TEHACHAPI-CUMMINGS COUNTY WATER DISTRICT A "State Of The Art" Water District!

PURPOSE OF INQUIRY:

The Special Districts Committee (Committee) of the 2018-2019 Kern County Grand Jury (Grand Jury) reviewed the Tehachapi-Cummings County Water District (TCCWD) pursuant to California Penal Code §933.5. The Grand Jury last reviewed the TCCWD in 2012-2013.

PROCESS:

The Committee reviewed the TCCWD's website, Board minutes, agendas, 2017-2018 financial statements; interviewed the General Manager, Operations Manager and the Business Manager. The Committee visited the TCCWD's Office three times, toured the facilities and attended a Board of Directors meeting.

BACKGROUND AND FACTS:

The TCCWD was formed on March 10, 1965, under the provisions of the County Water District Law (Water Code of the State of California §30000) to provide imported water supply, water resource management and flood control protection to the agricultural, municipal and industrial customers within the TCCWD's boundaries. Tehachapi-Cummings County Water District is located at 22901 Banducci Road in the Tehachapi Mountains, east of the southern San Joaquin Valley, and encompasses approximately 266,000 acres. The main groundwater (native water) supply is located in three adjudicated basins which are Tehachapi, Cummings and Brite.

- A. The TCCWD has complete control and authority as the Watermaster over three distinct groundwater basins.
- B. The Board of Directors is subject to the Uniform District Election Law, is independent of the Kern County Board of Supervisors and, since its inception, has operated under the Council-Manager for Government.
- C. Has a five-member Board of Directors (Directors):
 - Elected to a four-year staggered term by all registered voters in the five divisions within this Water District
 - Elected Board Members must live in the division they represent
 - Responsible for the policies and decisions governing the operation of this Water District
 - Meet regularly at 3:00P.M. on the third Wednesday of each month

 Receive a stipend of \$100 per day of service up to 10 days of service per month

FINDINGS:

FLOOD CONTROL

- F1. A large portion of the Tehachapi Valley lies in a flood plain.
- F2. In 1932, and again in 1940, the area was devastated by major floods. Three dams were built to retard the runoff. The structures are ID4, Antelope and Blackburn.
- F3. The TCCWD has allocated \$106,000 in the 2018-2019 budget for the operation and maintenance of the three structures.
- F4. The structures were inspected on January 18, 2018 by the California Department of Water Resources, Division of Safety of Dams. This inspection required the Water District to have inundation maps and Emergency Action Plans prior to January 01, 2019. A third party contractor was selected, a report was submitted at a cost of \$50,000. The dams were found without defect, but have been reclassified to level "high", which is a classification for the potential of flooding downstream in the event of a structural failure.

WATERMASTER

- F5. The TCCWD is the court-appointed Watermaster for the three adjudicated basins.
 - a. Brite Basin with a Native Safe Yield (NSY) of 500 acre feet (a/f) annually, with no injunction against pumping
 - b. Cummings Basin with a NSY of 4,090 a/f annually, with no exporting of native water
 - c. Tehachapi Basin with a NSY of 5,500 a/f annually, with no exporting of native water
- F6. The TCCWD performs all recharge and recovery projects within the three basins.
- F7. As Watermaster, TCCWD:
 - Protects the groundwater resources within the basins by administering judgements
 - Acts as the agent for any water right ownership change
 - Provides annual reports to the Kern County Superior Court
- F8. The Tehachapi-Cummings County Water District is a member of the Kern County Water Agency (KCWA). The Water District has limited residential customers and provides imported and native water to agriculture, manufacturing and industry in the valley, and has no water treatment facility. All potable water is produced from groundwater wells.

- F9. The Department of Water Resources (DWR) allocation commitment for this Water District is 19,300 a/f per year.
- F10. The DWR water is lifted 3,425 feet just prior to A.D. Edmonston Pumping Plant (California Aqueduct) 31 miles away to the Brite Basin reservoir, through a 27" and 39" coated steel pipeline. This water is non-potable, and after some customers are served, the remaining water is distributed among four percolation (natural filtration) ponds located in the Cummings and Tehachapi Basins in sufficient quantities to maintain safe groundwater levels when available.

