

Media Release

CONTACT: Nancy Ross, nross@pacinst.org, 510.251.1600 x106

WATER EFFICIENCY AND CONSERVATION CAN SAVE ONE MILLION ACRE FEET OF WATER QUICKLY AND COST-EFFECTIVELY; 6-8 MILLION ACRE FEET BY 2020

Peter Gleick to Testify at House Water Hearing in Los Angeles

January 25, 2010 – Oakland, Calif. – Notwithstanding the recent winter rains the state has received, California continues to face serious unresolved water challenges. According to Dr. Peter Gleick, president of the <u>Pacific Institute</u>, effective solutions in conservation and efficiency can save one million acre feet of water quickly and cost-effectively, and 6-8 million acre feet by 2020.

"Improving the efficiency of our water use is the cheapest, easiest, fastest, and least destructive way to meet California's current and future water supply needs," said Gleick, who is a member of the U.S. National Academy of Sciences, a MacArthur Fellow, and one of the world's leading authorities on water. Gleick has been called for expert testimony on Monday, January 25 in Los Angeles before the U.S. House of Representatives Subcommittee on Water and Power. The hearing, called by Rep. Grace Napolitano (D-Norwalk), is intended to help California handle its water problems and determine how the federal government can assist.

According to Gleick, Governor Schwarzenegger's recent call for a 20 percent reduction in water use by 2020 is based on sound science and economics, even if the policies to achieve such savings are not yet in place. Pacific Institute reports on <u>urban</u> and <u>agricultural</u> water efficiency provide a comprehensive statewide analysis that finds that existing, cost-effective technologies and policies can reduce current state demand for water by 6-8 million acre-feet, or around 20 percent. These findings have been adopted by the California Department of Water Resources in the California Water Plan. And the Pacific Institute is preparing a new assessment of how to save **one million acre-feet of water** quickly and cost effectively, split 60/40 between agricultural and urban users.

"There is no 'silver bullet' solution to California's water problems," said Gleick. "Everyone involved in state water debates will acknowledge the need for diverse answers or a 'portfolio' of solutions – but current proposals for meeting water challenges are inadequate and largely misdirected."

Gleick will testify that California must do the most effective things first, and that means expanding thinking about supply away from costly and ineffective new dams and toward the tremendous potential for expanding water supplies through non-traditional approaches of water recycling and reuse, smart desalination, rainwater harvesting, and better conjunctive use of California's surface and groundwater.

An advance look at some of the new million-acre-feet savings analysis shows:

• 400,000 acre-feet of water can be quickly conserved by urban users by replacing only some of the many remaining inefficient toilets, showerheads, restaurant spray-rinse nozzles, washing machines. These savings would require an investment of under \$2 billion and over the life of these fixtures, the energy, water, and wastewater savings will far exceed the initial investment.

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• Another 600,000 acre-feet of water can be saved by applying smart irrigation scheduling to 20% of the state's vegetable and orchard acreage, practicing regulated deficit irrigation on 20% of current almond and pistachio acreage in the Sacramento Valley, and converting 20% of Central Valley vegetables, and 10% of orchards and vineyards, to drip and sprinklers. These changes would save water at a cost of around \$100 per acre-foot.

The Institute's analysis will show that through conservation and efficiency, far more water could be saved at far less cost than any proposed new supply option. For example, the proposed Temperance Flat dam would only provide between 100,000 and 200,000 acre-feet of water, and even these figures are disputed, at a cost far exceeding \$3 billion (or over \$900 per acre-foot).

Traditional water planning assumed that as populations and the economy grow, water use must also grow and so new infrastructure must be built. But the latest information from the U.S. Geological Survey shows that total water use in 2005 for the United States is now lower than it was in 1975. Per-capita water use has dropped dramatically over the past three decades, and total water use in California was less in 2001 than it was in 1975, while population increased by 60% and gross state product increased 2.5 times.

"This suggests that we can and in fact we have broken the link between water use, population, and economic growth," said Gleick, "and this has been achieved in large part by improvements in conservation and efficiency. Widespread conservation and efficiency improvements are real savings that are possible in every sector and can be found for much less than the cost of building new supply or expanding our current supply."

Based in Oakland, California, the Pacific Institute is a nonpartisan research institute that works to create a healthier planet and sustainable communities. Through interdisciplinary research and partnering with stakeholders, the Institute produces solutions that advance environmental protection, economic development, and social equity – in California, nationally, and internationally. www.pacinst.org.

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