

1.1 OBJECTIVE

The City of Lone (City) is currently near or at capacity for the treatment and disposal of wastewater. An expansion would be necessary to accommodate future planned growth and wastewater flows. The purpose of this Wastewater Treatment Plant Master Plan (Master Plan) is to provide the City with a document that addresses the City's wastewater needs and identifies activities and guidelines necessary to meet future wastewater treatment and disposal requirements through 2030, the planning horizon of the City's General Plan. The primary objectives of this Master Plan are to:

- Project future wastewater flows through year 2030;
- Summarize the existing wastewater treatment and disposal system and known deficiencies;
- Establish wastewater treatment and disposal design criteria;
- Evaluate and propose improvements that will meet future wastewater flows, while increasing treatment and disposal system reliability; and
- Provide a plan which accommodates the City's future wastewater flows and meets the City's goal of tertiary treatment of all municipal and Amador Regional Sanitation Authority (ARSA) effluent.

This Master Plan contains four (4) sections, followed by appendices that provide supporting documentation for the information presented throughout this report. The chapters are briefly described below:

Section 1: Introduction. This section presents the purpose and objectives of this Master Plan. Background information is also provided.

Section 2: Study Area Characteristics. This section discusses the study area location, including physical characteristics, land use classifications and historical and future population projections. Land use classifications and population projections are based on the most recent General Plan (2009), which provides guidance for forecasting wastewater flows and staging future wastewater system improvements.

Section 3: Existing Wastewater System. Overview of the City's existing wastewater system, the secondary wastewater treatment plant (WWTP) and tertiary WWTP are presented in this section.

Section 4: Planning Criteria. Basic criteria used in developing the proposed improvements discussed in this Master Plan, such as wastewater flow, organic loads and treatment and disposal capacity are discussed in this section.

Section 5: Evaluation and Proposed Improvements. Options for meeting future wastewater flows are outlined and evaluated in this section. These improvements are recommended based on the criteria discussed in Section 4. A recommended option based on the wastewater treatment and disposal requirements, regulatory requirements, cost effectiveness and operational reliability is also provided in this section.

1: INTRODUCTION

1.2 BACKGROUND

The City of Lone owns and operates the wastewater collection system and WWTP that provides wastewater service to its residents. The WWTP operates under a Central Valley RWQCB Waste Discharge Requirements (WDR) Order No. 95-125 dated May 26, 1995. On July 11, 2003, a Cease and Desist Order (CDO) R5-2003-0108 from the RWQCB to the City required the submission of a Wastewater Master Plan by November 30, 2004. A copy of the CDO is included in **Appendix 7.1**. In response to this request, the City completed and submitted in November 2004 a Master Plan, which included a capacity evaluation and recommended improvements.

Following the submission of the Master Plan in late 2004, the City submitted a Report of Waste Discharge in June 2006 and a companion Initial Study/Mitigated Negative Declaration¹ in July 2006. The report and declaration recommended expansion of the existing secondary WWTP facility with the construction of new aerated treatment ponds new percolation ponds both at the existing treatment plant and north of Sutter Creek adjacent to the Castle Oaks Water Reclamation Plant. Concerns were then raised about the recommended project and level of detail of the corresponding environmental study. Further, on February 20, 2007 the RWQCB issued a letter stating that the Report of Waste Discharge was incomplete. A copy of the letter is contained in **Appendix 7.2**.

On October 4, 2007, the City prepared a Technical Memorandum (TM), which expanded the number of alternatives presented in the 2004 Master Plan. A copy of the TM is contained in **Appendix 7.3**. During the Lone Council Meeting on October 16, 2007, the TM was presented and publicly discussed. From this meeting, the Council decided that the new wastewater facilities would:

- (1) Provide tertiary treatment of City municipal wastewater;
- (2) Allow for growth within the City of Lone based upon the General Plan
- (3) Allow for the treatment and disposal of ARSA secondary effluent;
- (4) Continue water reclamation at the Castle Oaks Golf Course;
- (5) Allow the continued use of percolation/storage ponds; and
- (6) Encourage partnerships for regionalization of wastewater facilities.

Therefore, this Master Plan updates the City's earlier planning efforts previously discussed and presents and recommends future wastewater treatment and disposal options to meet the City's objectives, regulatory requirements, and growth in the community. The Master Plan also furthers the Regional Board's goals to provide for reclamation and recycling of treated wastewater, and regionalization of wastewater treatment services.

This proposed Master Plan is based on anticipated demands resulting from projected growth in the City, as reflected in the City's General Plan. The City acknowledges, however, that wastewater demands could change based on future potential agreements to provide wastewater service to other dischargers in the region, including, but not limited to, Mule Creek

¹ According to California Environmental Quality Act, a Negative Declaration report is a document that describes the proposed project, presents the findings, and states the reasons why the project will not have a significant effect on the environment.

State Prison, Preston Youth Authority, Cal Fire Academy, and other communities in Amador County. Nothing in this Master Plan is intended to preclude such future potential agreements, so long as the City maintains treatment and disposal facilities to meet the objectives of this Master Plan.

In compliance with the California Environmental Quality Act (CEQA), an accompanying Environmental Impact Report (EIR) will analyze the environmental impacts associated with this Master Plan's recommended project and offer mitigation measures, if required.