Chapter 1
Introduction

This chapter introduces the Salinas River system and the *Salinas River Long-Term Management Plan* (LTMP) and identifies its purpose, goals, scope, development process, and organization.

The Salinas River provides critical ecosystem benefits and supports a multi-billion dollar regional economy. Key challenges in managing the river and surrounding lands are periodic flooding, streamflow maintenance for agriculture and species habitat, invasive species, poor water quality, loss of riparian vegetation, encroachment on the stream channel, and ad hoc bank stabilization.

Various water management facilities along and near the Salinas River, including the largest dams in Monterey and San Luis Obispo Counties, are operated by the Monterey County Water Resources Agency (MCWRA). MCWRA also serves as the flood control agency for most of Monterey County. In developing the Salinas River LTMP, MCWRA aims to establish comprehensive solutions to the complex water resource management challenges along the Salinas River. Specifically, the purpose of the LTMP is to provide a multi-benefit management program that addresses the needs of MCWRA facilities and operations, while addressing related issues such as flood risk reduction, water supply, water quality, natural resource conservation, threatened and endangered species management, and compliance with the federal and state environmental laws, including Endangered Species Acts.

The geographic scope of this LTMP is limited to the portion of the Salinas River watershed in which MCWRA conducts management activities. Management actions under the LTMP broadly include water supply management, groundwater recharge, flood management, and riverine habitat enhancement and restoration. The LTMP is not subject to a specific (e.g., 20- or 30-year) planning horizon—instead, it is intended to remain flexible to guide both short- and long-term management needs.

Developing the LTMP and establishing a stakeholder engagement process were coordinated efforts by MCWRA and its consultants. Engaging technical experts, regulatory agencies, and landowners was essential for developing a successful LTMP; these and other stakeholders, including members of the public, were involved throughout, providing input and influencing its development.

1.1 Overview

The Salinas River is the longest river system in the central coast of California. Fertile soils in the floodplain, a highly favorable climate, and the use of river flows for aquifer recharge and irrigation make the Salinas Valley one of the most productive agricultural regions in California. Agriculture in the Salinas Valley generates billions of dollars for the regional economy. However, the successes of the region have also led to management challenges. Among these are maintaining stream flows for agriculture and species habitat; controlling periodic flooding; managing invasive species; and addressing impaired water quality, loss of riparian vegetation, encroachment on the stream channel, and ad hoc bank stabilization. All these factors affect the river and its estuary lagoon.

MCWRA is the primary local agency managing water and minimizing flood risk along the Salinas River. MCWRA operates the largest dam in Monterey County (San Antonio Dam) and in San Luis Obispo County (Nacimiento Dam). MCWRA also operates a variety of water management facilities

along and near the Salinas River, and it is the flood control agency for most of Monterey County. Due to the many and growing challenges facing the Salinas River, it is critical that MCWRA successfully manages the water resources along the Salinas River while minimizing flood risk and addressing the needs of threatened and endangered species. Recognizing these challenges, MCWRA conducted several public meetings in 2013 to begin collecting input on how best to manage the river while addressing multi-benefit needs. Key take-aways from these public meetings included strong desires for local control, for a comprehensive approach, and for oversight to be undertaken by an existing agency (Monterey County Water Resources Agency 2013).

The strategy that evolved consisted of developing and implementing a comprehensive, phased approach that encompasses a range of options. An early step in this phased approach was implementing the Salinas River Stream Maintenance Program (SMP) to provide flood reduction benefits and habitat restoration and enhancement to 90 miles of the Salinas River upstream of the Salinas River Lagoon. Partnering with landowners, the Salinas River Channel Coalition, The Nature Conservancy, the Resource Conservation District of Monterey County, and the Grower-Shipper Association of the Central California, the Salinas River SMP was permitted and began implementation in 2014.

MCWRA intends for this LTMP to be the next step in the process of establishing comprehensive solutions to the complex water resource management challenges along the Salinas River. MCWRA has developed this management strategy in collaboration with all interested parties to meet the goals and objectives for the entire system, while maintaining necessary flexibility.

