California League of Food Processors

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Comments Regarding:
Draft Central Valley Salinity Project Economic Impact Report
March 26, 2008

The California League of Food Processors has reviewed the draft Central Valley Salinity Project Economic Impact Report and has the following general comments:

1. First and foremost, Tables 3.1.2 through 3.1.9 are all misleading. These tables attribute all of the annual salt loading in the central valley region to various industrial, agricultural, and municipal sources. However, this attribution method ignores the fact that across most of the Central Valley the source water for these sectors has elevated, and in numerous instances increasing, levels of salinity. It is CLFP's understanding that the major source of salt loading in the Valley is the importation of water into the region. Households, farms, and industrial facilities have essentially no control over the salinity of the water delivered to them. The Table below lists the supply water characteristics for several locations in the Central Valley. In these cases (and many others not listed) the user of the water may add little, or no, salt to the intake water and still discharge wastewater that is relatively saline.

Supply Water Characteristics of Selected Locations Near Food Processing Plants

Location	Electrical Conductivity (uS/cm)
Hilmar	982
Volta	1,200
Ripon	1,051
Gustine	1,750
Los Banos	1,842

Source: Hilmar SEP study, data from individual food processor

The Economic Impact Report should give a more balanced perspective of this issue by providing an overview of the movement of salt into the Central Valley, and what portion of annual salt load can be attributed to imported water and other natural sources. CLFP will take significant issue with this report unless this information is incorporated in the final version.

2. The draft salt load table released by the State Water Board last year (see enclosure) indicated that the entire industrial sector generated 65,564 tons of salt in 2005, equivalent to less than 1 percent of the total salt discharge for the entire Central Valley. However, the February 29, 2008 draft report indicates that the total industrial contribution was 282,246 tons in 2005, a more than four-fold increase from the previous estimate. The revised numbers indicate that the industrial sector accounted for 12.6 percent of the salt load in 2005 rather than the previous 1 percent estimate. What factors account for this major revision in the estimate?

   In the February, 2008 draft report, the total industrial salt contribution is estimated to increase from 282,246 tons in 2005 to 624,315 tons in 2030, an increase of 121 percent. This equates to an annual average growth rate of 13,683 tons of salt per year. Even if the number of industrial facilities doubled by 2030, this would still represent a very robust growth in water use and salt emissions. CLFP has a number of questions about the projections:

   - What accounts for this enormous growth in estimated industrial salt load? The total population of the Central Valley is projected to increase from 30 to 40 percent by 2030 (and your projected municipal salt loading growth tracks that trend), but you project industrial salt discharges to increase over 120 percent in the same period. Why would industrial salt discharges grow at a rate 3 – 4 times faster than municipal discharges? What types of industries or firms will be generating these enormous salt discharges?
   - If industrial salt loading is projected to increase by 121 percent, are you assuming a commensurate increase in water consumption by industry? The data in Table 3.3.2 is based on water use in the Modesto and Turlock Irrigation Districts (San Joaquin Basin) and is presented as an example of Valley-wide trends. However, in that example total industrial water use is projected to increase by just 2.4 percent between 2007 and 2030. *How could industrial salt loadings in the San Joaquin Basin increase by 79 percent (Table 3.1.9) if total industrial water use in that basin increased by just a few percent?* Also, if the Modesto/Turlock data is representative of the Valley, why does industrial water use account for 10.4 percent of total water usage in that example (page 56, Section 3.3.3), but account for less than 1 percent for the entire San Joaquin Basin (Table 3.1.1)?
   - How much of the projected increase in total industrial salt loading can be attributed to higher salinity levels in the source water? Could it be that most of what you are tracking is water usage rather than on-site salt additions?
   - Given the Central Valley Regional Board's intense focus on salinity with respect to WDR and NPDES permit conditions, how likely is it that current industrial dischargers will be able to expand their salt discharges, or that new dischargers will be allowed to discharge significant amounts of salt?

3. Tomatoes, peaches, strawberries, spinach, carrots, and apricots collectively account for a very large portion of the total annual tonnage of processed fruits and vegetables. All of these crops are considered to be sensitive or moderately sensitive to salinity. Reduced long-term production of these crops due to increasing soil salinity and higher farm gate prices will directly impact the profitability and viability of the food processing sector. These added costs should be quantified, or at least noted, in Chapter 3.4 regarding the food processing sector.

4. There seems to be some discrepancies between Table 3.1.9 and Figure 5.1.3. Table 3.1.9 indicates that municipal and commercial sources will account for 1.99 million tons of salt in 2030 for the three basins combined. However, Figure 5.1.5 seems to indicate that the municipal and commercial total for 2030 will be less than 1.2 million tons. Table 3.1.9 shows the 2030 basin-wide salt total for irrigated crops to be 500,000 tons, but Figure 5.1.3 indicates the total to be over 800,000 tons. Are we misreading Figure 5.1.3 or is there a discrepancy in the data?

5. Table 3.4.8 is rather confusing. Some text explaining the results would be helpful.

6. In the text and tables you seem to use the terms "residential", "domestic", and "municipal" interchangeably. It might be preferable to use one term for that sector to avoid confusion.

