



Water Resources

of Santa Barbara County

Santa Barbara County Water Agency

July 2000





Water Resources of Santa Barbara County

Prepared by:

Lynn Rodriguez
Rory Lang

Under direction from:

Robert Almy, Water Agency Manager

Published by:

Santa Barbara County Water Agency

Co-Sponsored by:

Santa Barbara Water Purveyors Agency

Santa Barbara County Water Agency Board of Directors:

Naomi L. Schwartz 1st District
Susan Rose 2nd District, Chair
Gail Marshall 3rd District
Joni Gray 4th District, Vice-Chair
Thomas B. Urbanske 5th District

Contributing Authors:

Darcy Aston Santa Barbara County Water Agency
Dennis Gibbs Santa Barbara County Water Agency
Alison Whitney City of Santa Barbara Public Works Department

Edited by:

John Ahlroth Santa Barbara County Water Agency
Dwayne Chisam City of Santa Maria Public Works Department
Bill Ferguson City of Santa Barbara Public Works Department
Dan Masnada Central Coast Water Authority
Greg Mohr Santa Barbara County Planning and Development Department
Gary Keefe City of Lompoc Utility Division
Reese Riddiough Santa Barbara Water Purveyors Agency
Bruce Wales Santa Ynez River Water Conservation District
Kevin Walsh Goleta Water District
Susan Zavolta City of Lompoc Utility Department

Designed by:

Jan French Santa Barbara County Water Agency

Published July 2000

Additional copies available through:

Santa Barbara County Water Agency

123 East Anapamu Street
Santa Barbara, CA. 93101
(805) 568-3440
(805) 568-3434 fax
www.publicworkssb.org/water

Contents

Introduction	1
Setting	2
History	6

Water Supplies

Groundwater	12
Surface Water	36
State Water Project	46
Desalination	50

Water Quality

Influencing Factors	54
Water Treatment	56

Water Delivery & Oversight

Water Purveyors	62
Other Agencies	66

Water Use

Urban Water Use	70
Agricultural Water Use	73
Predicting Future Use	75

Water Supply Enhancement

Water Use Efficiency	78
Cloud Seeding	88
Water Reuse	90

Regulatory Framework

Legislation	96
Regulatory Agencies	100

Appendix

Glossary	108
References	112
On-line References	114
Acronyms	116

Charts and Graphs

Rainfall Comparison	3
Hydrologic Cycle	12
Comparison of Groundwater Basins	16
Measuring Water	41
County Reservoir Information	45
State Water Entitlements in the County	47
1998 Urban Water Use Summary	71
County Historical Per-Capita Water Use	72
Irrigation Water Use for Major Crops	73
County Historical Harvested Acres	74
Wastewater Treatment Plants in the County	91

Maps

Santa Barbara County Watersheds	4
County Groundwater Basins	14
South Coast Basins	18
Santa Ynez River Watershed Basins	24
North County Basins	29
Cuyama Basin	33
County Rivers	36
State Water Project Pipeline in the County	49