

SOUTH SAN JOAQUIN IRRIGATION DISTRICT
P. O. Box 747
Ripon, CA 95366-0747

February 5, 2009

Joe Karkoski
Chief, Irrigated Lands Regulatory Program
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, California 95670-6114

C.C.: Adam Laputz

Dear Mr. Karkoski:

RE: Central Valley Regional Water Quality Control Board Long-term Irrigated Lands Regulatory Program for surface water and groundwater

South San Joaquin Irrigation District appreciates the opportunity to comment on the Long-term Irrigated Lands Regulatory Program.

At this time it is the District's position that the Central Valley Regional Water Quality Control Board (Regional Board) should exclude the proposed monitoring of groundwater from the Irrigated Lands Program.

Groundwater Regulation to the Eastern San Joaquin Subbasin.

The Regional Board should not be attempting to regulate groundwater through the proposed Program. First, it is complete speculation to conclude that groundwater within our District has any impact on surface water. Next, even if it can be shown that groundwater has an impact on surface water, it would be impossible to detect the difference between impacts caused by subsurface drainage from surface runoff caused by a farmer pumping groundwater (beneficial use of the water). The District would have no authority over either situation. Third, because of the general movement of groundwater in our District flows to the north, it is impossible to connect groundwater impacts to a particular property owner or even to a particular area. Fourth, the impact of surface irrigation on groundwater cannot be tied to a particular farmer, region, crop or time of year as impacts are highly variable. A farmer applying water by flood irrigation will cause different impacts than one using drip irrigation. There are differences based on soil types, crop types, groundwater levels, groundwater extraction rates, and drainage practices. Such impacts are quite incapable of measurement. To impose a rule that would result in monitoring requirements or other restrictions in such highly variable situations would be entirely arbitrary.

Before the Regional Board introduces groundwater into the Irrigated Lands Program, it should first organize and make available, data from its existing programs and then determine whether any further monitoring is needed. Several studies have already been completed to track ground water aquifers, salinity source information, soil analysis (percolation or non-percolation fields), pesticide areas of concern, and Groundwater Management Zones, to mention a few.

It would be reasonable to assume that any Groundwater Data obtained through the Irrigated Lands Program would be a duplication of effort of one of the existing eight programs.

If Groundwater Monitoring is introduced into the Irrigated Lands Program there would then be (at least) nine Groundwater Monitoring Programs in the Central Valley. The District's previous letter of May 29, 2008, pointed out the eight existing programs that should provide vast quantities of information to the Regional Board. In addition to those listed at that time, the Regional Board has several water quality management programs in place; Construction Storm Water Management Plans, 2007 Milk Cow Dairy Program, Municipal Waste Discharge Requirements (WDR's), etc... Groundwater data provided through these ongoing programs should also be analyzed by groundwater basin and watershed. There has been little discussion of how this data is being organized or made accessible to other organizations and be a benefit to the Long Term Goals for Groundwater Management in the Central Valley. Unless the data is effectively assembled and analyzed, there will still not be a realistic Groundwater Database to use to make water quality decisions for future generations of water users in California.

At several meetings both Adam and you assured the workgroups that these existing programs would be fully analyzed and the Regional Board staff would make the existing information from the eight groundwater monitoring programs available for discussion.

If this program is to be beneficial to the State of California, the Regional Board should designate files for each individual watershed throughout the Central Valley, and include a list of the existing groundwater programs in each watershed, and the existing data and monitoring programs goals (MRP's). This would provide the Regional Board with a baseline to refer to before proposing any additional monitoring requirements in any watershed, should a problem be reported.

There should be adequate Regional Board staff available to gather the information from these sources, separate the data into watersheds, divide that watershed information into regions (GPS or Township and Range), then organize a directory that would access the data by any specific data inquiry.

