	0.4	513
11N/35W-19E02 S	680503	8.4	1290	927	129.0	53.0	81.0	4.0	249.9	423.0	44.0	2.9	0.10	0.2	540
11N/35W-19E02 S	690516	8.1	1061	825	89.0	52.0	78.0	3.0	124.4	415.0	45.0	3.2	0.15	0.4	436

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/35W-19K02 S	791102	7.7	297	198	13.0	6.0	34.0	2.5	53.6	6.0	54.0	9.7	0.00	0.3	57
11N/35W-20E01 S	620822	7.4	730	514	70.0	25.0	48.0	3.0	162.2	187.0	41.0	11.0	0.13	0.1	278
11N/35W-20K03 S	640206	7.3	1165	832	122.0	42.0	74.0	4.0	299.9	221.0	124.0	3.2	0.12	0.7	477
11N/35W-21K01 S	640619	7.8	615	376	53.0	15.0	54.0	2.0	156.1	104.0	55.0	3.0	0.13	0.2	194
11N/35W-21K01 S	731011	7.4	1326	1081	137.0	62.0	81.0	3.5	221.9	513.0	43.0	1.6	0.18	0.4	596
11N/35W-21K01 S	741112	8.2	1372	1032	139.0	58.0	50.0	4.3	173.1	500.0	45.0	1.5	0.20	0.6	587
11N/35W-21K01 S	751010	8.0	1365	1086	155.0	53.0	81.0	3.1	251.2	505.0	44.0	2.4	0.18	0.7	604
11N/35W-21K01 S	761007	7.7	1338	1028	142.0	55.0	83.0	3.5	213.4	501.0	48.0	2.0	0.21	0.7	581
11N/35W-21K01 S	771024	8.1	1269	950	141.0	43.0	76.0	2.8	225.6	433.0	41.0	0.6	0.22	0.5	529
11N/35W-21K01 S	791106	7.8	1070	726	115.0	38.0	62.0	2.9	195.1	349.0	41.0	2.8	0.10	0.3	443
11N/35W-21K01 S	871019	8.2	440	317	40.0	13.0	35.0	1.6	104.9	85.0	38.0	4.8	0.00	0.1	154
11N/35W-25L01 S	570829	7.5	1056	728	95.0	64.0	54.0	3.0	192.6	365.0	49.0	9.8	0.20	0.2	500
11N/35W-25L01 S	601118	7.4	929	711	101.0	48.0	53.0	3.0	191.4	279.0	48.0	13.0	0.13	0.5	450
11N/35W-26M01 S	580917	8.7	855	715	99.0	50.0	55.0	3.0	201.2	332.0	46.0	12.0	0.08	0.2	453
11N/35W-26M01 S	590421	8.2	985	715	103.0	37.0	61.0	3.0	187.8	301.0	35.0	12.0	0.41	0.6	409
11N/35W-26M01 S	610309	8.0	815	74.0	74.0	56.0	54.0	2.0	131.7	299.0	63.0	16.0	0.19	0.2	415
11N/35W-26M01 S	611005	7.8	940	75.0	75.0	50.0	53.0	2.0	201.2	261.0	44.0	13.0	0.18	0.3	393
11N/35W-26M01 S	620920	8.0	830	646	95.0	31.0	50.0	2.0	203.6	234.0	45.0	14.0	0.11	0.2	365
11N/35W-26M01 S	630718	7.3	857	600	78.0	34.0	56.0	2.0	173.1	234.0	43.0	13.0	0.06	0.4	335
11N/35W-26M01 S	650709	7.5	793	548	68.0	31.0	50.0	2.0	148.7	193.0	51.0	9.0	0.07	0.4	297
11N/35W-26M01 S	651108	8.0	693	440	66.0	23.0	44.0	2.0	154.8	148.0	45.0	19.0	0.06	0.3	259
11N/35W-26M01 S	660412	8.3	872	570	88.0	32.0	51.0	2.0	182.9	222.0	50.0	18.0	0.06	0.0	351
11N/35W-26M01 S	661019	8.4	937	651	95.0	33.0	53.0	3.0	191.4	241.0	49.0	16.0	0.10	0.0	373
11N/35W-26M01 S	671013	8.1	767	517	72.0	27.0	48.0	2.0	158.5	178.0	50.0	21.0	0.06	0.3	291
11N/35W-26M01 S	680503	8.6	952	661	105.0	27.0	55.0	2.0	187.8	244.0	44.0	19.0	0.10	0.3	373
11N/35W-26M01 S	690516	8.3	1398	1123	153.0	57.0	84.0	3.0	145.1	505.0	77.0	67.5	0.11	0.5	617
11N/35W-27Q01 S	570829	8.0	1135	799	113.0	48.0	59.0	3.0	221.9	365.0	40.0	5.5	0.80	0.2	480
11N/35W-27Q01 S	581218	7.9	1105	821	120.0	46.0	50.0	3.0	214.6	369.0	35.0	6.6	0.12	0.4	489
11N/35W-27Q01 S	601117	7.5	1069	772	111.0	47.0	58.0	3.0	217.0	361.0	39.0	5.7	0.19	1.0	471
11N/35W-27Q01 S	620822	7.7	1065	772	148.0	29.0	53.0	4.0	215.8	361.0	40.0	7.0	0.14	0.6	489
11N/35W-28B01 S	520910	7.8	1020	104.0	104.0	41.0	62.0	4.0	202.4		38.0		0.11		428
11N/35W-28B01 S	570405	7.1	898	93.0	93.0	38.0	54.0	3.0	196.3		37.0				389
11N/35W-28B01 S	590421	7.9	731	516	67.0	24.0	47.0	2.0	146.3	179.0	44.0	10.0	0.38	0.2	266
11N/35W-28B01 S	600406	8.1	873	620	82.0	32.0	52.0	3.0	171.9	234.0	44.0	10.0	0.01	0.3	336
11N/35W-28B01 S	611005	6.8	530	35.0	35.0	13.0	44.0	3.0	103.6	80.0	46.0	2.6	0.24	0.6	141

