

**TESTIMONY OF
GARY BOBKER, PROGRAM DIRECTOR, THE BAY INSTITUTE,
BEFORE THE U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON RESOURCES, SUBCOMMITTEE ON WATER AND
POWER, OVERSIGHT HEARING ON
IMPLEMENTATION OF THE WESTSIDE REGIONAL DRAINAGE PLAN
AS A WAY TO IMPROVE SAN JOAQUIN WATER QUALITY**

July 28, 2005

Washington D.C.

Mr. Chairman, members of the subcommittee:

My name is Gary Bobker. I am the program director at the Bay Institute, a non-profit conservation organization that works to protect and restore the ecosystems of San Francisco Bay and its watershed. TBI has been active since the mid-1980s in issues involving the management of agricultural subsurface drainage in the Westside San Joaquin Valley. Personally, I helped negotiate the terms of the Grasslands Bypass Agreement and was involved in the effort to secure adequate wastewater discharge requirements for the disposal of drainwaters to evaporation ponds in the Tulare Basin.

Thank you for the opportunity to discuss the challenge of solving the Westside San Joaquin Valley's perennial salt and selenium management problems. For too long after the discovery of widespread and severe wildlife contamination at Kesterson, inadequate drainage management continued to cause waterbird deaths and deformities at evaporation ponds and degraded water quality in the San Joaquin River. For too long, a comprehensive approach to transforming drainage management was impeded by local efforts to revive the San Luis Drain or oppose land retirement initiatives, despite successful initiatives by some parties, such as the Grasslands drainers in implementing the Grasslands Bypass Agreement, to significantly reduce drainage impacts.

In many respects, the Westside Regional Drainage Plan represents an important step forward by local interests themselves towards finally implementing a permanent, economically viable, environmentally responsible, in-valley solution.

First and foremost, the Westside Plan would help achieve the all-important goal of ending discharge of contaminated agricultural drainwaters to the San Joaquin River and the Bay-Delta estuary. These downstream aquatic ecosystems are highly sensitive to – and have been experiencing high levels of – contamination by persistent, bioaccumulative trace elements like selenium. Water quality objectives for selenium in the San Joaquin River have been routinely violated for years, and elevated levels are commonly found in biota throughout San Francisco Bay. Completing the San Luis Drain to the Delta and increasing selenium and other loads to the Bay would have catastrophic effects on the estuarine food web, in an ecosystem where pelagic fish species and food web organisms are already experiencing severe population declines.

Second, the Westside Plan would implement many actions that are consistent with the recommendations contained in our 2003 *Drainage without a Drain* report, issued by a number of conservation groups and downstream water interests, to implement the “Four R’s”: Reduce, Reuse, Retire, and Reclaim. These actions are also consistent with the findings of the San Joaquin Valley Drainage Program’s 1990 Management Plan for Agricultural Subsurface Drainage and Related Problem, also known as the Rainbow Report.

Reduce: An obvious truth is that the less agricultural drainage is created, the easier it is to manage. Installing drip irrigation systems, lining canals, reducing pre-season irrigation, and implementing other source control measures are helping the Grasslands Area meet its load reduction requirements, and could dramatically reduce the volume of drainage created throughout the rest of the federal drainage service area. The Westside Plan proposes to implement such source control measures on a regional basis.

Reuse: Keeping subsurface agricultural drainage from reaching sensitive aquatic or wildlife environments does not mean keeping it out of controlled agricultural environments. Applying drainwater to salt-tolerant crops, recycling higher quality water for use on salt-sensitive crops, using drainage for dust control, and other reuse practices could solve as much of the drainage problem as source control. Again, the Westside Plan would pursue re-use projects that could significantly reduce the volume of drainage generated throughout the region.

Reuse facilities are an important part of the drainage solution. If improperly operated, however, the potential for ponding, food web creation, offsite migration, and other opportunities for biological uptake can very quickly make these facilities dangerous to wildlife. Conservative design, strict oversight, dedicated financial reserves for clean-up and mitigation, and independent monitoring systems are key components for making reuse a safe and efficient part of the solution.

