

AGENDA STAFF REPORT

MEETING NAME: REGULAR BOARD MEETING
MEETING

DATE(S): NOVEMBER 10 & 15, 2021

FROM: Arden Wallum – General Manager

FOR: ACTION X DIRECTION INFORMATION



COST SHARE AGREEMENT FOR THE UNITED STATES GEOLOGICAL SURVEY LAND SUBSIDENCE STUDY IN THE MISSION CREEK SUBBASIN

STAFF RECOMMENDATION

Authorize the General Manager to enter into a Letter of Agreement with the Coachella Valley Water District and Desert Water Agency for coordinating, developing, and cost sharing on a Land Subsidence Study in the Mission Creek Subbasin by the United States Geological Survey.

SUMMARY

Mission Springs Water District (MSWD), Coachella Valley Water District (CVWD), and Desert Water Agency (DWA) (collectively referred to as “Agencies”) wish to enter into a letter of agreement for coordinating, developing, and cost sharing on a Land Subsidence Study in the Mission Creek Subbasin. The study will be performed by the United States Geological Survey (USGS) under a joint funding agreement with CVWD.

ANALYSIS

Declining groundwater levels, due to pumping and/or other factors, may contribute to or induce land subsidence in aquifers. In 1996, the CVWD and the USGS began cooperatively investigated subsidence in the Coachella Valley, more specifically the Indio Subbasin. These cooperative investigations showed that the geology and groundwater-level declines in parts of the Indio subbasin resulted in land subsidence. Additionally, the investigations also showed that water-resource management actions had decreased the rate of land subsidence. The relation between geology, groundwater levels, and land-surface-elevation changes in the Mission Creek subbasin have not been previously studied and are of concern to the Agencies. As such, the on-going land subsidence monitoring in the Indio Subbasin will be expanded into the Mission Creek Subbasin.

For the Mission Creek subbasin, the objectives of this study are to: assess land-surface elevations during 2015–21 using available InSAR or other survey data, develop a subsidence monitoring plan, detect and quantify land subsidence, and evaluate the relation between changes in land-surface elevation and groundwater levels at selected sites. This information can be used to effectively manage the water resources and related land subsidence and develop a greater understanding of subsidence and the geology of the Mission Creek Subbasin.

FISCAL IMPACT AND STRATEGIC PLAN IMPLEMENTATION

The total cost of the study is \$582,458, with USGS contributing \$98,221. The total cost of the study specific to the Mission Creek Subbasin is \$240,856, with USGS contributing \$39,899. The Agencies desire the split the remaining Mission Creek study costs (\$200,957) equally (1/3 each agency), for a total of \$66,986 for each agency over the next 4 fiscal years.

ATTACHMENTS

Letter of Agreement; USGS Proposal and Scope of Work