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/35W-28B01 S	630718	7.8	872	625	84.0	37.0	54.0	3.0	190.2	254.0	37.0	8.3	0.18	0.5	362
11N/35W-28B01 S	631014	8.1	1020	840	127.0	38.0	63.0	3.0	218.2	370.0	37.0	8.6	0.19	0.4	474
11N/35W-28B01 S	641006	8.0	943	670	98.0	38.0	57.0	3.0	198.7	290.0	42.0	10.0	0.14	0.6	401
11N/35W-28F S	950620											32.0			
11N/35W-28F01 S	620822	7.6	1127	858	122.0	51.0	57.0	3.0	226.8	380.0	36.0	8.4	0.13	0.7	514
11N/35W-28F02 S	640206	7.7	2663	2372	326.0	123.0	221.0	8.0	526.7	1145.0	140.0	3.6	0.50	0.8	1321
11N/35W-28L01 S	530423	8.1	1170		131.0	48.0	67.0	5.0	224.3		34.0	6.0			525
11N/35W-28L01 S	590929	8.2	1077	775	94.0	52.0	63.0	3.0	174.3	362.0	37.0	10.0	0.48	0.3	449
11N/35W-28L01 S	611005	7.9	1060		102.0	58.0	57.0	2.0	226.8	352.0	39.0	8.5	0.21	0.4	493
11N/35W-28L01 S	620615	7.8	1080	822	114.0	51.0	56.0	4.0	236.5	347.0	39.0	12.0	0.19	0.8	494
11N/35W-28L01 S	630718	7.5	1092	815	118.0	46.0	62.0	3.0	246.3	346.0	35.0	12.0	0.15	0.7	484
11N/35W-28L01 S	631014	8.2	990	808	137.0	30.0	61.0	3.0	237.7	344.0	35.0	10.0	0.19	0.2	466
11N/35W-28L01 S	641006	7.9	1088	810	121.0	49.0	58.0	3.0	246.3	346.0	37.0	13.0	0.18	0.8	504
11N/35W-28Q01 S	420415			968	140.0	56.0	64.0	4.0	208.5	481.0	35.0			0.5	580
11N/35W-29R01 S	520425	8.2	1180		107.0	58.0	74.0	4.0	140.2	466.0	48.0				506
11N/35W-33F01 S	531217	7.8	1650		229.0	51.0	89.0	4.0	252.4		88.0				782
11N/35W-33F01 S	560327		1530		134.0	79.0	101.0	4.3	113.4		96.0				660
11N/35W-33F01 S	580505	7.8	1872	1553	236.0	93.0	93.0	4.0	470.6	634.0	93.0	12.2	0.18	0.4	972
11N/35W-33F01 S	590526	7.9	1596	1173	144.0	82.0	89.0	4.0	197.5	588.0	86.0	15.0	0.34	0.3	697
11N/35W-33F01 S	590929	7.4	1895	1446	229.0	85.0	91.0	4.0	442.6	591.0	110.0	12.0	0.00	0.4	922
11N/35W-33F01 S	601013	7.6	1890	1460	228.0	91.0	97.0	4.0	469.4	618.0	92.0	15.0	0.08	2.3	944
11N/35W-33F01 S	610309	7.7	1675		180.0	84.0	90.0	4.0	260.9	627.0	96.0	9.7	0.31	0.1	795
11N/35W-33F01 S	611009	6.8	1920		206.0	120.0	91.0	4.0	481.6	602.0	98.0	8.0	0.32	0.1	1008
11N/35W-33F01 S	630719	7.0	1969	1585	253.0	90.0	110.0	5.0	509.6	662.0	93.0	6.7	0.28	0.7	1002
11N/35W-33F01 S	640506	7.9	1961	1559	256.0	92.0	99.0	4.0	495.0	628.0	101.0	10.0	0.27	0.5	1018
11N/35W-33F01 S	650709	7.1	2009	1618	234.0	103.0	103.0	4.0	492.6	637.0	102.0	8.5	0.24	0.6	1008
11N/35W-33F01 S	670523	8.1	2111	1784	162.0	99.0	184.0	4.0	234.1	834.0	105.0	2.8	0.33	0.8	812
11N/35W-33F01 S	671013	7.7	1841	1518	159.0	104.0	124.0	7.0	248.7	732.0	115.0	3.0	0.26	0.5	825
11N/35W-33F01 S	680503	8.2	2110	1590	250.0	94.0	106.0	5.0	514.5	655.0	93.0	7.5	0.30	0.3	1011
11N/35W-33F01 S	700916	7.7	1857	1458	186.0	98.0	115.0	4.0	320.7	673.0	111.0	8.0	0.28	0.6	868
11N/35W-33F01 S	710921	7.8	1744	1349	190.0	91.0	101.0	4.1	397.5	587.0	90.0	8.1	0.22	0.8	848
11N/35W-33F01 S	850722	7.9	1840	1440	220.0	80.0	98.0	4.9	399.9	564.0	72.0	80.0	0.20	0.6	878
11N/35W-33F02 S	271012			1040	146.0	53.0	71.0		214.6	466.0	41.0				580
11N/35W-33G01 S	850722	7.9	1300	990	153.0	54.0	66.0	3.5	314.6	364.0	44.0	52.0	0.30	0.5	604
11N/35W-34E02 S	750925		1550	1040	180.0	64.0	70.0	3.3	380.4	410.0	52.0	48.7	0.23	0.4	710

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride



Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/36W-13K02 S	670308	8.5	1500	917	48.0	20.0	246.0	4.2	357.2	186.0	171.0	1.7	0.20		203
11N/36W-13K02 S	671003	8.3	1169	707	52.0	18.0	180.0	4.0	375.5	99.0	136.0	0.5	0.14	0.4	204
11N/36W-13K02 S	760607	8.2	943	564	89.0	31.0	76.0	3.9	369.4	90.0	80.0	10.0	0.10	0.3	350
11N/36W-13K03 S	660609	8.2	504	338	48.0	14.0	29.0	3.0	130.5	39.0	55.0	18.7	0.41	0.4	178
11N/36W-13K03 S	670308	8.5	986	458	74.0	25.0	103.0	2.4	285.3	174.0	64.0	0.8	0.10		287
11N/36W-13K03 S	671003	8.3	898	583	83.0	33.0	70.0	3.0	286.5	160.0	62.0	0.0	0.10	0.3	343
11N/36W-13K04 S	660609	8.4	997	718	94.0	37.0	75.0	5.0	232.9	284.0	40.0	1.0	0.06	0.3	387
11N/36W-13K04 S	670308	8.0	1000	688	89.0	38.0	68.0	2.7	225.6	264.0	39.0	2.8	0.00		379
11N/36W-13K04 S	671002	8.0	951	665	90.0	38.0	62.0	3.0	234.1	262.0	36.0	2.3	0.07	0.3	381
11N/36W-13K04 S	760607	8.1	943	655	99.0	37.0	57.0	3.1	225.6	271.0	38.0	3.0	0.10	0.4	399
11N/36W-13K05 S	670308	8.7	1320	871	63.0	23.0	191.0	5.6	145.1	438.0	58.0	3.5	0.10		252
11N/36W-13K05 S	671002	8.1	1212	881	105.0	33.0	120.0	6.0	200.0	412.0	45.0	0.5	0.09	0.3	398
11N/36W-13K05 S	760607	7.9	1249	938	137.0	44.0	75.0	3.9	208.5	449.0	41.0	0.0	0.12	0.6	524
11N/36W-13K06 S	670308	8.2	1450	1090	133.0	43.0	129.0	4.6	230.4	490.0	59.0	1.7	0.10		508
11N/36W-13K06 S	671002	8.0	1248	944	126.0	42.0	95.0	4.0	209.7	437.0	44.0	0.5	0.11	0.4	487
11N/36W-13K06 S	760607	8.2	1279	970	138.0	51.0	68.0	4.3	226.8	456.0	40.0	0.0	0.08	0.6	553
11N/36W-13R01 S	520425	8.2	1220		114.0	57.0	82.0	4.0	162.2	502.0	43.0				519
11N/36W-13R01 S	570829	7.8	1332	957	131.0	56.0	78.0	4.0	248.7	463.0	45.0	2.1	0.50	0.1	558
11N/36W-13R01 S	580505	8.0	1299	819	140.0	57.0	80.0	4.0	256.0	465.0	58.0	0.9	0.30	0.4	584
11N/36W-13R01 S	580917	8.0	1195	927	113.0	60.0	70.0	8.0	162.2	467.0	43.0	13.0	0.09		529
11N/36W-13R01 S	590421	7.5	1307	983	161.0	44.0	77.0	4.0	248.7	468.0	47.0	2.0	0.34	0.1	583
11N/36W-13R01 S	600406	8.1	1208	856	114.0	58.0	73.0	3.0	192.6	440.0	48.0	0.0	0.10	0.2	523
11N/36W-13R01 S	610309	8.0	1280		140.0	52.0	69.0	4.0	245.1	449.0	45.0	1.4	0.23	0.1	564
11N/36W-13R01 S	620614	7.7	1260	992	142.0	55.0	68.0	4.0	256.0	451.0	45.0	0.0	0.24	0.1	581
11N/36W-13R01 S	620822	7.6	1266	993	137.0	56.0	72.0	4.0	248.7	452.0	40.0	0.5	0.21	0.5	573
11N/36W-13R01 S	630718	7.5	1279	985	138.0	55.0	84.0	4.0	256.0	456.0	42.0	2.2	0.20	0.4	571
11N/36W-13R01 S	631014	7.6	1160	1016	101.0	73.0	79.0	9.0	245.1	461.0	42.0	0.0	0.25	0.1	552
11N/36W-13R01 S	640506	7.9	1180	840	62.0	102.0	81.0	3.0	254.8	467.0	43.0	0.8	0.20	0.2	574
11N/36W-13R01 S	641006	8.3	1200	1005	141.0	54.0	78.0	4.0	267.0	452.0	41.0	2.0	0.16	0.5	574
11N/36W-13R01 S	650709	7.5	1313	1018	136.0	59.0	80.0	4.0	249.9	449.0	47.0	0.5	0.16	0.5	582
11N/36W-13R01 S	651108	8.0	1282	970	132.0	60.0	78.0	4.0	253.6	461.0	41.0	1.0	0.16	0.5	576
11N/36W-13R01 S	660412	8.1	1215	861	112.0	54.0	78.0	4.0	167.0	446.0	47.0	2.5	0.17	0.5	502
11N/36W-13R01 S	661019	8.2	1280	1000	127.0	53.0	73.0	3.0	214.6	447.0	41.0	1.8	0.20		535
11N/36W-13R01 S	670523	8.0	1265	1064	125.0	56.0	72.0	4.0	219.5	447.0	40.0	1.8	0.17	0.4	543
11N/36W-13R01 S	671013	7.9	1170	983	113.0	53.0	78.0	4.0	178.0	443.0	45.0	1.0	0.15	0.4	500

