INITIAL TESTING SHOWS...

CAWело’S PRODUCED WATER SAFE FOR AGRICULTURAL USE

“Testing continues to support initial findings that Cawело’s produced water is a clean and dependable water source to irrigate California crops.”

Dr. Heriberto Robles
Enviro-Tox Services, Inc.

Subject to Rigorous Government Regulations & Enforcement

Cawelo is relentless in its mission to provide clean, safe irrigation water to help California farmers grow healthy, world-class produce.

- Cawelo Water District (Cawelo) has been serving the Kern County community for more than 50 years, providing irrigation water to approximately 34,000 acres of orchards, vineyards and other important California crops.
- Cawelo has been relying on produced water from oil operations to augment limited surface and groundwater supplies. Produced water is a reliable, additional source of water that helps offset severe restrictions imposed due to the drought and environmental measures.
- Cawelo’s produced water is filtered, treated and blended prior to being distributed for irrigation of crops, and is subject to water quality standards and testing/monitoring protocols established by the Central Valley Regional Water Quality Control Board (Regional Board).
- Cawelo has a long history of complying with the water quality standards enforced by the Regional Board.
- It’s important to note and clarify, water generated during hydraulic fracturing (also known as “fracking”) is not used for agricultural purposes – a point that has been incorrectly reported in certain publications and promoted by opponents of oil production. Cawelo does not accept, use, or deliver water generated from hydraulic fracturing.

For more information on produced water for agricultural use & Cawelo’s commitment to quality, visit www.cawelowd.org.
Supports Statewide Water Policy & Helps Farmers During Drought

- Using produced water to irrigate crops is a growing practice amongst California farmers, who are looking to conserve every drop of water during the state’s unprecedented drought.
- **Benefits are twofold** – produced water is providing farmers a much-needed additional source of irrigation water and helping protect and replenish already depleted groundwater basins.
- **Water should never be wasted** – recycling of municipal and industrial water is a central tenet of California statewide water policy. The use of produced water is a model of business, local government and farmers collaborating to best utilize precious natural resources.

Regional Board & Cawelo Undertaking Additional Analysis

- As demand for produced water increases, the Regional Board established a Food Safety Panel to further evaluate the use of produced water and requested more detailed water quality reporting from water districts relying on produced water.
- Cawelo voluntarily initiated a program to extensively and systematically study produced water quality as well as commodities grown with produced water.
- Results of all tests are being provided to the Regional Board, the Food Safety Panel and made available to the public.

Initial Testing Indicates Cawelo’s Produced Water Is Safe For Irrigation

- In April 2016, Cawelo engaged a third-party environmental toxicologist to analyze the initial water quality data that was submitted to the Regional Board – specifically studying the levels of organic compounds in the irrigation water. The initial water quality study, which tested for nearly 70 constituents, determined that detected organic compounds were within safe drinking water standards, a higher standard than what is necessary for irrigation water.
  - At that time, Cawelo also conducted preliminary crop testing by comparing almonds, grapes and pistachios, and the third-party environmental toxicologist found that crops irrigated with Cawelo’s produced water had similar chemical composition levels as crops irrigated with other water supplies.
- In October 2016, Cawelo released testing results for mandarins, oranges and lemons – comparing crops irrigated with Cawelo’s produced water supply against crops irrigated with water from other sources. The third-party toxicologist concluded key organic elements are not being absorbed in edible fruit.
- In August 2016, Cawelo submitted expanded water quality data. The Regional Board now requires the district to test for more than 160 constituents. Cawelo is systematically moving through the review process of the expanded testing data, but notes the vast majority have been non-detectable or below drinking water quality standards – an even higher standard than what is required of irrigation water.
- To date, no studies have shown that irrigating food crops with produced water poses any threat to public health, according to the State Water Resources Control Board.
- These results are part of an ongoing science-based program – Cawelo will continue to test additional crops as they come into season to further verify these initial findings, as recommended by the third-party toxicologist.

Working Collaboratively With Regulators

- Cawelo is committed to working with the Regional Board and its expert panel in the next steps to do its part and ensure produced water is governed within a strict regulatory framework and is a safe, reliable supply for California agriculture.
- Working collaboratively with its customers, regulators and the public is a key value that Cawelo practices each and every day in providing water to its farmers.

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