MCWRA prepared the LTMP with funding provided by the State Coastal Conservancy. During LTMP development, MCWRA actively sought input and feedback from a wide range of local stakeholders (Section 1.4, *Preparation Process*) to identify issues and management recommendations that balance protecting the natural resources in the Salinas River watershed for future generations while meeting the water needs of today's communities.

1.2 Purpose and Goals

The purpose of the Salinas River LTMP is to describe a multi-benefit management program that addresses needs related to MCWRA facilities and operations, as well as related issues such as flood risk reduction, water supply, water quality, natural resource conservation, threatened and endangered species management, and federal and state Endangered Species Acts compliance. The LTMP's primary goals are as follows.

- Identify long-term solutions for management of the Salinas River that include flood reduction, water resource management, stream maintenance, and habitat management for threatened and endangered species.
- Investigate the Salinas River Lagoon for the potential of reducing flooding and improving habitat conditions.
- Identify potential improvements to steelhead migration issues in the Salinas River utilizing management efforts and anticipated future projects.
- Develop the framework for implementing the LTMP that meets a variety of multi-benefit management goals, including implementation of the forthcoming groundwater sustainability plans for the Salinas Valley.

- Build upon and incorporate public/private partnerships, compatible with existing land uses and water rights.
- Document the historical conditions in the Salinas River watershed in Monterey County.
- Describe the existing conditions in the Salinas River watershed in Monterey County—including the physical, biological, and chemical changes in the system over time, and, to the extent possible, the sources driving those changes.
- Inform development of a future MCWRA habitat conservation plan (HCP) and other planning documents.

MCWRA has several facilities in or near the Salinas River in areas where threatened or endangered species listed under the federal Endangered Species Act of 1973 (ESA) may be present. The operations and maintenance of those facilities may affect species listed under ESA and, therefore, necessitate the need for *take* coverage (see Appendix A, *Glossary*). Authorization for take can be accomplished in two different ways under ESA; through a federal nexus under Section 7 or by a nonfederal entity under Section 10. MCWRA currently has Section 7 biological opinions and associated incidental take statements but is anticipating preparing an HCP to provide broader, longer-range coverage under Section 10. The historical and existing conditions of the Salinas River, together with identified management and implementation opportunities (see Chapter 4, *Management Plan*, and Chapter 5, *Implementation*), are intended to substantially inform development of the HCP.

This LTMP supports the future development of an HCP and accompanying California Environmental Quality Act and National Environmental Policy Act documentation (environmental impact report and environmental impact statement, respectively). However, this LTMP is not a regulatory document and will not result in regulatory permits. Similarly, the LTMP does not authorize any projects undertaken by MCWRA, partner agencies, or stakeholders. The LTMP is intended to inform how future projects are designed or implemented.

1.3 Scope

The following sections describe the framework of the LTMP: geographic scope, water resource management activities considered, and planning horizon.

1.3.1 Geographic Scope

The Salinas River originates in the center of San Luis Obispo County and flows 184 miles north and northwest to Monterey Bay, about 80 miles south of San Francisco. The Salinas River watershed[1] is one of the largest in California (Figure 1-1). The mainstem Salinas River originates in San Luis Obispo County in the La Panza Range in the Los Padres National Forest and drains 4,240 square miles, from Santa Margarita Lake at an elevation of 2,400 feet, to Monterey Bay and the Pacific Ocean. The Salinas River watershed is more than twice the size of any other central California coastal river system from San Mateo to Santa Barbara (Monterey County Water Resources Agency 2014). Major tributaries to the Salinas River are the Nacimiento, San Antonio and Arroyo Seco Rivers, and San Lorenzo Creek.

[1] As defined by the U.S. Geologic Survey hydrologic unit code (HUC)-8 boundary (cataloging unit 18060005).