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/day	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/36W-13R01 S	680503	8.2	1340	1000	135.0	58.0	80.0	4.0	248.7	460.0	41.0	2.2	0.10	0.2	576
11N/36W-13R01 S	680920	7.7	1290	1002	127.0	59.0	75.0	3.0	242.6	460.0	40.0	1.5	0.15	0.4	560
11N/36W-13R01 S	690516	8.1	1138	900	107.0	55.0	76.0	3.0	158.5	446.0	41.0	0.4	0.17	0.5	494
11N/36W-13R01 S	690924	8.0	1271	1016	139.0	59.0	68.0	4.0	236.5	456.0	43.0	2.0	0.15	0.5	590
11N/36W-13R01 S	700409	8.1	1207	913	116.0	57.0	75.0	3.0	187.8	449.0	40.0	2.0	0.18	0.5	524
11N/36W-13R01 S	700916	8.1	1271	963	134.0	55.0	75.0	3.0	231.7	456.0	41.0	3.4	0.15	0.4	561
11N/36W-13R01 S	710324	7.9	1255	884	130.0	61.0	69.0	4.0	231.7	442.0	45.0	0.0	0.16	0.4	576
11N/36W-13R01 S	710920	8.1	1245	967	138.0	55.0	77.0	3.2	253.6	451.0	40.0	1.4	0.17	0.4	571
11N/36W-13R01 S	720321	8.1	1120	878	102.0	55.0	72.0	3.7	134.1	450.0	41.0	1.8	0.17	0.5	481
11N/36W-13R01 S	721106	7.9	1214	938	120.0	55.0	77.0	3.3	204.8	444.0	41.0	0.7	0.21	0.4	526
11N/36W-13R01 S	730524	8.0	1225	931	126.0	48.0	73.0	3.4	185.3	441.0	41.0	1.7	0.21	0.5	513
11N/36W-13R01 S	731018	7.8	1203	895	111.0	55.0	76.0	3.3	173.1	448.0	39.0	2.0	0.18	0.4	503
11N/36W-13R01 S	740527	8.5	1256	996	143.0	52.0	74.0	3.1	232.9	450.0	44.0	3.5	0.16	0.5	568
11N/36W-13R01 S	741024	9.5	1256	973	127.0	53.0	76.0	3.1	204.8	443.0	41.0	2.4	0.14	0.5	534
11N/36W-13R01 S	750515	8.1	1148	869	99.0	52.0	77.0	3.1	136.6	436.0	40.0	0.0	0.09	0.4	459
11N/36W-13R01 S	760922		1240		130.0	51.0	74.0	4.0	248.7	440.0	39.0	2.3	0.18	0.2	530
11N/36W-13R01 S	771020		1250	872	130.0	53.0	75.0	0.9	230.4	440.0	38.0		0.20		550
11N/36W-35J02 S	670928	7.7	1090	811	106.0	46.0	63.0	4.0	260.9	332.0	28.0	1.3	0.12	0.4	454
11N/36W-35J02 S	760521	8.1	1038	747	101.0	50.0	60.0	2.8	234.1	335.0	31.0	2.0	0.12	0.6	458
11N/36W-35J02 S	760604	8.0	1072	795	107.0	50.0	58.0	3.1	258.5	340.0	27.0	0.7	0.07	0.6	473
11N/36W-35J02 S	770726		1050	860	110.0	49.0	60.0	3.2	259.7	340.0	28.0		0.10		470
11N/36W-35J02 S	780803		1000		97.0	46.0	54.0	3.5	243.8	330.0	29.0	2.3	0.15	0.1	430
11N/36W-35J02 S	791010		1090		110.0	47.0	56.0	3.7	256.0	330.0	29.0	2.2	0.14	0.2	470
11N/36W-35J02 S	801015	7.5		709	110.0	49.0	63.0	3.4		360.0	28.0		0.17	0.2	480
11N/36W-35J02 S	811016	7.6	1090	790	110.0	47.0	58.0	2.8		360.0	25.0		0.15	0.2	470
11N/36W-35J02 S	821015	7.6	975		110.0	48.0	59.0	3.1	243.8	340.0	29.0	2.1	0.15	0.2	470
11N/36W-35J02 S	831012	7.5	1100		110.0	49.0	59.0	3.0	268.2	360.0	29.0	2.2	0.14	0.2	
11N/36W-35J02 S	841011	7.4	1030		110.0	47.0	58.0	3.1	335.3	330.0	28.0	2.0	0.14	0.2	
11N/36W-35J02 S	851016	7.7	1070		110.0	49.0	59.0	3.0	254.8	340.0	29.0	2.2	0.15	0.2	
11N/36W-35J02 S	861021	7.5	1060		110.0	47.0	54.0	3.3	262.1	370.0	32.0	2.2	0.15	0.2	
11N/36W-35J02 S	871028	7.5	1080	773	110.0	48.0	56.0	2.2	276.8	340.0	26.0	2.1	0.15	0.2	
11N/36W-35J02 S	880927	7.5	968	787	110.0	51.0	60.0	3.1	259.7	350.0	27.0	2.8	0.15	0.2	
11N/36W-35J02 S	890919	7.5	1110	780	100.0	46.0	57.0	3.5	270.7	340.0	28.0	2.1	0.14	0.2	
11N/36W-35J02 S	900814	7.5	1060	758	110.0	47.0	58.0	3.2	268.2	320.0	26.0	2.2	0.15	0.3	
11N/36W-35J02 S	910827	7.6	1104	770	110.0	48.0	57.0	3.2	259.7	370.0	33.0	2.1	0.15	0.2	