1. U. S. Geological Survey NWIS Metadata
(National Water Information System) 1899 - 2008
Ground water: conductivity, alkalinity, salinity dissolved salts, nutrients (nitrate, phosphate, & nitrite), major organics, (sulfate, chloride, bicarbonate, carbonate, calcium, sodium).
Access: <http://waterdata.usgs.gov/nwis>
2. U. S. Geological Survey NAWQA Metadata
(National Water Quality Assessment Program) 1991 - 2001
San Joaquin-Tulare Basin, Sacramento River Basin
8,100 wells, g-49,000 nutrient samples, and 31,000 pesticide samples.
Ground water: Parameters measured for salinity include: nitrate, phosphate, chloride, and conductivity. Most downloaded data comes with land use information.
Access: <http://usgs.gov/nawqa>
3. U. S. Environmental Protection Agency STORET Metadata
(STORage and RETrieval database) 1901 - 2008
Ground water: Parameters measured: conductivity, dissolved solids, nitrate, chloride, carbonate, sodium and calcium, salinity. Salinity measurements are based on conductivity and in parts per thousand. Total dissolved solids measurements are reported as sum of constituents, tons per day, electrical conductivity and lb/day/cfs/
Access: www.epa.gov/storet/dbtop.html.
4. California Department of Water Resources Water Data Library

(WDL) 1963 – 2008
Ground water: alkalinity, nitrate, nitrite, conductance, sulfate,
phosphate, TDS, and chloride.
Access: www.wdl.water.ca/gov

5. U. S. Geological Survey GAMA Metadata
Ground-Water Ambient Monitoring & Assessment 2004 – 2010
Ground-Water Quality Monitoring Act of 2001 (Sections 10780 – 10782.3 of the Water Code); 116 identified priority basins in the state of California, 35 study units. In each study unit 60 – 120 public-supply wells are sampled.
Ground water: Chemical constituents; major ions, trace elements, nutrients, volatile organic compounds, pesticides, and pharmaceuticals to define the quality of water in the ground-water basins.
Access: <http://www.ca.water.usgs.gov/gama>

6. California Department of Pesticide Regulation
California Code of Regulations (title 3, Food and Agriculture)
Division 6, Pesticides and Pest Control operations
Chapter 4. Environmental Protection
Subchapter 1. Groundwater
Article 1. Pesticide Contamination Prevention
Note: Groundwater sampling has been done since 1970's.
The Pesticide Contamination Prevention Act (AB 2021) was initiated in 1986.
New Regulations took effect in the spring of 2004.
 - a. California Department of Food and Agriculture, Sampling for pesticide Residues in California Well Water, 1986 Well Inventory Data Base.
 - b. Cal EPA, Department of Pesticide Regulation, Sampling for Pesticide Residues in California Well Water, 1994 Update, Well Inventory Data Base.
 - c. California Department of Pesticide Regulation,
Ground Water Protection List Monitoring (GWPL)
GWPL Studies have been conducted every year since 1991 featuring one to six constituents each year in these reports.
Access: http://www.cdpr.ca.gov/docs/emon/grndwtr/list_mon.htm
Contact: Mark Pepple – mpepple@cdpr.ca.gov
Tele: (916) 324-4086

7. California Department of Public Health
Drinking Water Source Assessment and Protection (DWSAP) Program
34 Counties, the California Rural Water Association, plus over 500 Water Systems throughout the State of California. 1997 – 2008
14,326 Ground water Sources, 16,152 drinking water sources
And a total of 7,741 Water Systems (7,543 Public Water Systems)
Access: <http://www.cdph.ca.gov/certlic/drinkingwater/Pages/DWSAP.aspx>

8. State of California Department of Water Resources
Division of Planning and Local Assistance
Integrated Water Resources Information System (IWRIS)
IWRIS went live on May 2, 2008

Access Groundwater Management Plans and bulletin 118 groundwater basin descriptions.
User interface contains twenty-one Map Tools and uses standard buttons in GIS.
Access: <http://www.water.ca.gov/iwris/>

South San Joaquin Irrigation District continues to recommend that the Groundwater regulations should be excluded from the Long-term Irrigated Lands Regulatory program. The Regional Board has not provided any indication that they have attempted to follow through with their promises as mentioned above. There is no rational reason to implement another groundwater monitoring program in the Central Valley, without complete disclosure of the existing ground water monitoring programs listed above.

The District believes that through full disclosure of the existing programs the regional Board will have a baseline for each Groundwater basin / Watershed that will enable them to determine whether a problem is new or existing naturally.

The ultimate goal of this program should be to define any source that influences water quality.

If you have any questions or concerns regarding this document, please contact me at (209)-993-7971 or e-mail at jima@ssjid.com.

Sincerely,



Jim Atherstone
Environmental Compliance & Safety Officer
South San Joaquin Irrigation District

[Electronically submitted to: awlaputz@waterboards.ca.gov]