Retire: Some lands with elevated soil and shallow groundwater selenium levels are simply too severely impaired to continue to irrigate, because they disproportionately contribute to water quality degradation in the underlying aquifer and in downstream areas. It is a measure of the progress made in developing a common understanding of the Westside drainage problem that local interests now recognize that large-scale land retirement is an integral part of the solution.

In our view, however, more work needs to be done on the Westside Plan's proposed land retirement element. To begin with, between 300,000 and 400,000 acres will need to be retired in the federal drainage service area to prevent continuing water quality degradation from the most severely drainage-impaired lands. The benefits created by retiring all the severely impacted lands is clearly shown in the draft San Luis Drainage Feature Re-evaluation Environmental Impact Statement, where the most comprehensive land retirement option (the In-Valley Drainage Impaired Area Land Retirement alternative) is also the most cost-effective on a regional and national basis, according to the Bureau of Reclamation's own National Economic Development analysis.

In addition, it is unclear how retired lands will be managed, and who will be legally responsible for that management. Permanent cessation of irrigated agriculture or any other activities that may create water quality impacts must be assured, and the United States relieved of any ongoing liability for management of these lands.

Finally, the disposition of water supplies made available by retiring drainage-impaired lands needs to reflect the broader obligations of the water right holder, in this case, the Bureau of Reclamation. The Bureau's contractual commitments to deliver water to its customers on the Westside must be weighed against its other statutory and regulatory requirements to comply with state water quality

standards, federal and state endangered species protections, and Congressional directives to provide water for fish, wildlife and habitat restoration, among other things. The unfortunate fact is that the Bureau does not fully comply with all these obligations, and some or all of the water supply may be needed in order to come into compliance.

Reclaim: Together, source control, reuse, and land retirement can reduce the volume of contaminated agricultural drainage by over 90%. Treatment technologies are available to reclaim solid salts from the last increment of drainwater, and pilot projects to apply these technologies have begun to be implemented in the Grasslands Area. A number of commercial uses for reclaimed salts exist, and developing a viable market for these salts is the final remaining step in achieving an environmentally and economically efficient solution to the drainage problem. The Westside Plan would build on these early treatment investments and help develop a viable reclaimed salt market.

It is important to emphasize that reclaimed salts are hazardous substances. Any salts that are not marketed must be tightly controlled in order to prevent site and offsite contamination and comply with hazardous waste disposal regulations.

There is a fifth R in play, in addition to the four R's identified in our report: Relief from further drainage service. We understand that some parties may propose to absolve the federal government of any future obligation to provide drainage service in return for helping to underwrite some of the programs contained in the Westside Plan. We look forward to reviewing the details of any such proposal. Certainly such a proposal must also address the specific performance assurances regarding monitoring, liability for managing retired lands, and other important components of the Plan that the federal government should receive from the Westside drainers.

In any case, relief from drainage service should not be confused or conflated with relief from having to comply with water quality regulations. The State of California is in the process of developing new, more protective load limitations for salt and other drainage constituents that are discharged to the San Joaquin River. Pursuing the four R's embodied in the *Drainage without a drain* report and the Westside Plan will ensure that upstream parties will be able to comply with downstream water quality protections. Only those who are not serious about implementing such programs need fear these water quality requirements.

To repeat, implementing the source control, drainage reuse, land retirement, and salt disposal/reclamation measures contained in our report and the Westside Plan would preclude the need for any significant drainage volume to be disposed of. Failing to do so, on the other hand, would create large-scale environmental effects – not just in the sensitive coastal and estuarine aquatic environments affected by ocean or Delta disposal options, but in the San Joaquin Valley itself, where insufficient drainage volume reduction would result in the creation of thousands of acres of new evaporation ponds with elevated selenium levels, which would contaminate wintering and resident waterbirds and require mitigation on an unprecedented scale. This is a future, which can and should be avoided. The Westside Plan, our 2003 report, and the recent draft San Luis Drainage Feature Re-evaluation EIS conclusively demonstrate that an in-valley approach that precludes the need for disposal to ponds, the Delta or the ocean is the best option for solving the drainage problem from both an environmental and economic perspective.

Again, thank you for the opportunity to come before the subcommittee.

Attachment: *Drainage without a drain*