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/day	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/36W-35J02 S	920825	7.8	1050	746	110.0	48.0	57.0	3.2	263.4	320.0	31.0	2.1	0.14	0.6	
11N/36W-35J02 S	960327	7.4	1070	776	107.0	52.2	57.0	3.2	260.9	362.0	26.7	2.2	0.20		
11N/36W-35J02 S	961120	8.0	1040	761	100.0	47.0	57.0	3.1	229.0	330.0	28.0	2.1	0.16	0.2	
11N/36W-35J02 S	971120	7.4	1063	771	108.9	46.7	54.7	2.9	256.0	329.4	26.3	2.1	0.16	0.2	
11N/36W-35J02 S	981117	7.4	1051	777	104.3	48.7	56.1	3.2	236.5	319.3	26.9	2.1	0.16	0.2	
11N/36W-35J03 S	670928	7.8	1367	1031	132.0	55.0	89.0	4.0	239.0	462.0	54.0	10.8	0.18	0.6	556
11N/36W-35J03 S	760604	7.8	1389	1059	129.0	61.0	88.0	3.5	191.4	495.0	59.0	11.4	0.16	0.7	573
11N/36W-35J03 S	770726		1360	1130	150.0	58.0	87.0	3.5	249.9	490.0	54.0		0.10		610
11N/36W-35J03 S	780803		1020		140.0	58.0	79.0	4.1	231.7	470.0	58.0		0.21	0.4	590
11N/36W-35J03 S	791010		1480		150.0	59.0	79.0	4.3	256.0	510.0	58.0	12.0	0.19	0.5	620
11N/36W-35J03 S	801015	7.6	1330	904	120.0	57.0	78.0	3.9		440.0	52.0		0.21	0.4	530
11N/36W-35J03 S	811016	7.7	1520	1150	160.0	63.0	85.0	3.1		570.0	62.0		0.21	0.4	660
11N/36W-35J03 S	821015	7.5	1400		170.0	67.0	88.0	3.8	268.2	570.0	64.0	12.4	0.20	0.4	700
11N/36W-35J03 S	831012	7.4	1500		170.0	69.0	89.0	3.6	268.2	570.0	65.0	12.0	0.20	0.4	
11N/36W-35J03 S	851016	7.6	1600		190.0	73.0	89.0	3.6	285.3	600.0	66.0	14.2	0.21	0.4	
11N/36W-35J03 S	861021	7.7	1580		170.0	68.0	86.0	3.5	287.7	570.0	62.0	13.7	0.21	0.4	
11N/36W-35J03 S	871028	7.7	1600	1200	170.0	70.0	85.0	3.9	279.2	580.0	61.0	15.5	0.21	0.4	
11N/36W-35J03 S	880927	7.8	1380	1070	140.0	65.0	86.0	3.4	264.6	520.0	51.0	14.6	0.21	0.4	
11N/36W-35J03 S	890919	7.5	1650	1230	170.0	69.0	88.0	3.7	299.9	600.0	62.0	18.6	0.21	0.4	
11N/36W-35J03 S	900724	7.5	1450	1060	160.0	63.0	84.0	3.9	268.2	520.0	56.0	17.3	0.21		
11N/36W-35J03 S	920825	7.7	1520	1080	160.0	66.0	83.0	3.9	282.9	520.0	59.0	20.5	0.21	0.3	
11N/36W-35J03 S	931119	7.3	1530	1130	160.0	66.0	86.0	4.0	285.3	550.0	63.0	21.4	0.21	0.3	
11N/36W-35J03 S	960327	7.4	1558	1230	179.0	64.0	88.0	4.0	291.4	556.0	56.7	26.1	0.28		
11N/36W-35J03 S	961120	7.9	1530	1150	160.0	66.0	87.0	3.7	254.0	530.0	59.0	25.3	0.22	0.5	
11N/36W-35J03 S	971120	7.4	1640	1222	179.6	70.6	83.4	3.7	287.0	557.2	62.9	32.0	0.21	0.5	
11N/36W-35J03 S	981117	7.4	1590	1198	164.7	74.0	85.7	3.9	278.0	550.0	62.3	31.3	0.23	0.4	
11N/36W-35J04 S	670928	7.5	1533	1177	159.0	67.0	90.0	4.0	264.6	530.0	66.0	11.5	0.14	0.7	673
11N/36W-35J04 S	760604	8.1	1650	1256	184.0	72.0	90.0	3.8	296.3	582.0	71.0	9.6	0.21	0.8	755
11N/36W-35J04 S	770726		1650	1460	190.0	73.0	86.0	4.3	299.9	600.0	72.0		0.20		780
11N/36W-35J04 S	780803		1540		190.0	72.0	90.0	4.4	292.6	590.0	78.0	10.6	0.19	0.4	770
11N/36W-35J04 S	791010		1700		190.0	73.0	91.0	4.6	304.8	630.0	72.0	10.2	0.20	0.5	780
11N/36W-35J04 S	801015	7.6			200.0	80.0	94.0	4.3		650.0	78.0	10.6	0.20	0.5	830
11N/36W-35J04 S	811016	7.7	1770		200.0	80.0	90.0	3.7		620.0	73.0	9.7	0.21	0.4	830
11N/36W-35J04 S	821015	7.5	1600		210.0	80.0	93.0	4.1	317.0	650.0	78.0	9.7	0.22	0.5	850
11N/36W-35J04 S	831012	7.4	1850		220.0	84.0	93.0	3.9	329.2	660.0	78.0	9.7	0.21	0.4	

