MEDIA ALERT FROM SPEEDREAD TECHNOLOGIES:

NEW REPORT SHOWS SAVING WATER CUTS ENERGY USE

Water Conservation Could Reduce Air Pollution, Prevent Blackouts

FOR IMMEDIATE RELEASE

CONTACT: Bernard Hasten
SpeedRead Technologies
317/824-4544
bernard@speedreadtech.com

SAN FRANCISCO (August 24, 2004) -- As California's electricity demand sets record highs and the Southwest is parched by drought, a new report shows the hidden connection between two scarce resources, energy and water. The report's authors say that saving water is an untapped way to also save energy and even to keep the lights on when the electric grid is strained during hot summer months.

"Few people realize how much energy we use when we turn on the tap," said Ronnie Cohen, a policy analyst with NRDC (Natural Resources Defense Council) and co-author of the study, "Energy Down the Drain." "Conserving water and improving efficiency, doesn't just save water, it also saves energy, cuts electricity bills, and reduces pollution from power plants."

California's State Water Project (SWP), which transports water from Northern California to Southern California is the state's largest single energy user, consuming 2 to 3 percent of all electricity. It takes tremendous amounts of energy to pump the water 2,000 feet over the Tehachapi Mountains -- the highest water lift of any water system in the world.

But water pumps aren't the only energy consumer. Every step along the way, from source and conveyance to wastewater treatment, requires energy. Yet the report says policymakers rarely consider the energy costs -- and potential savings -- in water supply planning.

"With power shortages and water scarcity a constant threat across the West, it's time to look at water and energy in a new way," said Dr. Gary Wolff a co-author of the report and principal economist and engineer with the Pacific Institute. "But too often, policy makers and water and energy experts ignore the links. The good news is we can reduce our energy use, cut air pollution and create new energy supplies with cost-effective improvements to water efficiency."

"Energy Down the Drain" presents three case studies that detail the important energy implications of water supply decisions. For instance, the San Diego County Water Authority (SDCWA), which currently serves nearly 3 million people, estimates that by 2020 it will need at least an additional 100,000 acre-feet of water per year. (An acre-foot is the volume of water that would cover an acre of land one foot deep.)

The NRDC-Pacific Institute study found that taking additional water from the State Water Project and building a seawater desalination plant would consume the most electricity, while improving water efficiency and conservation efforts could save San Diego 767 million kilowatt hours (kWh) -- enough electricity power 118,000 households for a year.

People in San Diego -- and throughout California -- could also lower their energy bills by conserving and using water more efficiently. "It takes a lot of energy to heat the water for dish washers, clothes washers and showers," said Cohen. "People who have more efficient appliances are going to save on both their water and energy bills."

Urban water use is not the only sector where energy implications have been ignored. Agriculture uses about 80 percent of California's developed water supply. The report's authors say that means that irrigation supply and farming practices may have important consequences for the state power grid.

As an example, the report studied proposals to retire drainage-impaired land on the west side of the San Joaquin Valley. Decades of irrigation have caused toxic salts to build up in the soil, rendering it practically infertile. The study found that taking this land out of production and using the water to help the environment could save enough energy for 18,000 households. However, transferring the water to cities could dramatically increase energy use.

The report lists five key findings:

- Water conservation lowers energy use and energy bills;
- Water recycling is a highly energy efficient water source;
- Retiring agricultural land may increase energy use if the water is transferred to other agricultural or urban uses;
- Retiring agricultural land can save energy if the water dedicated to the environment;
- Diverting water above dams costs power and money.

The report also includes specific recommendations to guide policymakers and potential future legislation. For example, it says that California's Urban Water Management Planning Act should be revised to require water suppliers to consider the energy implications of their water management options. And it recommends retiring drainage-impaired farmland in the San Joaquin Valley and using the water saved to help restore the San Francisco Bay Delta.

The Natural Resources Defense Council is a national, nonprofit organization of scientists, lawyers and environmental specialists dedicated to protecting public health and the environment. Founded in 1970, NRDC has more than 1 million members and e-activists nationwide, served from offices in New York, Washington, Santa Monica and San Francisco.

Based in Oakland, California, the Pacific Institute is an independent, nonpartisan think-tank dedicated to protecting our natural world, encouraging sustainable development, and improving global security.