

KEY FACTS AND CONCLUSIONS OF 2018 BONANZA SPRING STUDY

On January 30, 2018, geologist Miles Kenney, PhD and veteran hydrogeologist Mr. Terry Foreman co-authored a new report based on extensive field work that identified important new facts about the Bonanza Spring. Among these important new facts are:

- Bonanza Spring occurs in fractured crystalline mountain bedrock in the southwestern Clipper Mountains at 2,100 feet elevation. The spring exists entirely in bedrock.
- Bonanza Spring is 11 miles northeast of the northern end of Cadiz Water Project's wellfield.
- The Cadiz Water Project wellfield water table in the alluvial aquifer occurs at approximately 1,100 feet elevation – 1,000 feet lower than Bonanza Spring – which indicates “disconnection” between the two systems. The alluvial groundwater aquifer is also three miles to the east of the Bonanza Spring.
- Bonanza Spring is located at the intersection of two extensive bounding faults, which exhibit evidence of being groundwater barriers.
- The two bounding faults create a spring catchment area that extends over 4 miles north of the Bonanza Spring. Recharge to the catchment area is delivered by precipitation and runoff that infiltrates the porous, fractured rock formations up gradient from the spring.
- This fractured rock system is effectively hydraulically separated from the alluvial regional groundwater system in Fenner Valley.
- Long-term climate conditions, not regional groundwater conditions, control recharge of Bonanza Spring.

The final report and related materials are available for review at the following link:

<http://www.cadizwaterproject.com/2018-bonanza-spring-study/> .