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/day	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/36W-35J04 S	841011	7.5	1850		210.0	87.0	99.0	3.9	408.4	690.0	80.0	9.7	0.22	0.4	
11N/36W-35J04 S	851016	7.5	1830		220.0	89.0	94.0	3.8	334.1	710.0	80.0	11.1	0.22	0.4	
11N/36W-35J04 S	861021	7.5	1790		220.0	88.0	93.0	4.2	349.9	690.0	78.0	11.1	0.22	0.4	
11N/36W-35J04 S	871028	7.5	1930	1490	220.0	86.0	90.0	0.3	346.3	740.0	77.0	12.8	0.23	0.4	
11N/36W-35J04 S	880927	7.7	1740	1490	210.0	93.0	96.0	4.0	356.0	750.0	77.0	14.2	0.23	0.4	
11N/36W-35J04 S	890919	7.5	1950	1510	220.0	87.0	95.0	4.3	363.3	750.0	77.0	14.6	0.22	0.4	
11N/36W-35J04 S	900724	7.5	1840	1530	220.0	89.0	95.0	4.3	358.4	730.0	80.0	15.1	0.24	0.3	
11N/36W-35J04 S	910827	7.6	1910	1530	230.0	90.0	94.0	4.3	359.7	810.0	84.0	16.8	0.24	0.4	
11N/36W-35J04 S	920826	7.6	1920	1480	220.0	90.0	93.0	4.5	360.9	700.0	77.0	17.4	0.24	0.6	
11N/36W-35J04 S	931119	7.2	1930	1510	220.0	88.0	95.0	4.4	368.2	730.0	78.0	18.7	0.24	0.3	
11N/36W-35J04 S	960327	7.4	1875	1500	343.0	20.5	96.0	4.4	358.4	665.0	72.0	22.6	0.33		
11N/36W-35J04 S	961120	7.9	1880	1460	210.0	86.0	96.0	4.0	326.0	690.0	76.0	23.0	0.24	0.5	
11N/36W-35J04 S	971120	7.3	1920	1486	226.1	87.3	89.8	4.0	352.0	682.3	73.7	19.2	0.24	0.4	
11N/36W-35J04 S	981117	7.3	1870	1470	201.8	92.5	92.6	4.4	343.8	663.5	76.7	27.3	0.25	0.4	
11N/36W-35J05 S	670422	7.3	1316	1048	140.0	51.0	96.0	4.0	259.7	467.0	48.0	4.0	0.16	0.7	559
11N/36W-35J05 S	670928	7.4	1341	1029	134.0	57.0	81.0	4.0	259.7	453.0	45.0	5.0	0.13	0.7	569
11N/36W-35J05 S	760604	8.1	1394	1043	162.0	62.0	74.0	3.0	279.2	484.0	51.0	6.0	0.18	0.9	659
11N/36W-35J05 S	770726		1380	955	160.0	60.0	75.0	3.5	269.4	500.0	49.0		0.10		650
11N/36W-35J05 S	791010		1490		160.0	66.0	77.0	4.0	268.2	520.0	51.0	5.3	0.17	0.5	670
11N/36W-35J05 S	801015	7.6	1400		130.0	59.0	69.0	3.7		470.0	49.0	5.3	0.19	0.5	570
11N/36W-35J05 S	811016	7.5	1450		160.0	63.0	75.0	3.0		530.0	49.0	4.4	0.18	0.4	660
11N/36W-35J05 S	831012	7.3	1250		170.0	64.0	74.0	3.4	268.2	540.0	53.0	4.2	0.18	0.5	
11N/36W-35J05 S	841011	7.4	1450		160.0	64.0	76.0	3.3	351.1	520.0	52.0	3.9	0.18	0.5	
11N/36W-35J05 S	851016	7.6	1460		170.0	65.0	69.0	3.2	285.3	530.0	54.0	4.4	0.20	0.5	
11N/36W-35J05 S	861021	7.5	1470		170.0	66.0	78.0	3.4	296.3	520.0	53.0	4.9	0.19	0.4	
11N/36W-35J05 S	871028	7.5	1550	1100	170.0	66.0	75.0	3.6	304.8	520.0	52.0	5.3	0.19	0.5	
11N/36W-35J05 S	880927	7.7	1440	1190	180.0	73.0	79.0	3.4	307.2	590.0	56.0	6.6	0.20	0.5	
11N/36W-35J05 S	890919	7.4	1560	1130	170.0	66.0	77.0	4.0	299.9	580.0	53.0	6.2	0.19	0.4	
11N/36W-35J05 S	900724	7.5	1545	1220	200.0	72.0	80.0	4.0	308.5	600.0	59.0	7.1	0.21		
11N/36W-35J05 S	920826	7.6	1580	1190	190.0	68.0	74.0	3.9	314.6	550.0	58.0	7.1	0.20	0.5	
11N/36W-35J05 S	931119	7.3	1610	1200	190.0	71.0	80.0	1.3	360.9	600.0	60.0	8.0	0.20	0.4	
11N/36W-35J05 S	960327	7.4	1570	1210	182.0	68.9	82.0	3.8	315.8	554.0	52.5	8.9	0.27		
11N/36W-35J05 S	961121	7.9	1570	1210	180.0	69.0	80.0	3.7	279.0	570.0	57.0	8.4	0.21	0.5	
11N/36W-35J05 S	971120	7.3	1640	1228	187.6	70.0	75.4	3.4	313.0	558.2	57.7	10.0	0.21	0.5	
11N/36W-35J05 S	981117	7.3	1590	1216	163.4	75.3	77.9	4.1	292.6	555.3	59.3	11.4	0.21	0.5	

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/36W-35J06 S	670420	7.8	848	546	80.0	24.0	67.0	5.0	229.2	108.0	94.0	12.5	0.09	0.3	298
11N/36W-35J06 S	670928	7.5	916	601	92.0	28.0	54.0	5.0	242.6	143.0	80.0	12.0	0.09	0.4	345
11N/36W-35J06 S	760604	8.1	974	623	108.0	26.0	53.0	5.9	208.5	186.0	94.0	9.4	0.07	0.6	377
<b>Arroyo Grande Valley Subbasin</b>															
31S/14E-31K01 M	640603	7.6	789	526	90.0	43.0	27.0	2.0	382.8	122.0	18.0	2.4	0.04	0.5	402
31S/14E-31N02 M	711021	8.2	853	565	93.0	47.0	28.0	2.0	326.7	183.0	17.0	1.6	0.03	0.3	425
31S/14E-31N02 M	850416	8.3	849	588	97.0	46.0	28.0	2.6	331.6	186.0	20.0	1.6	0.00	0.5	431
31S/14E-32G03 M	640603	8.0	838	554	78.0	43.0	40.0	2.0	296.3	157.0	32.0	1.5	0.03	0.5	372
31S/14E-32G03 M	711028	8.2	618	400	74.0	30.0	22.0	1.4	275.5	101.0	18.0	0.4	0.02	0.4	309
31S/14E-32G03 M	811020	8.5	756	477	80.0	37.0	22.0	1.9	308.5	113.0	17.0	4.0	0.00	0.4	352
32S/13E-01G01 M	540930	8.2	865		92.0	46.0	28.0	2.0	381.6	132.0	24.0	5.0	0.00	0.2	419
32S/13E-01G01 M	610302	8.3	890		102.0	51.0	32.0	2.0	425.5	137.0	34.0	0.0	0.08	0.2	464
32S/13E-01G01 M	680620	7.6	934	578	101.0	56.0	32.0	2.0	449.9	132.0	34.0	0.5	0.09	0.5	483
32S/13E-01H01 M	640603	8.5	887	614	103.0	50.0	29.0	2.0	391.4	147.0	29.0	0.5	0.03	0.6	463
32S/13E-12C01 M	540701	7.4	1190		135.0	62.0	33.0	2.0	462.1	239.0	37.0	5.0	0.10	0.1	592
32S/13E-12C01 M	610302	7.4	1120		133.0	64.0	34.0	2.0	468.2	232.0	38.0	0.0	0.10	0.2	595
32S/13E-12C01 M	620824	7.5	1065	766	186.0	23.0	34.0	2.0	490.1	187.0	36.0	0.0	0.10	0.2	559
32S/13E-12C01 M	640603	8.1	992	676	100.0	63.0	30.0	2.0	409.7	172.0	35.0	3.0	0.09	0.5	509
32S/13E-12C01 M	711021	8.0	1056	690	114.0	62.0	33.0	2.0	470.6	170.0	31.0	4.3	0.07	0.3	540
32S/13E-12C04 M	640603	8.0	1103	808	101.0	68.0	40.0	2.0	290.2	300.0	46.0	0.0	0.10	0.5	532
32S/13E-12N01 M	640603	7.1	1889	1544	263.0	108.0	49.0	2.0	540.1	644.0	62.0	0.5	0.17	0.7	1101
32S/13E-12Q02 M	570829	7.9	895	611	79.0	41.0	51.0	1.0	325.5	123.0	57.0	0.0	0.53	0.2	366
32S/13E-12Q02 M	580929	7.7	883	648	76.0	44.0	47.0	1.0	336.5	122.0	52.0	0.0	0.24	0.3	371
32S/13E-12Q02 M	590922	7.4	880						319.4		60.0				378
32S/13E-12Q02 M	601006	7.5	974		79.0	45.0	46.0	1.0	330.4	139.0	51.0	0.0	0.30	0.9	382
32S/13E-12Q02 M	611106	8.0	841	565	92.0	45.0	43.0	1.0	317.0	152.0	57.0	5.6	0.05	0.6	415
32S/13E-12Q02 M	620824	7.6	927	638	92.0	45.0	45.0	1.0	317.0	167.0	50.0	0.0	0.09	0.7	415
32S/13E-12Q02 M	621009	8.4	880	640	95.0	46.0	47.0	1.0	338.9	179.0	47.0	0.0	0.14	0.4	426
32S/13E-12Q02 M	630925	8.1	965	650	89.0	52.0	49.0	1.0	317.0	187.0	60.0	0.5	0.07	0.7	436
32S/13E-12Q02 M	640603	7.1	984	674	92.0	48.0	46.0	1.0	286.5	188.0	71.0	0.0	0.08	0.7	427
32S/13E-12Q02 M	651007	8.2	967	660	102.0	51.0	48.0	1.0	334.1	173.0	76.0	10.0	0.06	0.7	464
32S/13E-12Q02 M	711020	8.2	1083	724	111.0	58.0	48.0	0.9	365.8	215.0	47.0	25.8	0.06	0.4	516
32S/13E-13C02 M	640603	8.2	1059	750	87.0	73.0	60.0	3.0	508.4	163.0	50.0	6.0	0.23	0.4	517
32S/13E-13C02 M	661017	8.3	1210		111.0	63.0	58.0	3.8	510.9	178.0	49.0	5.5	0.20		537

