

MONITORING IRRIGATED AGRICULTURE – STRATEGY AND RESULTS

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ABSTRACT

California is undertaking challenging steps to more rigorously address water quality issues related to nonpoint source pollution through enhanced regulatory and monitoring programs. The State's primary water quality statute, which pre-dates the federal Clean Water Act, the Porter-Cologne Water Quality Control Act, is very broad in scope. The Act regulates any person discharging waste or proposing to discharge waste that could affect the quality of the waters of the State, and applies to point sources and to nonpoint sources.

This presentation will explore the new regulatory framework and the monitoring that is being implemented in California's Central Valley to address water quality issues related to an estimated 7.5 million acres of irrigated agriculture. 'Conditions' of the waivers include monitoring and management practice implementation. An overview of water quality data from the first three years of the program and how the data is used to support decision-making to address identified water quality impairments. The monitoring data includes field measurements, non-pesticide chemistry, pesticide chemistry, metals and toxicity results for water and sediment for monitoring conducted by coalition groups, individual dischargers and by the Central Valley Water Board.

The emerging partnerships, through the formation of Coalition Groups that have been established by growers to comply with the regulations are key aspects of the program. The collaborative process is also used extensively in order to facilitate the development and evolution of the program. Participants in these collaborative processes include Coalition Groups, Irrigation Districts, Federal, State and local agencies, analytical laboratories, Resource Conservation Districts, individual growers and other interested stakeholders.

The Central Valley region stretches from the Oregon border to the northern tip of Los Angeles County and includes all or part of 38 of the State's 58 counties. Three major watersheds have been delineated within this region, namely the Sacramento River Basin, the San Joaquin River Basin, and the Tulare Lake Basin. The three basins cover about 40% of the total area of the State (over 60,000 square miles) and approximately 75% of the irrigated acreage. Of the 30 sub-watersheds that comprise the Sacramento River, San Joaquin River, and Tulare Lake Basins, 12 are listed as impaired due to agriculture.

KEYWORDS

Agriculture, Water Quality, Monitoring, Stakeholders