

I. Executive Summary

Dibble Engineering (Dibble) has been contracted by the Sedona–Oak Creek Airport Authority (SOCAA) to prepare a fire protection water system master plan and potable water feasibility study for the airport. Fire protection water service to buildings at the airport are currently divided between SOCAA and the Oak Creek Water Company (OCWC). SOCAA desires to consolidate the fire protection water service at the Sedona Airport and be the fire protection water system provider for all existing and future developments on the Table Top Mountain (Airport Mesa). Potable water to the Airport Mesa is currently provided by OCWC.

Dibble conducted a site visit to document existing infrastructure, to perform hydrant flow testing, and to determine current fire flow requirements for the existing buildings. This information was used to prepare a hydraulic model of the existing SOCAA water system. Several iterations of the hydraulic model were performed to develop improvements recommendations that the SOCAA can implement based on need and development opportunity. The recommended improvements to the SOCAA fire protection water system are categorized, described, and modeled in the Sedona Airport Fire Protection Water System Master Plan (FPWS Master Plan). The improvements recommended in this study build on the recommendations of the FPWS Master Plan. The FPWS Master Plan recommends improvements that provide storage, pumping, and delivery system improvements for the SOCAA fire protection water system that can also be used for a potable water system. The recommended improvements of this study should be done after the recommended improvements of the FPWS Master Plan. See **Table 1** for the SOCAA potable water system improvement recommendations.

Table 1: Capital Improvement Recommendations

PRIORITY	DESCRIPTION	CONCEPTUAL COST
Short Term	Recommended Short Term Improvements include: Well Water Quality and Well Capacity Testing	\$85k
Long Term or Full Build-out	Recommended Long Term Improvements include: Development of a potable water system	\$2.8M–\$5.1M