PACIFIC INSTITUTE

Report wrongly excuses farms from helping solve water woes

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The latest report on California's water crisis has recently been released by the Public Policy Institute of California, and while there are good things in this work, it has two fundamental flaws that cannot be ignored: It completely lets the agricultural sector off the hook for its part in causing – and ultimately helping to solve – our water problems, and it lays all the pressure and responsibility on urban water users and the environment.

The report includes a thorough review of California's long history with water management based on the fine work by many earlier authors, a review of the nature of the water problems we face, a strong emphasis on the risks of flooding, support for a public goods charge on water, and important suggestions for institutional reform of our complex water agencies and their responsibilities. But while the study edges to the brink of identifying key steps to solving those problems, it ultimately steps back from producing the explicit recommendations needed.

The report's biggest blind spot is agriculture, the state's largest water user. The authors discount the vast potential for improving agricultural water-use efficiency because they misunderstand how it works in the real world, they overestimate its costs, and they misconstrue, misrepresent or minimize the benefits of these improvements. Why do they ignore this potential? Because they make the simplistic and false assumption, promulgated by some in the agricultural industry, that all excessive farm water use is already recaptured and reused.

This conclusion is at odds with history, science, field studies and the actual experience of California farmers. In reality, abundant water is lost to unproductive evaporation or to other sinks where it is not recaptured. Other benefits accrue from agricultural efficiency improvements as well, including better water quality, improvements in the timing of flows in important stretches of California's rivers, reductions in energy demands and a savings of real water. Every one of these advantages would contribute to solving problems in the Delta and elsewhere. Efficiency improvements must therefore be central to any portfolio of recommendations for a new California water policy.

The exact savings potential is uncertain and varies from field to field. It depends on water prices, technology, financial barriers, soil conditions, return flows, recharge rates, downstream water users and many other factors. But as numerous studies have clearly stated, the potential for agricultural water savings is not zero. In fact, all available evidence suggests that it can be as large as 10 percent to 15 percent or more of current use – a vast amount of water – and certainly cannot be ignored.

Indeed, the authors contradict themselves when they grudgingly observe that farmers are already regularly improving efficiency: "Gross agricultural water use appears to have been falling since the early 1980s, due to irrigation efficiency improvements and retirement of some farmland with urbanization and accumulating soil salinity. Despite these declines in farm water use, crop production and the value of farm output continue to rise owing to productivity improvements and shifts to higher-value crops." We simply cannot say that the full potential of agricultural water conservation and efficiency has been achieved.

Moreover, the report confuses the technical potential to save water with the policy choice about what to do with the savings. They observe that some efficiency improvements are reused immediately by farmers to grow more food or irrigate more land and thus they argue there is no real savings. But that is a policy choice. If the saved water goes to grow more food or irrigate more lands, no water may be freed up for other uses, but the savings and benefits are still real. And policies could also be put in place to permit these savings to be transferred to other users, left in streams for ecosystems, or stored in groundwater for later use – all additional benefits from efficiency. Finding more innovative ways to share water, to save water and to store water is key to the future of our state and critical to the health of both ecosystems and agriculture.

If there was no way to improve agricultural water-use efficiency, California and the rest of the world would be in a very difficult spot. Given natural limits on water availability, land would have to be fallowed or crop choices would have to change. In the long run, these options may also have to be considered, but voluntary efficiency improvements give farmers much more flexibility and choice.

As the Pacific Institute's "agricultural success stories" have shown, California farmers are demonstrating all the time the potential to save water and increase productivity in response to water availability constraints, drought, new technology, prices and the shared experiences of their neighbors and other farmers. By ignoring the real potential for efficiency improvements, the PPIC report is forced to put all the focus for solutions on the urban sector and the environment. That is unnecessary and leads to bad policy recommendations, or worse, will lead to the failure to fix our problems at all.

Solving California's water problems will not be easy, and it will not happen by ignoring the most serious pieces of the puzzle and the sectors with the greatest potential to help.