7. In the draft report you estimate that food processors (fruit & vegetable and animal processors combined) will generate a total of 134,171 tons of salt in 2030 (Table 3.1.9, totals for all three basins). You also estimate that crop processors and animal processors will incur a combined $151 million in annual salinity costs in 2030 [Table 5.1.1]. Those costs equate to <u>$1,125 per ton of salt generated</u> in 2030. If you perform the same calculations for the other sectors you obtain the following results:
   <u>CAFOS</u>: $257 per ton of salt generated
   <u>Irrigated Agriculture</u>: $369 per ton of salt generated
   <u>Municipal & Industrial</u> (including wine): $18 per ton of salt generated

   Based on your projections food processors will incur costs <u>many times higher</u> per ton of salt generated than any other sector of the economy. This is a very noteworthy point and CLFP hopes that it will be highlighted in the final report.

8. To further amplify the previous point it should also be noted that the food processing industry's share of the annual salt load is projected to *decrease* from 2.08 percent of the total in 2005 to 2.06 percent of the total in 2030 (Table 3.1.9). Winery discharges are also projected to decrease.

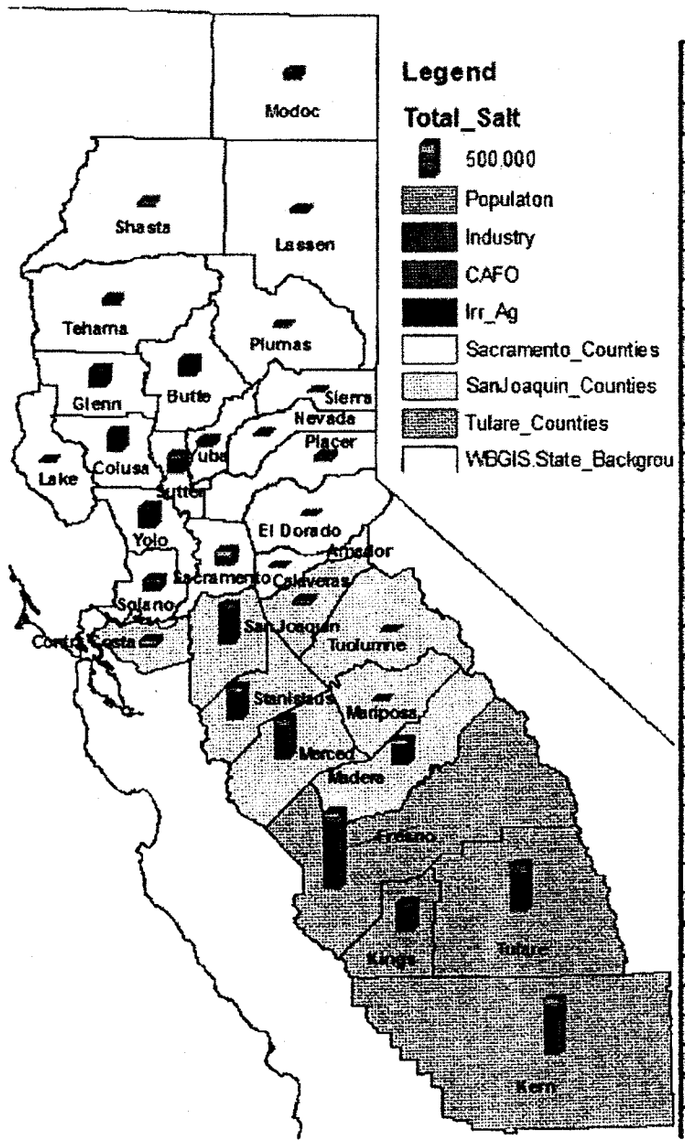
9. Many of the tables in the report lack units of measure, dates, and source citations.

10. The non-market survey results regarding hunting, boating, and wildlife viewing seem confusing. If a lake or reservoir becomes more saline will people cease to use it and drive further to use other water bodies to jet ski, water ski, or go boating? Will salinity levels, park entry fees, boat slip rental prices, travel distance, or gasoline prices be most likely to determine where people go to enjoy water sports? What is the real significance of the number of hunters who shot squirrels or coyotes? Will rising salinity levels really deny them of this pleasure? If some farm land is no longer used to grow crops due to high levels of salinity does that mean it will also be abandoned by wildlife? Do coyotes generally avoid unused farm land and instead frequent intensely farmed tomato or lettuce fields? Could changing crops patterns create more habitat for some wildlife? CLFP believes these issues require further analysis before any definitive statements can be made.

11. The results of the non-market survey indicate that about 30 percent of respondents indicated that they are willing to pay to fund a salinity management plan, and the average amount that they are willing to pay is $5.37 per month. If these results are representative of the entire Central Valley than sufficient funds could easily be generated by the residential sector to fund the salinity management plan and other water quality projects. CLFP believes that the following findings are quite significant and should be highlighted in the report summary:

    - The non-market survey respondents expressed concern for protecting agriculture and the environment.
    - Residential salt loading is substantial and projected to increase rapidly
    - The residential sector is projected to bear only a very small fraction of the annual salinity costs in 2030.
    - A significant percentage of survey respondents indicated that they are willing to pay for a salinity management plan.
    - The average amount they are willing to pay could, extrapolated across the region, provide the money to solve this dilemma.

