

San Joaquin Valley Residents Face High Environmental and Social Hazards

Land of Risk/ Land of Opportunity:
Cumulative Environmental Vulnerabilities in California's San Joaquin Valley

Cutting edge research by the UC Davis Center for Regional Change

California's San Joaquin Valley is a place of contradictions. It has some of the most productive and wealth-generating agricultural lands on the planet, but many of the people who live in this region live in poverty, confront environmental contamination, and face serious health risks. Despite efforts to alleviate these problems, the region's poor air and water quality, concentrated poverty, and uneven access to educational and other opportunities continue to afflict the Valley. Additionally, sustainability of the Valley's economy is increasingly dependent on the health and well-being of the all of the region's residents across its diverse rural and urban communities.

"Land of Risk/Land of Opportunity," a report produced by researchers from the U.C. Davis Center for Regional Change, is a new, comprehensive approach to addressing problems in the San Joaquin Valley. Over a three-year investigation, researchers identified and analyzed the places and populations that are being adversely affected by elevated and extreme environmental hazards and social vulnerabilities.

The Research Innovations

- **The report provides an innovative way to understanding the region's challenges:** Researchers created the Cumulative Environmental Vulnerability Assessment (CEVA) – a tool that measures the correlation of environmental risk and social vulnerability for individuals living in the San Joaquin Valley. To assess a community's environmental risks, the study compiled data on the prevalence of toxic facilities, hazardous waste, refineries, pesticides, and air toxicity. To assess a community's social vulnerability, the study accumulated data on the poverty and English language fluency rates as well as demographics on age and ethnicity. The report also documents uneven distribution of poor health, including low birth weight, childhood asthma hospitalization, and premature death.
- **CEVA can be used to improve environmental protection and public health policies:** The report outlines comprehensive and innovative environmental protection and public health policies for the San Joaquin Valley and beyond, through the use of CEVA.
- **CEVA empowers leaders and community members:** CEVA allows policy makers, agency leaders and communities to create innovative strategies to address these problems for the good of the region and the state.

The Findings

- **Over 31% (1.2 million) of San Joaquin Valley residents face extreme cumulative environmental and social vulnerability.**
- **An additional 20% of San Joaquin Valley residents (1.9 million) face elevated cumulative environmental and social vulnerability.**

- **More environmental hazards exist than are publically documented:** Residents identified many more environmental hazards than are documented or addressed by the state and federal regulatory inventories.
- **Not all vulnerability is equal:** The combination of environmental risk and social vulnerability is not randomly distributed across the region, but rather concentrated within particular communities.
- **More focused attention is required by regulators and policy makers:** These areas of high vulnerability deserve special attention from regulators and policy makers to protect the health and well-being of area residents.

The Path Forward

The report provides policy makers, agencies and community leaders with a comprehensive, innovative, approach to developing environmental protection and public health policies that ensure the health and well-being of San Joaquin Valley residents and beyond. The report recommends the following steps:

- **Integrate CEVA into existing policy and planning frameworks.** The state of California should create an annual Cumulative Environmental Vulnerability Report Card overseen by a coordinating body.
- **Move from analysis to coordinated action.** California should designate Cumulative Environmental Vulnerability Action Zones (CEVAZ) that require enhanced protection, increased interagency coordination and investment.
- **Improve Community Participation.** Public agencies should engage with affected communities in ways that both builds and incorporate community knowledge.
- **Enhance resources for continued improvements in CEVA.** California governments should invest in continued improvement of the data sources relevant to CEVA, such as bio-monitoring, water quality, and longitudinal analyses.