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
32S/13E-13C03 M	871105	8.3	736	600	40.0	65.0	30.0	2.0	239.0	191.0	32.0	4.0	0.00	0.4	367
32S/13E-13D04 M	811027	7.3	1310	867	129.0	63.0	58.0	4.9	392.6	251.0	52.0	68.0	0.20	0.5	581
32S/13E-14R01 M	711028	8.1	1128	735	106.0	58.0	78.0	4.7	499.9	154.0	69.0	8.0	0.28	0.2	503
32S/13E-14R02 M	680620	7.5	1110	682	89.0	65.0	67.0	4.0	547.4	116.0	55.0	1.0	0.28	0.4	490
32S/13E-22P01 M	610303	7.5	2200		297.0	134.0	98.0	4.0	620.6	822.0	121.0	0.0	0.21	0.2	1293
32S/13E-22Q01 M	640604	7.6	2163	1871	290.0	131.0	93.0	4.0	554.7	719.0	115.0	102.0	0.20	0.8	1263
32S/13E-22R01 M	640604	7.8	2020	1671	235.0	147.0	82.0	7.0	752.3	584.0	99.0	4.6	0.16	0.6	1192
32S/13E-22R01 M	680620	7.4	2014	1666	234.0	141.0	80.0	6.0	714.5	567.0	115.0	1.5	0.14	0.6	1165
32S/13E-23F01 M	620824	7.4	1900	1530	159.0	159.0	78.0	4.0	669.3	488.0	116.0	0.0	0.24	0.4	1051
32S/13E-23F01 M	640604	7.3	1827	1432	213.0	117.0	92.0	3.0	724.2	469.0	102.0	8.0	0.24	0.5	1013
32S/13E-23F01 M	661017	8.1	2020	1520	216.0	112.0	82.0	5.0	627.9	516.0	102.0	7.4	0.30		1000
32S/13E-23F01 M	680620	7.5	1941	1544	213.0	122.0	83.0	3.0	636.4	518.0	126.0	0.5	0.19	0.5	1034
32S/13E-23F02 M	610303	7.7	1840		200.0	106.0	82.0	3.0	614.5	436.0	117.0	0.0	0.23	0.3	936
32S/13E-23N M	960129	7.0			72.0	41.0	68.0	0.5	243.8			nd			349
32S/13E-23R01 M	620919	7.8	860	543	54.0	46.0	70.0	11.0	425.5	69.0	43.0	1.8	0.10	0.4	324
32S/13E-24A02 M	640604	7.7	1240	980	166.0	57.0	64.0	1.0	440.1	329.0	59.0	0.0	0.18	0.4	649
32S/13E-24D01 M	640604	7.7	1360	960	174.0	60.0	82.0	5.0	529.1	308.0	71.0	0.0	0.16	0.4	681
32S/13E-27D03 M	620824	7.3	2160	1854	205.0	164.0	109.0	6.0	714.5	650.0	115.0	0.0	0.14	0.2	1187
32S/13E-27D03 M	640617	7.6	2177	1694	230.0	106.0	152.0	6.0	681.5	585.0	118.0	3.3	0.02	0.7	1011
32S/13E-27D03 M	680620	7.1	2225	1918	276.0	131.0	108.0	4.0	627.9	734.0	126.0	1.5	0.14	0.6	1228
32S/13E-27D03 M	871105	8.2	1780	1460	111.0	121.0	147.0	8.0	243.8	678.0	136.0	4.2	0.20	0.5	774
32S/14E-07J01 M	640604	7.5	1372	976	112.0	86.0	94.0	3.0	482.8	263.0	105.0	7.2	0.24	0.7	634
32S/14E-07K01 M	640604	7.0	1623	1210	145.0	103.0	90.0	8.0	492.6	403.0	123.0	14.0	0.24	0.7	786
32S/14E-08N01 M	640604	7.2	1783	1407	159.0	135.0	82.0	2.0	510.9	503.0	121.0	9.4	0.16	0.7	952
32S/14E-17N02 M	610302	7.2	1150		75.0	79.0	47.0	1.0	496.2	102.0	60.0	15.0	0.23	0.2	512
32S/14E-18F03 M	640604	7.5	1525	1084	110.0	116.0	105.0		695.0	205.0	106.0	50.0	0.40	0.2	752
32S/14E-18F04 M	640604	7.7	1350	934	115.0	83.0	91.0		609.6	179.0	85.0	28.0	0.22	0.2	629
32S/14E-18P01 M	610302	7.5	1260		125.0	68.0	54.0	2.0	432.8	258.0	57.0	12.0	0.20	0.3	592
32S/14E-19A01 M	640604	7.6	1020	724	66.0	80.0	59.0	1.0	451.1	165.0	50.0	8.4	0.13	0.2	494
32S/14E-19A01 M	741106	8.9	980	621	91.0	54.0	52.0	1.2	393.8	146.0	46.0	25.0	0.11	0.5	448
32S/14E-19A01 M	760927	8.0	1047	650	100.0	56.0	53.0	1.2	427.9	156.0	52.0	12.0	0.14	0.4	479
32S/14E-19A01 M	771013	8.0	1195	726	110.0	61.0	54.0	1.1	447.5	164.0	58.0	25.5	0.10	0.6	525
32S/14E-19D01 M	610302	7.7	1225		126.0	69.0	58.0	1.0	453.5	259.0	60.0	12.0	0.13	0.2	598
32S/14E-19D03 M	640604	7.7	2750	2150	208.0	163.0	198.0		486.5	245.0	642.0	59.0	0.22	0.2	1190