Figure 1-1. Regional Location

The geographic scope of this LTMP is limited to the portion of the Salinas River watershed in which MCWRA conducts management activities. The LTMP defines a *management area* and a *study area*. To define the *management area*, MCWRA first mapped the combined outermost boundary of MCWRA's primary zones of benefit (zones of benefit 9, 2B, and 2C) within the Salinas Valley, together with the seven River Management Units defined by MCWRA's Salinas River SMP (Figure 1-2). Collectively, these boundaries encompass the location of MCWRA's current operational activities in the Salinas River watershed. Next, the management area was extended into San Luis Obispo County to include the channel of the Nacimiento River (where MCWRA manages flows from the Nacimiento Dam), the surface of Nacimiento Reservoir, and lands owned by MCWRA in San Luis Obispo County. Finally, the edges of the management area were refined to exclude small noncontiguous areas within MCWRA's zones of benefit where MCWRA does not conduct management activities (e.g., the portion of zone of benefit 2C just north of Stonewall Creek). The LTMP management area is shown in Figure 1-3.

The northwestern edge of the management area is defined primarily by zone of benefit 2B and includes Salinas River State Beach, Salinas River Lagoon, the Old Salinas River, and a portion of Moro Cojo Slough State Marine Reserve. The central portion of the management area includes zone of benefit 2C and encompasses the cities and surrounding agricultural lands of Salinas, Spreckels, Chualar, Gonzales, Soledad, Greenfield, King City, San Lucas, and San Ardo. The southern section of the management area is defined by zone of benefit 2C, extending south to the county line, and includes Bradley and San Miguel, as well as San Antonio Reservoir.

Because this LTMP also addresses natural resources associated with the Salinas River, it was important to consider other areas within the Salinas River watershed in Monterey County that may affect, or be affected by, the management actions proposed in this LTMP. Using a watershed approach, MCWRA defined a larger LTMP study area including all U.S. Geological Survey Hydrologic Unit Code (HUC)-10 watersheds where the HUC-10 watersheds have a confluence with the Salinas River at or downstream of the confluence of the Nacimiento River. The LTMP study area is defined as the management area, plus all associated watersheds. The study area defines the geographic extent of resource planning described in this LTMP.

The study area lies primarily within Monterey County, with some portions in north San Luis Obispo County and western San Benito County (Figure 1-3). Table 1-1 shows the proportion of the study area located within each county. The study area includes approximately 118 river miles of the Salinas River (67% of the total length of the Salinas River) as well as all of the Nacimiento, San Antonio, and Arroyo Seco watersheds.

