## Vista Irrigation District Local Water Supply Projections 2017, 2018 and 2019

## **Supporting Analysis and Calculations**

In 1946, the Vista Irrigation District (VID) purchased the Warner Ranch, which included Henshaw Dam and Lake Henshaw, its local water supply. Lake Henshaw's capacity is 52,000 acre-feet and is located on the San Luis Rey River, about 25 miles east of the VID service area. Both natural run-off developed from the 200 square mile watershed above Lake Henshaw and groundwater pumped from the Warner Basin are held as surface water in Lake Henshaw.

Water from Lake Henshaw is delivered to VID, the City of Escondido, and the Rincon Band of Indians under terms of several governing contracts. While the amount of water delivered to each party is dependent on annual hydrologic conditions, the median local water delivery to the VID since 1960, including groundwater production and surface water run-off, is 5,062 acre-feet per year (AF/YR).

The State Water Resources Control Board (State Board) supply sufficiency calculation is based on a series of conservative assumptions including projecting available supplies based on three additional years of drought. The calculation specifies the use of hydrology from 2013, 2014 and 2015 to project water supplies for 2017, 2018 and 2019.

The table below shows VID's annual supply from Lake Henshaw for calendar years 2013, 2014 and 2015 along with the average for those three years.

## **Local Surface Water Supply from Lake Henshaw** (AF/YR)

2013	2014	2015	Average
2,077	1,449	1,620	1,715

As shown in the table, VID's water deliveries from Lake Henshaw over the last three calendar years have averaged 1,715 acre-feet. Based on its past experiences with local water production (from surface and groundwater supplies) during dry years, VID has chosen to use 1,715 AF as its projected deliveries for 2017, 2018 and 2019.

## **Projected Surface Water Supply from Lake Henshaw** (AF/YR)

2017	2018	2019
1,715	1,715	1,715

VID's projection of local water supply deliveries for all three years, coupled with water supply deliveries from its water wholesaler, the San Diego County Water Authority, show how VID is expected to have adequate water supplies to meet its projected demands from 2017 through 2019.