

G. Fred Lee & Associates

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May 27, 2003

William Jennings
DeltaKeeper
3536 Rainier Avenue
Stockton, CA 95204

Dear Bill:

Per your request I have reviewed the Five Mile Slough Aquatic Weed Control Program CEQA Initial Study and Proposed Mitigated Negative Declaration, prepared for the San Joaquin Area Flood Control Agency by Kleinschmidt Associates and the Huffman-Broadway Group, Inc., dated May 2003.

Overall Assessment

I find that this document does not support a negative declaration. The information presented on the potential impacts of the various herbicides that are proposed for use in this project, as well as the proposed approach for their application and mitigation, raises important issues about adverse impacts to aquatic life in Five Mile Slough and other waters that are associated with this waterbody.

The herbicides that are proposed to be used either alone or in combination with other chemicals have the potential to cause toxicity to aquatic life. Since the US EPA Office of Pesticide Programs and the California Department of Pesticide Regulation do not evaluate this situation as part of permitting the use of pesticides (herbicides), these issues need to be reliably discussed in an EIR, where information is provided on the approach that will be used to evaluate this situation and the mitigation measures that will be used to control it.

Qualifications

After obtaining my PhD in environmental engineering and environmental sciences at Harvard University in 1960, I taught and conducted graduate-level research at several major universities for a period of 30 years. .Since retirement from university graduate-level teaching and research in 1989, I expanded my part-time consulting with governmental agencies, industrial and public groups into a full-time activity. My assessment of the need for an EIR for the SJAFCA aquatic weed control project in Five Mile Slough is based on 40-plus years of water quality research in which I have conducted over \$6 million of studies and published over 900 papers and reports on these studies. Additional information on my qualifications to comment on these issues is on my website, www.gfredlee.com.

I have some familiarity with the city of Stockton waterbodies through my work in developing a report,

Lee, G. F. and Jones-Lee, A., "City of Stockton Mosher Slough and Five Mile Slough Diazinon and Chlorpyrifos Aquatic Life Toxicity Management Report," California Water Institute Report TP 02-08 to the California State Water Resources Control Board/Central Valley Regional Water Quality Control Board, 44 pp, California State University Fresno, Fresno, CA, December (2002), <http://www.gfredlee.com/StockDiaTMDL12-14-02.pdf>,

that was submitted to the Central Valley Regional Water Quality Control Board on aquatic life toxicity in these waterbodies, associated with stormwater runoff events. One of the waterbodies addressed in this report is Five Mile Slough. While we reported that, based on past studies, the toxicity in Five Mile Slough (and, for that matter, the other waterbodies) was associated with stormwater runoff events, this does not mean that the addition of herbicides to this waterbody would not cause toxicity in the water column. Further, no studies have been conducted on toxicity in sediments, with or without the addition of herbicides or other chemicals that are added to the waterbody from local sources along the waterbody.

One of the topics that I have focused on in my career is aquatic life toxicity, including studies on herbicides used for aquatic weed control. While the herbicides that are proposed to be used in this aquatic weed control project are of lower toxicity than some other chemicals, they are toxic to aquatic life at certain concentrations. Further, there is need to evaluate the potential for additive and synergistic toxicity with other chemicals to aquatic life in the water column and the sediments of the waterbody being treated. The EIR needs to discuss these issues and present the details on the approach that the SJAFCA plans to follow in determining whether any of these problems are occurring during the initial phases and during the course of the project.

If there are questions on these comments please contact me.

A handwritten signature in black ink, appearing to read "G. Fred Lee". The signature is written in a cursive, flowing style.

G. Fred Lee, PhD, DEE