

Groundwater Protection in Central Coast Ag Waiver Renewal

March 14, 2012
Jennifer Clary



Past Participation

- » July 10, 2009
- » May 12, 2010 – 40 community members
- » July 8, 2010 – 45 community members
- » March 17, 2011 – 30 community members
- » May 4, 2011 – 6 community members

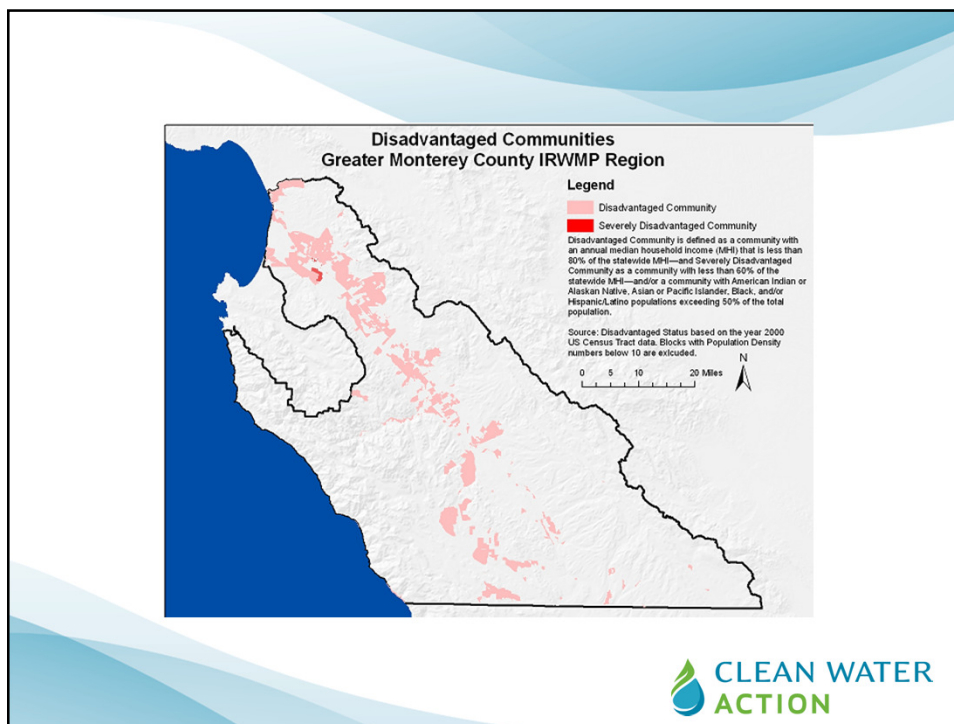


Environmental Justice Defined

“The fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.”

CA Government Code Section 65040.12





San Jerardo's experience with contaminated groundwater



The HIGH COSTS of agricultural contamination

- » 1991, 1993, 2001 - Wells taken out of service due to f high nitrates and 1,2,3 TCP
- » Interim solution – County-funded treatment - \$15,000 per month
- » State-funded well – \$5million
- » New water rates - \$113 per month + usage



...but don't forget other communities

- » Chular
- » San Lucas
- » Prunedale

We SUPPORT the Staff Recommendations

•Agricultural discharges must be regulated to protect our water quality.

•We strongly support the Staff recommendations for individual monitoring, we want strict compliance timelines, and effective monitoring and reporting systems.

•We want the Regional Board to put fines for non-compliance – the cost to peoples health is too high.



Children and fetuses are especially vulnerable

- » Methemoglobinemia, (Blue Baby Syndrome)
- » Inflammatory bowel disease
- » Acute respiratory tract infections
- » Miscarriage, stillbirths or premature birth
- » Sudden Infant Death Syndrome (SIDS)
- » neural tube disabilities and other birth-related disabilities



Nitrate and California Agriculture, 1989 (CDFA)

- » “Several Problem Areas Exist” [on the Central Coast
- » 48% of all monitored wells in the unconfined aquifer of the Salinas Valley exceed the ...MCL
- » Prunedale...27% of wells exceed MCL



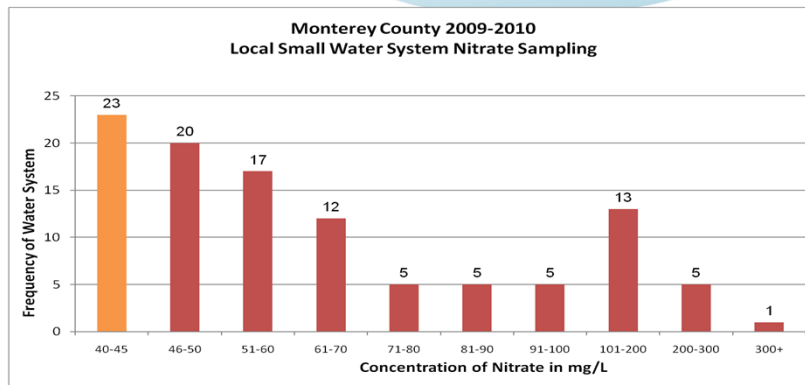
Data from Monterey County Environmental Health

- Public records request
- 2009-10 sampling data for nitrate contamination
- Information is also available at:
http://www.mtyhd.org/images/stories/FY_2009-10_LSWS_Sampling_02-14-11.pdf

MCEH found 83 water systems with nitrates over 45mg/L legal limit (16% of wells sampled)



Monterey County Environmental Health Data



[Graphs courtesy of EJCW intern, Raymundus Butarbutar, UC Berkeley]



What's needed

Vote Now!



Bullet Point 6.

- » Studies indicate that fertilizer from irrigated agriculture is the largest primary source of nitrate pollution in drinking water wells and that significant loading of nitrate continues as a result of agricultural fertilizer practices...



Bullet 8

- » Existing and potential water quality impairment from agricultural waste discharges takes on added significance and **urgency**, given the impacts on public health...



Acute Health Impacts of Nitrates



- Methemoglobinemia, or “Blue Baby Syndrome”
- Indigestion and inflammation of the stomach and gastrointestinal tract (gastroenteritis),



Long-term health effects

- » Multiple digestive tract impairments
- » Depression, headache and weakness
- » Mutagenicity (DNA damage) and tetragenicity
- » Several types of Cancer
- » Nervous system disabilities

And....

- » Active ulcerative colitis and Crohn's disease
- » Pancreatitis
- » Thyroid disruption
- » Nervous system disabilities
- » Dieresis



Bullets 87

- » ...the Executive Officer may require Dischargers to locate (inventory) and conduct sampling monitoring of private domestic wells in or near agricultural areas with high nitrate in groundwater
- » ...the Board may require Dischargers to provide alternative water supplies or replacement water service, including wellhead treatment, to affected public water suppliers or private domestic well owners.



Groundwater Monitoring

- » Within one year of adoption of the Order, Dischargers must sample private domestic drinking water and agricultural groundwater wells on their farm/ranch



Concerns

- » Tier 3 requirement to develop nutrient management plans should be expanded
- » All fertilizer application should be reported
- » Groundwater monitoring requirements not sufficient to identify trends or assign responsibility
- » Limited pesticide requirements
- » Enforcement program unclear



Results of Inaction?

- » More community water systems will lose access to safe drinking water
- » Domestic well owners and small water systems will continue to be ignorant of the threat to their water quality



QUEREMOS AGUA LIMPIA – We want clean water



MI \$
Paga
\$u
Fertiliz