

Westlands Water District

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October 27, 1998

Senate Select Committee on CALFED
The Honorable Maurice Johannessen, Chair
California State Senate
PO Box 942848
Sacramento, CA 94248-0001

Dear Senator Johannessen:

Westlands Water District submits the following comments on the written testimony of Dr. Peter Gleick, director of the Pacific Institute for Studies in Development, Environment and Security, presented to the Senate Select Committee on CALFED. Our comments specifically address the report, "Review of the CALFED Water-Use Efficiency Component Technical Appendix."

In both the report and written testimony, the Pacific Institute makes broad, sweeping statements about the potential for improving efficiencies in agricultural irrigation. These representations ignore the advances already made and fail to recognize the practical limitations of additional improvements. We acknowledge there are opportunities for marginal improvements to agricultural water use efficiency; however, the Pacific Institute fails to acknowledge those areas where tremendous gains have been made and conveniently overlooks the technological advancements used daily by farmers and water managers.

The Committee members should not misinterpret this misleading data. Farmers have invested substantial time and financial resources to maximize irrigation efficiencies. Investments of \$1,000 per acre for on-farm irrigation system improvements are quite common as farmers strive to deal with unreliable and high cost surface water supplies.

The Report states, "We are nowhere near the limits of what is technically feasible, economically justifiable or socially acceptable" in applying water-use efficiency policies and technologies. Dr. Gleick states, without any evidence, that "substantial improvements are possible for all sectors." We disagree. Westlands farmers have traditionally pushed the limits of technical feasibility, developing improved methods on crops not easily irrigated with state-of-the-art technology. One such example is the use of buried drip-tape to irrigate row crops of tomatoes and cotton. These programs have promise; however, they also result in added costs, salt management problems, and reduced groundwater recharge.

The Institute's primary, technically feasible proposal is aimed at adopting micro-irrigation and linear-move irrigation systems to achieve high irrigation efficiency without under-irrigation on all crops. This proposal is factually flawed by failing to recognize that these specific irrigation methods will not work on every crop in every situation. Irrigation methodology is a function of crop, soil types, farm management conditions, and cost-benefit factors.

Dr. Gleick cites Westlands as "still using furrow flooding or a combination of furrow with pre-irrigation with sprinklers on 76 percent of irrigated acreage. Precision drip irrigation is used on less than 10 percent." This statement implies that furrow irrigation is inefficient. Westlands, with a District-wide 20-year seasonal application efficiency of 83 percent, is recognized by the State of California, United States Department of Interior, and numerous foreign countries as a leader in on-farm water management. Sprinklers have been documented to provide a significant improvement in efficiency. Likewise, a well-managed furrow system can be just as efficient as sprinklers. The fine textured soils in the trough of the Valley are well-suited to properly managed furrow irrigation and can have high efficiencies. In addition, furrow irrigation is necessary for certain crops, like garlic and tomatoes, which can't be irrigated with an over-head system at certain stages in their crop development.

The shift to higher-value crops and the rising costs of water have prompted Westlands farmers strive for increased irrigation efficiencies. Currently, two-thirds of the acreage in Westlands is irrigated with sprinklers, drip/micro and a combination of sprinklers/furrow irrigation systems. In 1985, only 37 percent of the District's acreage was irrigated with these highly efficient systems. The most popular irrigation practice then was furrow systems with 60 percent of the land under furrow irrigation. As the crops change and production costs increase, farmers continue to look for ways to increase efficiency in all cultural practices, especially irrigation and water use.

In response to the CALFED emphasis on incentive-based actions over regulatory actions, Dr. Gleick cites unspecified "studies to show that certain government roles cannot be devoted to local or private organizations." Regulatory action is held up as a more efficient methodology than local actions for implementing water-use efficiency effectiveness. Again, we disagree. Westlands did not become an international leader in water management because of water-use regulations; we did so because it made good economic sense to our farmers. It would appear Dr. Gleick believes that, with sufficient information, the most efficient management of water in California would be for centralized control at the State or Federal level. Because water management is so specific to a particular area or region in California, centralized control at the State or Federal level would not be effective. The districts or water agencies within a specific

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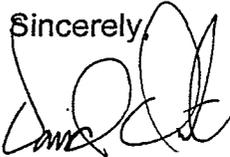
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region are the best ones to identify and implement those water management techniques and programs that are proven to work best in their region. Few farmers will continue a practice if there is a more profitable or less-expensive alternative available.

In closing, the Institute's analysis is simply rhetorical, incomplete and misleading. Further reliance on this report could result in inaccurate conclusions when determining California's water management future. We have always supported efficient on-farm water management and will continue to pursue those opportunities that are economically feasible and those that support strong stewardship of our limited resources.

Sincerely,



David L. Orth
General Manager