TECHNOLOGY

- F11. The Tehachapi-Cummings County Water District operates 16 natural gas engine/pump packages from four remote sites. The operating capacities for each package are 9,400 gallons per minute or 21 cubic feet per second.
- F12. Each package has extensive computer monitoring via sensors. Each package has an Altrontic Control System and interfaces with a Supervisory Control and Data Acquisition (SCADA) software.
- F13. This water district has initiated a pilot vibration analysis program for critical rotating machinery (gas engines/pumps) by an outside vendor to monitor equipment integrity.
- F14. The TCCWD has a Controls/Emissions Specialist responsible for ensuring operational compliance with continuous monitoring. All gas engines are subject to strict Air Pollution Control District emission permits.
- F15. The TCCWD's web site is current and highlights the Water District's transparency. For example, the Board of Directors' agendas and minutes are available.
- F16. The TCCWD has purchased a GPS data location program that allows the mapping of the infrastructure and equipment. This technology will provide the baseline maps and description for in-place equipment. With the retirement of experienced employees having knowledge and whereabouts of critical isolation valves and appurtenances, this software/system will aid the younger workforce to make repairs in a timelier manner.
- F17. A computerized work order and backlog system does not exist. A weekly meeting is held to discuss the past maintenance activities as well as the work for the upcoming week.

OPERATIONS

- F18. The TCCWD is operating under a balanced budget for 2018-2019 and is projected to increase revenue due to increased availability of delivered water. Property tax revenues in the general fund will increase due to a 4.3% increase in assessed valuation.
- F19. The TCCWD has an aging workforce, with several employees approaching retirement. In 2018, there were three new hires and two retirements. Current job descriptions are available for all positions.
- F20. The TCCWD has 20 full time employees and some part time summer employees.
- F21. The TCCWD purchases treated water from the California Correctional Institution and sells it to sod farmers and the golf course in Stallion Springs at break-even costs.
- F22. The Tehachapi-Cummings County Water District fully supports the California Water Fix Project. The success of this project is a key for the future of Tehachapi Valley.
- F23. Until the Federal Emergency Regulatory Commission finalizes its portion of the repair cost of the Oroville Dam Spillway, the TCCWD does not know their shared cost. However, it is estimated to be about \$5 million.
- F24. The TCCWD offers outside/bulk water sales using a portable metering and locking system. Customers are billed on usage and consumption data is recorded for an annual report.
- F25. The TCCWD has established bidding and purchasing procedures for any items purchased.

COMMENTS:

The Grand Jury would like to thank the TCCWD's General Manager, Operations Manager and Business Manager for their time, cooperation, knowledge, expertise and the informative tour of the facilities provided to the Committee.

RECOMMENDATIONS:

- R1. The TCCWD should continue to explore all opportunities to purchase property in the Cummings Basin for increasing the Water District's recharge capacity. (Findings 5b & 6)
- R2. The vibration analysis program for critical rotating machinery should become an integral part of a preventative maintenance program for the TCCWD. (Finding 13)
- R3. Implement a computerized work order and backlog system to include building a database for performing routine repairs and scheduling preventative maintenance activities. (Finding 17)

NOTES:

- The Tehachapi-Cummings County Water District should post a copy of this report where it will be available for public review.
- Persons wishing to receive an email notification of newly released reports may sign up at: www.kerncounty.com/grandjury.
- Present and past Kern County Grand Jury Final Reports and Responses can be accessed on the Kern County Grand Jury website: www.kerncounty.com/grandjury.

RESPONSE REQUIRED WITHIN 90 DAYS TO:

PRESIDING JUDGE KERN COUNTY SUPERIOR COURT 1415 TRUXTUN AVENUE, SUITE 212 BAKERSFIELD, CA 93301

CC: FOREPERSON
KERN COUNTY GRAND JURY
1415 TRUXTUN AVENUE, SUITE 600
BAKERSFIELD, CA 93301