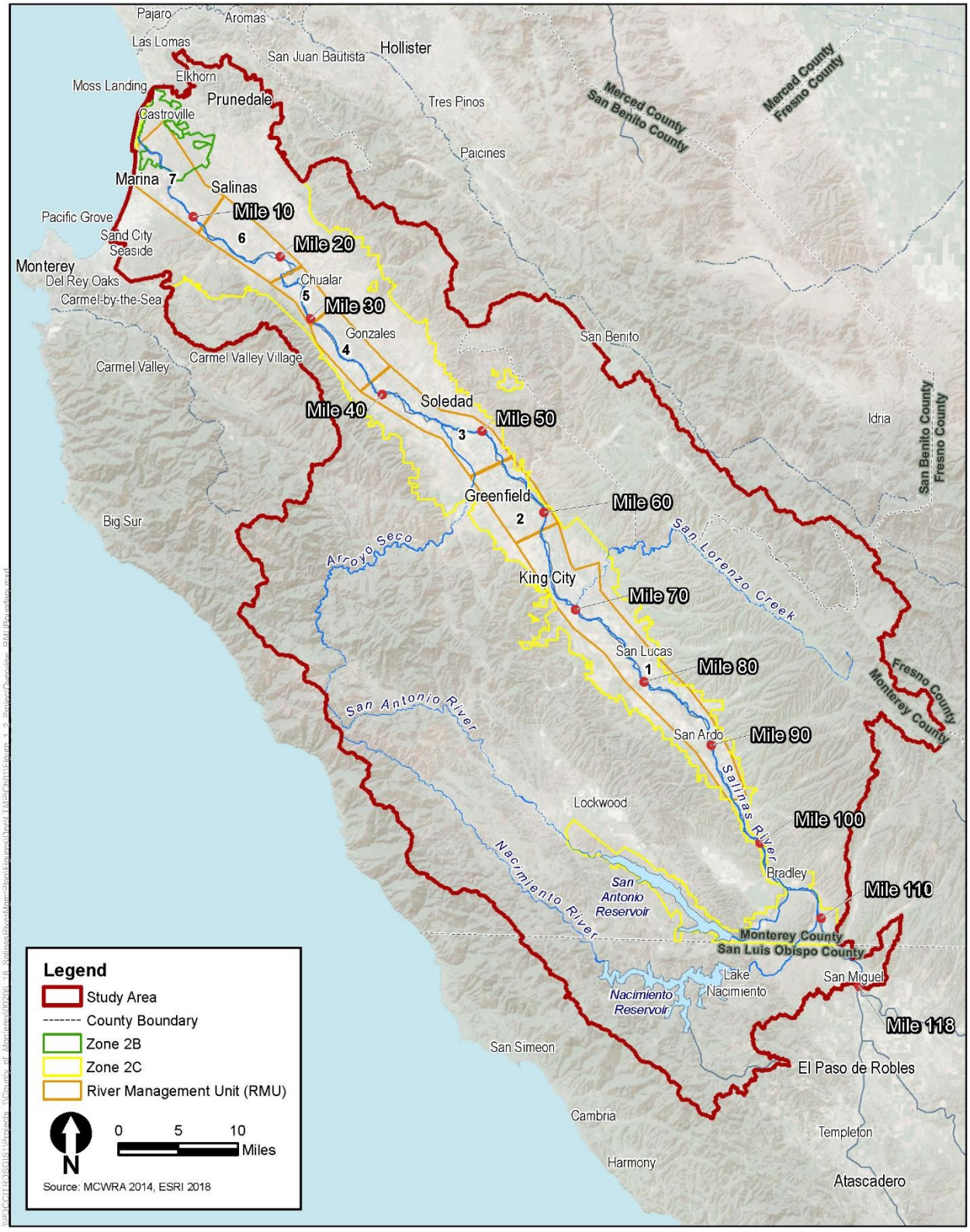

Figure 1-2. MCWRA Zones of Benefit and River Management Units

Figure 1-3. Study Area and Management Area Boundaries

Table 1-1. Acreage of Study Area by County

County Name	Study Area (acres)	Total County Size (acres)	% of County within Study Area
Monterey	1,447,994	2,120,907	68
San Luis Obispo	144,222	2,125,567	7
San Benito	146,435	889,358	16
Total	**1,738,671**[a]	**--**	**--**

[a] Total study area acreage does not round precisely due to Geographic Information System mapping differences in county boundaries vs. watershed boundaries. These differences result in a 20-acre discrepancy along the Monterey County and Fresno County border in the southeastern section of the study area.

The northwestern portion of the study area encompasses the entirety of the management area. The western half of the study area also includes the Santa Lucia Mountains, and the Arroyo Seco, Nacimiento, and San Antonio watersheds. The eastern section reaches into the Gabilan Range and its associated watersheds including the Chalone, San Lorenzo, and Sargent Creeks. The southernmost portion of the study area is characterized by lands owned by MCWRA in San Luis Obispo County along Nacimiento Reservoir and the Nacimiento River, which flows into the Salinas River just north of the county line (Figure 1-3).

1.3.2 Water Resource Management Activities Considered

The LTMP focuses on water resource management actions undertaken by MCWRA and other parties that may have an effect on how the Salinas River is managed. The management actions broadly include water supply management, groundwater recharge, flood management, and riverine habitat restoration. The LTMP also considers those natural resources related to the river, including wetland and riparian habitats and the species that rely on them, with particular consideration given to listed species that are known to rely on the Salinas River, such as South-Central California Coast steelhead (*Oncorhynchus mykiss*). Section 2.4.2, *MCWRA Partnership Projects and Programs*, describes a number of other projects and programs undertaken by MCWRA either as the lead or through a partnership that may have implications for this LTMP. These projects include operations and maintenance as well as capital projects and targeted studies, and form the basis of the actions considered in this LTMP in the context of long-term management needs and considerations for the Salinas River.

