4. LOWER CACHE CREEK GROUNDWATER STUDY

4.1 INTRODUCTION

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Yolo County currently is in the process of developing a Resources Management Plan for lower Cache Creek. The success of this plan is dependent upon a strong factual base to support its conclusions and policies. Accordingly, the County has commissioned three coordinated technical studies covering the riparian biological resources, stream morphology, and groundwater resources of lower Cache Creek. These three studies will serve as the factual foundation for the Cache Creek Resources Management Plan.

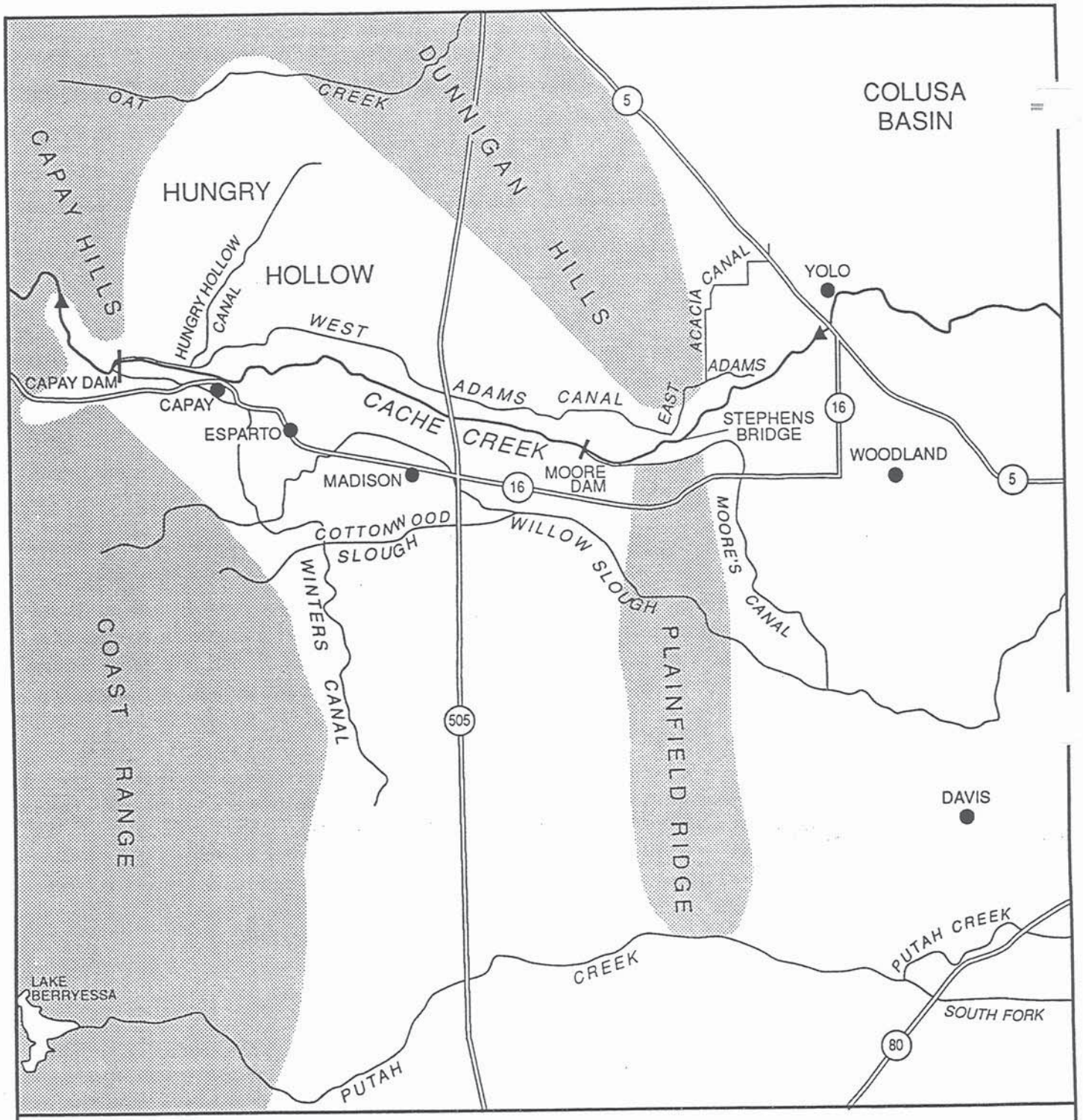
This report summarizes the findings and recommendations of the groundwater resources study. This study, developed in conjunction with the riparian resources and stream morphology studies, documents the local hydrogeology, groundwater quantity and quality, and factors affecting groundwater resources. This study also presents recommendations with regard to groundwater resources for the management and monitoring of aggregate extraction and site reclamation, consistent with conjunctive use and advanced management of surface and groundwater resources.

Purpose

The overall purpose of the Lower Cache Creek Groundwater Study is to provide the factual basis for development of the Cache Creek Resources Management Plan. Major objectives of the groundwater study are the quantification of historical groundwater quantity and quality, documentation of the hydrogeologic context, determination of surface water/groundwater interactions, evaluation of potential impacts of mining and reclamation, and identification of recommendations for management and monitoring of aggregate extraction.

Scope

This study focuses on the vicinity of Cache Creek from near Capay to Yolo, extending outward to encompass the mining resource zones that are the subject of the Cache Creek Resource Management Plan. However, the regional nature of the groundwater resource necessitates consideration of the overall groundwater basin (Figure 4.1-1). The basin boundary on the west consists of the contact of the unconsolidated alluvium and Tehama Formation with the less permeable, consolidated formations of the Coast Ranges. On the south, the boundary is defined by the watershed and groundwater flow divides between the Cache Creek and Putah Creek basins. Similarly on the north, the boundary is the divide between Cache Creek watershed and watersheds draining directly to Colusa Basin (e.g., Oat Creek). The eastern boundary is the Sacramento River.



September 1995	**Figure 4.1-1 Location Map**
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Given the considerable amount of hydrogeologic investigation and monitoring already accomplished in the study area, the current study is based on critical review and analysis of existing data and reports. No field work, such as test drilling or pumping tests, beyond study area reconnaissance and collection of existing data, is included in this scope. However, recommendations resulting from this study include field investigations.