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/da	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
<b>Pismo Creek Valley Subbasin</b>															
32S/12E-12R01 M	631016	7.8	2050	1440	168.0	21.0	390.0	22.0	1185.1	70.0	219.0	3.6	1.12	0.2	506
32S/12E-12R01 M	640708	8.4	2700	2152	202.0	126.0	290.0	12.0	557.2	677.0	355.0	0.0	1.00	0.4	1023
32S/12E-12R02 M	630501	7.7	2175	1409	68.0	75.0	361.0	27.0	1074.1	94.0	213.0	2.5	0.90	0.5	478
32S/12E-12R02 M	630828	7.6	2400	1472	137.0	38.0	405.0	24.0	1265.5	59.0	211.0	0.0	1.10	0.1	499
32S/12E-12R02 M	631016	8.1	1875	1270	145.0	41.0	298.0	18.0	1198.5	4.0	149.0	6.4	1.52	0.2	531
32S/12E-12R03 M	671004	7.9	2153	1346	79.0	88.0	300.0	18.0	1215.6	1.0	143.0	23.0	1.50	0.4	559
32S/12E-13A01 M	520716	7.3	2960	2080	180.0	158.0	305.0	12.0	652.3	680.0	290.0	81.0	0.57	0.4	1099
32S/12E-13A01 M	540928	8.0	2900		159.0	157.0	285.0	11.0	508.4	740.0	314.0	41.5		0.6	1043
32S/12E-13A01 M	541029	7.4	2740		162.0	158.0	272.0	13.0	514.5	737.0	307.0	39.2	0.72	0.6	1054
32S/12E-13A01 M	550518	7.8	3050	2040	145.0	175.0	301.0	13.0	574.3	716.0	312.0	34.0	0.96	1.2	1082
32S/12E-13A01 M	630306	7.1	2907	2115	171.0	155.0	300.0	14.0	614.5	724.0	298.0	35.0	0.92	0.8	1065
32S/12E-13A01 M	630828	7.4	2700	2056	164.0	139.0	310.0	12.0	625.5	727.0	296.0	24.0	0.84	0.8	981
32S/12E-13A01 M	670927	8.1	2771	2002	150.0	148.0	285.0	11.0	621.8	648.0	285.0	22.0	0.78	1.0	984
32S/12E-13C02 M	661017	8.3	1210	789	111.0	63.0	58.0	4.0	510.9	178.0	49.0	5.5	0.20		536
32S/12E-13J01 M	540928	7.4	3180		128.0	138.0	351.0	17.0	815.7	262.0	517.0	8.1	0.38	0.2	888
32S/12E-13J01 M	541029	7.9	2985		127.0	140.0	344.0	18.0	797.4	252.0	504.0	6.9	0.62	0.2	893
32S/12E-13J01 M	570829	8.1	3410	2391	133.0	150.0	383.0	16.0	842.5	273.0	600.0	0.0	1.00	0.2	950
32S/12E-13J01 M	590727	7.0	3105	2230	127.0	141.0	360.0	13.0	816.9	314.0	514.0	0.0	0.46	0.3	898
32S/12E-13J01 M	600929	7.7	2220		105.0	107.0	234.0	13.0	848.6	195.0	242.0	1.7	1.05	1.1	703
32S/12E-13J01 M	611108	7.2	3086	1889	126.0	135.0	354.0	14.0	826.6	246.0	515.0	1.5	0.65	0.6	870
32S/12E-13J01 M	621010	7.3	2500	1616	116.0	122.0	310.0	11.0	810.8	235.0	400.0	4.0	0.75	0.2	792
32S/12E-13J01 M	630306	7.4	2326	1450	114.0	110.0	255.0	14.0	833.9	204.0	280.0	5.0	0.84	0.7	738
32S/12E-13J01 M	630829	7.3	2700	1736	145.0	108.0	335.0	13.0	796.1	246.0	435.0	0.0	0.83	0.2	807
32S/12E-13J01 M	630926	7.4	2500	1776	152.0	94.0	310.0	15.0	796.1	253.0	442.0	0.0	0.93	0.4	766
32S/12E-13J01 M	640618	8.0	2450	1766	163.0	98.0	302.0	14.0	804.7	246.0	418.0	4.0	0.84	0.2	810
32S/12E-13J01 M	651007	7.9	3142	1929	139.0	140.0	340.0	12.0	803.5	248.0	533.0	0.0	0.90	0.6	923
32S/12E-13J01 M	670926	8.4	2769	1711	103.0	134.0	308.0	14.0	820.5	215.0	420.0	2.5	0.80	0.5	809
32S/12E-13J03 M	630306	7.2	3356	2270	203.0	115.0	355.0	6.0	203.6	580.0	678.0	48.0	0.28	1.9	980
32S/12E-13J03 M	640708	7.2	3000	2358	230.0	107.0	385.0	6.0	200.0	536.0	766.0	32.0	0.28	1.6	1015
<b>Nipomo Valley Subbasin</b>															
11N/34W-04J01 S	770121	7.3	917		56.0	62.0	64.0		341.4	199.0	41.0			0.6	395
11N/34W-04J01 S	770728	7.9		670	66.0	50.0	60.0	1.4	321.9	159.0	47.0	3.5		0.7	370
11N/34W-04J01 S	780707	8.4	800		74.0	46.0	50.0	2.3	280.4	182.0	46.0	18.0		0.7	374

Appendix F  
Groundwater Quality Data, Arroyo Grande - Nipomo Mesa Area

State Well No.	Date yr/mo/day	pH lab	EC lab	TDS@180°C mg/L	Ca mg/L	Mg mg/L	Na mg/L	K mg/L	HCO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Cl mg/L	NO <sub>3</sub> mg/L	B mg/L	FI mg/L	Total Hard- ness, mg/L
11N/34W-04Q01 S	640717	7.9	1110	846	72.0	45.0	137.0	3.0	412.1	219.0	54.0	21.0	0.10	0.2	365
11N/34W-05H01 S	640717	8.2	1120	748	109.0	57.0	66.0	1.0	423.1	159.0	81.0	15.0	0.05	0.4	507
11N/34W-05N01 S	691010	7.2	1380	912	83.0	69.0	138.0	9.0	445.0	285.0	99.0	0.5	0.04	0.3	491
11N/34W-06F01 S	620711	8.0	1400	878	95.0	57.0	118.0	5.0	396.2	178.0	152.0	0.0	0.12	0.2	472
11N/34W-06F01 S	640717	8.0	1290	856	84.0	67.0	106.0	4.0	342.6	228.0	151.0	0.0	0.12	0.2	485
11N/34W-06G01 S	751007	8.1	1353	778	101.0	61.0	94.0	4.3	336.5	217.0	149.0	0.0	0.56	0.5	505
11N/34W-08G01 S	940811	7.7	1300	860	78.0	51.0	150.0	2.0	400.0	240.0	160.0	2.4	0.10	1.7	410
11N/34W-08R01 S	751007	8.2	2052	1210	148.0	86.0	170.0	2.3	688.9	137.0	258.0	54.0	0.80	0.4	726
11N/34W-08R02 S	691010	7.1	1461	898	128.0	74.0	104.0	2.0	602.3	126.0	154.0	11.2	0.09	0.5	624
11N/34W-09P01 S	751007	8.1	1309	731	90.0	68.0	91.0	1.6	421.8	155.0	128.0	8.7	0.62	0.7	504
11N/34W-09P01 S	771025	8.3	1246	747	68.0	59.0	106.0	4.0	332.8	202.0	115.0	1.4	0.07	0.5	412
11N/34W-17A02 S	850110			850			90.0			180.0	130.0				
11N/34W-17A02 S	960226	7.1	1500	970	110.0	76.0	95.0	6.0	560.0	220.0	110.0	0.4	0.10	0.1	600
11N/34W-17A02 S	990223	7.1	1700	1100	140.0	90.0	110.0	6.0	580.0	250.0	130.0	0.4	0.20	0.2	720
11N/34W-17A02 S	001220			950			99.0			239.0	124.0	0.4	0.10		
11N/34W-17B01 S	691010	7.2	1276	831	108.0	63.0	97.0	2.0	446.2	171.0	120.0	34.8	0.04	0.7	529
11N/34W-17B05 S	920220	7.5	1500	910	87.0	66.0	110.0	9.0	490.0	200.0	140.0	3.5		<0.1	510
11N/34W-27D01 S	680731	7.3	752	405	36.0	22.0	87.0	2.0	197.5	69.0	80.0	32.0	0.04	0.2	180
11N/34W-27E01 S	751008	8.2	961	472	46.0	38.0	90.0	5.9	267.0	76.0	126.0	0.0	0.60	0.4	270
11N/34W-27G02 S	751008	8.3	1467	879	115.0	59.0	110.0	2.7	381.6	140.0	184.0	62.0	0.99	0.2	528
12N/34W-31F01 S	751007	8.2	1382	924	144.0	67.0	58.0	4.3	342.6	338.0	102.0	0.0	0.51	0.6	638
12N/34W-31M01 S	620711	8.0	1550	1190	182.0	83.0	55.0	2.0	434.0	405.0	109.0	0.0	0.07	0.2	796
12N/35W-36R S	950301	7.1	1400	1300	110.0	77.0	140.0	13.0	390.1	340.0	130.0	nd		0.2	590
12N/35W-36R01 S	620823	7.1	780	622	41.0	30.0	62.0	3.0	78.0	51.0	177.0	4.0	0.03	0.4	226
12N/35W-36R01 S	640717	7.6	940	578	60.0	37.0	83.0	4.0	147.5	86.0	194.0	2.0	0.05	0.2	302