1.3.3 Planning Horizon

This LTMP was not developed for a specific (e.g., 20- or 30-year) timeframe. Rather, it contemplates the long-term management needs of the Salinas River within the LTMP management area. As described in Chapter 2, *Background*, such needs relate to programs and projects that are being implemented currently and will be well into the future. For example, the Salinas River SMP is in year 3 of a 5-year U.S. Army Corps of Engineers permit; however, MCWRA expects that the Salinas River SMP will be active for decades to come. This LTMP is intended to be flexible in considering management—as well as implementation—needs in both the short and long term.

1.4 Preparation Process

The planning process for the LTMP began in 2017 when MCWRA received funding from the State Coastal Conservancy. On June 19, 2017, MCWRA secured approval from its own Board of Directors to develop an HCP, with the LTMP as a first step in that process. MCWRA staff secured approval for the same actions from the MCWRA Board of Supervisors on August 29, 2017. In April 2018, after a public bid process, MCWRA selected a consulting team to prepare the LTMP. MCWRA and its Board of Directors, with coordination and support from MCWRA's senior managers, has led development of this LTMP. As part of this work, MCWRA established a robust process for gaining review and feedback from a number of technical experts and stakeholders. This section contains details regarding the LTMP development partners, as well as the planning and working groups.

1.4.1 LTMP Consulting Team

Developing the LTMP document and establishing a stakeholder engagement process were coordinated efforts by MCWRA and its team of consultants. The consulting team, led by ICF, consisted of scientific, planning, legal, and other technical staff. The members of the consulting team, along with the general responsibilities of each member, are as follows.

- ICF (San Jose and San Francisco): LTMP development lead and general public outreach.
- Central Coast Wetlands Group (Moss Landing): Stormwater management planning and extensive scientific research related to the lower Salinas River and Reclamation Ditch watershed.
- Consensus Building Institute (San Francisco): Stakeholder issue assessment, working and planning group facilitation.
- FISHBIO (Chico and Oakdale): Fish resources expertise and strategic planning.
- FlowWest (Oakland): Surface water hydrology expertise and strategic planning.
- Geosyntec (Oakland): Groundwater resources expertise and strategic planning.
- M.Cubed (Oakland): Policy analysis and financial planning.
- Wood Environment & Infrastructure Solutions (Oakland): Water resources expertise and strategic planning.

1.4.2 Stakeholder Engagement and Participation

Engaging technical experts, regulatory agencies, landowners, and other stakeholders was an integral part of the process of developing this LTMP. At the outset of LTMP development, the Consensus Building Institute conducted a stakeholder issue assessment. The purpose of the assessment was to understand the histories, perspectives, and opinions of a range of stakeholder interests. The Consensus Building Institute compiled the findings (without attribution to the interviewee) in a findings and recommendations report (Appendix B, *Salinas River Long-Term Management Plan Stakeholder Issues Assessment Report*), and the outcomes of the assessment were used to inform the content and development process of the LTMP. After the initial issue assessment interviews, stakeholders and members of the public were actively involved throughout the planning process and had opportunities to provide their input and influence the development of the LTMP. The Consensus Building Institute developed a communication and engagement plan to support active

engagement, deepen understanding of the LTMP development, and create transparency about plan development across the Salinas Valley.

A planning group and topic-specific working groups were formed by MCWRA, with support and facilitation by the Consensus Building Institute, to organize and focus stakeholder input.

1.4.2.1 Planning Group

The planning group consisted of approximately 30 members representing a wide variety of interests, including conservation organizations, business and development interests, landowners, agricultural interests, open space land-management organizations, and the general public. The planning group met four times between August 2018 and January 2019. The meetings were open to the public to promote transparency. The purpose of this group was to create a highly informed group of stakeholders to engage in a joint fact-finding processes (framing key questions and developing a high level of understanding of the planning process opportunities and technical approaches), and to advance the planning process in the larger communities among stakeholders. The planning group reviewed technical and policy issues and made recommendations to MCWRA. Organizations that agreed to serve on the planning group are as follows.