CLFP looks forward to your response to these points and to the publication of the final report.



Total Salt Load (tons/year)

County	Basin	Population	Industry	CAFO	Irrigated Agriculture	Totals
Amador	SAC	2,404	104	86	11,999	14,592
Butte	SAC	13,638	926	597	225,946	241,107
Colusa	SAC	1,373	264	12	295,055	296,703
El Dorado	SAC	11,174	1,118	31	6,012	18,336
Glenn	SAC	1,808	335	3,767	236,488	242,398
Lake	SAC	4,020	0	17	23,750	27,787
Lassen	SAC	2,275	0	29	62,818	65,122
Modoc	SAC	608	0	40	131,238	131,886
Nevada	SAC	6,239	462	46	6,797	13,544
Placer	SAC	20,294	3,468	71	36,828	60,661
Plumas	SAC	1,321	132	8	16,913	18,375
Sacramento	SAC	87,981	7,468	4,353	126,732	226,535
Shasta	SAC	11,345	690	168	46,685	58,888
Sierra	SAC	218	0	0	12,311	12,529
Solano	SAC	26,568	5,026	1,091	126,330	159,016
Sutter	SAC	5,874	665	14	252,156	258,709
Tehama	SAC	3,863	559	1,201	100,265	105,889
Yolo	SAC	12,132	1,483	495	302,976	317,085
Yuba	SAC	4,424	305	745	94,837	100,312
Basin Totals		217,559	23,006	12,772	2,116,136	2,369,473
Calaveras	SJ	54,333	0	111	6,776	61,219
Contra Costa	SJ	35,429	9,637	19	33,749	78,833
Madera	SJ	27,183	924	11,486	325,218	364,811
Mariposa	SJ	13,110	0	113	1,580	14,803
Merced	SJ	7,752	2,288	52,197	531,577	593,814
San Joaquin	SJ	2,983	5,424	24,577	533,252	566,235
Stanislaus	SJ	2,399	6,052	30,613	411,533	450,598
Tuolumne	SJ	951	176	461	3,832	5,421
Basin Totals		144,141	24,502	122,576	1,847,516	2,143,735
Fresno	TULARE	67,115	7,334	50,213	1,003,802	1,128,965
Kern	TULARE	58,640	4,580	20,550	741,403	825,173
Kings	TULARE	31,381	1,549	30,179	371,793	434,902
Tulare	TULARE	11,073	4,593	94,537	595,906	706,109
Basin Totals		168,210	18,057	195,980	2,712,903	3,095,149
Region Totals		529,910	65,564	336,328	6,676,555	7,608,357

From: "Rob Neenan" <Rob@clfp.com>
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Date: 3/11/2008 9:33:31 AM
Subject: Central Valley Salinity Policy Group---Salinity Economic Impact Analysis Draft Report

Richard & Gerry:
I would like to thank you for your informative presentation yesterday. However, a statement that you made at the end of your presentation caused me to reflect further on your findings. You implied that, based on your analysis, that the food processing/industrial/municipal sectors will be major contributors to salinity in 2030 but will not bear the brunt of the costs. I would suggest that you revisit your data.

In the draft report you estimate that food processors (fruit & vegetable and animal processors combined) will generate a total of 134,171 tons of salt in 2030 [Table 3.1.9, totals for all three basins, which I note equates to about 600 tons of salt per facility per year]. You also estimate that crop processors and animal processors will incur a combined $151 million in annual salinity costs in 2030 [Table 5.1.1]. Those costs equate to $1,125.43 per ton of salt generated. If you perform the same calculations for the other sectors you obtain the following results:

CAFOS: $257.44 per ton of salt generated
Irrigated ag: $369.40 per ton of salt generated
Municipal & Industrial (including wine--it's not clear to me why wineries were not included in food processing in Table 3.1.9): $17.84 per ton of salt generated

Based on your projections food processors will incur costs 3 - 18 times higher per ton of salt generated than any other sector of the economy. So, you have proven the point that CLFP has been making for years. Food processors have borne, and will continue to bear, a disproportionate share of the costs and regulatory scrutiny with respect to salinity. CLFP appreciates that you have clearly documented this discrepancy and we hope that it will be clearly noted in the final report.

I would like to raise one more issue. The draft salt load table released last year indicated that the entire industrial sector (including food processing) currently generates 65,564 tons of salt per year, equivalent to less than 1 percent of the total for the entire SJ Valley. In your draft report, that number has now grown to 282,246 tons [Table 3.1.7]. What accounts for this enormous [more than four-fold] growth in estimated salt load? I would like to learn more about how this was estimated and why the numbers vary so significantly.

CLFP looks forward to further discussion of your report.

Rob Neenan

Director of Regulatory Affairs

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