EC: Electrical Conductivity in umhos/cm, TDS: Total Dissolved Solids, Ca: Calcium, Mg: Magnesium, Na: Sodium, K: Potassium, HCO<sub>3</sub>: Bicarbonate, SO<sub>4</sub>: Sulfate, Cl: Chloride, NO<sub>3</sub>: Nitrate, B: Boron, FI: Fluoride



This Page Intentionally Blank

**PLATE A1 - SPRING 2000 GROUNDWATER ELEVATION CONTOURS**

**LEGEND**

- 100 — Lines of equal elevation of groundwater in feet above mean sea level, contour interval 10 feet, dashed where inferred, hachures indicate depression
- 100 — Lines of equal elevation of groundwater in feet above mean sea level, contour interval 50 feet, dashed where inferred, hachures indicate depression
- ← Direction of groundwater flow
- Study Area Boundary
- Groundwater Basin Boundary
- Groundwater Subbasin Boundary
- - - Hydrologic Area (HA) and Subarea (HSA) Boundaries
- Bedrock Outcrop Within Groundwater Basin
- - - Fault, dashed where approximately located, queried where inferred, dotted where concealed
- Thrust Fault, dashed where approximately located, saw-teeth on upper plate, dip of fault plane between 30 and 80 degrees
- TTTTTT Buried bedrock step of uncertain origin, ball on lower side
- Buried monocline, arrow showing direction and width of downwarp
- Syncline, showing trace of axial surface, dashed where approximately located, dotted where concealed

Scale in Miles

Department of Water Resources, Southern District, "Water Resources of the Arroyo Grande - Nipomo Mesa Area," 2002

## **ADDENDUM**

TABLE A1  
ESTIMATED AMOUNTS OF GROUNDWATER IN STORAGE, SPRING 2000  
SANTA MARIA GROUNDWATER BASIN, SAN LUIS OBISPO COUNTY  
In acre-feet, unless otherwise noted

Division Within the Basin/Basin	Surface Area, in acres	Average Weighted Specific Yield, <sup>a</sup> in percent	Water Year	Amount of Groundwater in Storage (Available Storage Capacity)		Change in Storage, Above MSL <sup>b</sup>	
				Above MSL <sup>b</sup>	Below MSL <sup>b</sup>	Between Years	Amount
Oceano HSA <sup>c</sup>							
Tri-Cities Mesa - Arroyo Grande Plain <sup>d</sup>	10,770	11.0	1975	28,000 <sup>e</sup>	360,000 <sup>e</sup>	1975 and 1995	1,000
			1995	29,000 <sup>e</sup>	360,000 <sup>e</sup>	1995 and 2000	1,000
			<b>2000</b>	<b>30,000<sup>e</sup></b>	<b>360,000<sup>e</sup></b>	<b>1975 and 2000</b>	<b>2,000</b>
Arroyo Grande Valley Subbasin	3,860	12.7	1975	9,000 <sup>e</sup>	0	1975 and 1995	1,000
			1995	10,000 <sup>e</sup>	0	1995 and 2000	0
			<b>2000</b>	<b>10,000<sup>e</sup></b>	<b>0</b>	<b>1975 and 2000</b>	<b>1,000</b>
Pismo Creek Valley Subbasin <sup>f</sup>	1,220			--	--		--
Nipomo Mesa HSA <sup>c</sup>							
Nipomo Mesa	17,580	11.0	1975	84,000 <sup>e</sup>	720,000 <sup>e</sup>	1975 and 1995	-7,000
			1995	77,000 <sup>e</sup>	720,000 <sup>e,g</sup>	1995 and 2000	7,000
			<b>2000</b>	<b>84,000<sup>e</sup></b>	<b>720,000<sup>e</sup></b>	<b>1975 and 2000</b>	<b>0</b>
Guadalupe HA <sup>c</sup>							
Santa Maria Valley	21,560	11.1	1975	97,000 <sup>e</sup>	2,100,000 <sup>e</sup>	1975 and 1995	3,000
			1995	100,000 <sup>e</sup>	2,100,000 <sup>e</sup>	1995 and 2000	32,000
			<b>2000</b>	<b>132,000<sup>e</sup></b>	<b>2,100,000<sup>e</sup></b>	<b>1975 and 2000</b>	<b>35,000</b>
Nipomo Valley Subbasin	6,230	3.8	1975	3,600 <sup>e</sup>	0	1975 and 1995	100
			1995	3,700 <sup>e</sup>	0	1995 and 2000	0
			<b>2000</b>	<b>3,700<sup>e</sup></b>	<b>0</b>	<b>1975 and 2000</b>	<b>100</b>
Santa Maria Groundwater Basin	61,220		1975	221,600	3,180,000	1975 and 1995	-19,000
			1995	219,700	3,180,000	1995 and 2000	40,000
			<b>2000</b>	<b>259,720</b>	<b>3,180,000</b>	<b>1975 and 2000</b>	<b>38,100</b>

<sup>a</sup> Specific yield values used for calculating amount of groundwater in storage were determined for only the saturated thickness of the basin.

<sup>b</sup> MSL is mean sea level.

<sup>c</sup> Hydrologic area or subarea overlying groundwater basin.

<sup>d</sup> Includes lower Pismo Creek and Los Berros Creek portions of the groundwater basin.

<sup>e</sup> Values rounded to two significant figures.

<sup>f</sup> Water level data were not available to determine amount in storage for the subbasin.

<sup>g</sup> A small amount of groundwater in storage was lost from below MSL because of the depression. It is not shown because of rounding to significant figures.