Regulatory Agencies

- California Coastal Commission
- California Department of Fish and Wildlife
- National Marine Fisheries Service
- Regional Water Quality Control Board, Central Coast
- U.S. Fish and Wildlife Service

Scientists and Interest Groups

- California State University, Monterey Bay
- Central Coast Wetlands Group
- Monterey Bay National Marine Sanctuary
- Resource Conservation District of Monterey County
- The Nature Conservancy
- The Otter Project
- Trout Unlimited
- Upper Salinas-Las Tablas Resource Conservation District

Agricultural Representatives and Landowners

- Braga Farms
- Costa Farms
- Farm Bureau of Monterey County
- Grower-Shipper Association of Central California

- Merrill Farms
- Ocean Mist Farms
- Rava Ranches
- Salinas River Stream Maintenance Program River Management Unit Association
- San Bernardo Rancho

Water Resource Management

- Greenfield/Arroyo Seco Groundwater Sustainability Agency
- Marina Coast Water District Groundwater Sustainability Agency
- MCWRA
- Monterey County Resource Management Agency
- Salinas Valley Basin Groundwater Sustainability Agency

Other

- San Luis Obispo County
- State Coastal Conservancy

1.4.2.2 Working Groups

Working groups were developed to delve into specific issues to provide insights and guidance to MCWRA, consultants, and the planning group. Working groups provided feedback on technical and scientific information and advised on LTMP development from technical, scientific, political, socioeconomic, and funding viewpoints. Working groups met as needed per recommendations of MCWRA, the consultants, or the planning group. Working group meetings sought consensus on recommendations for planning group consideration; when consensus was not attainable, all views were reported to MCWRA and the consultants. Working group members included experts from a range of disciplines that may or may not have been active in other aspects of the LTMP planning process. Four working groups met during LTMP development: lagoon management, stream maintenance, LTMP implementation, and groundwater. These working groups helped develop LTMP objectives and actions to ensure alignment with, and support of, related efforts.

1.4.2.3 Public Outreach Program

In addition to the groups identified previously, MCWRA developed a public outreach program targeted at the general public. The public was kept abreast throughout the planning process via email and website updates, and had the following opportunities to provide input and influence the development of the LTMP.

- One public meeting was hosted by MCWRA and held at MCWA's headquarters on June 20, 2018.
- The public was invited to attend planning group meetings.

In addition, MCWRA established a website for the LTMP: http://salinasrivermanagmentprogram.org. Public meeting notices, meeting materials, meeting summaries, and other LTMP informational items were posted to the website. Additionally,

individuals could submit a request through the website to be added to the email distribution. The Consensus Building Institute managed the LTMP interested persons list to directly send email updates. The list was broad and included anyone who wanted to stay informed about LTMP activities and anyone who the planning group or working groups thought should be informed about LTMP development.

1.5 Document Organization

This LTMP and its supporting information are presented in the following chapters and appendices.

- Chapter 1, *Introduction,* discusses the purpose, objectives, scope, and preparation process of the LTMP.
- Chapter 2, *Background,* describes MCWRA's mission, project activities, as well as the current regulatory setting.
- Chapter 3, *Historical and Existing Conditions,* describes the historical and existing conditions of the study area relevant to the LTMP.
- Chapter 4, *Management Plan,* identifies the management planning considerations raised throughout LTMP development, along with the potential management and project design strategies that will guide MCWRA towards long-term conservation solutions.
- Chapter 5, *Implementation,* offers options on how best to implement the LTMP.
- Chapter 6, *References,* lists the references cited in the LTMP by chapter.
- Appendix A, *Glossary*.
- Appendix B, *Salinas River Long-Term Management Plan Stakeholder Issues Assessment Report*.
- Appendix C, *Watersheds in the Study Area*.
- Appendix D, *Community and Land Cover Mapping Methods*.
- Appendix E, *Special-Status Species Potential to Occur Tables*.
- Appendix F, *Species Accounts*.
- Appendix G, *Data Collection and Data Gap Assessment*.
- Appendix H, *Regulatory Context*.
- Appendix I, *Grant Opportunities*.