

JAN, 22, 2007 CALIFORNIA AIR RESOURCES BOARD WORKSHOP:

**CALIFORNIA GLOBAL WARMING SOLUTIONS ACT OF 2006
IMPLEMENTATION PLAN AND SCHEDULE AND DISCRETE EARLY
ACTIONS**

SONOMA COUNTY WATER AGENCY REMARKS

Good afternoon. My name is John McCaull, and I am speaking today on behalf of the Sonoma County Water Agency. Our Agency is a major wholesale water supplier for Sonoma and Marin Counties and also provides sanitation and flood protection services for the County of Sonoma. We are an independent Special District and one of the largest users of electric power in our region with a 10 to 12 MW peak load.

The overall Agency position on AB 32 implementation is that we support strong regulations and benchmarks to set a level playing field and incentives and rewards for "beyond" compliance activities and early actions beyond the mandated emission reduction levels. Our intent and offer of assistance is to find serious ways to advantage those who are willing to move out ahead: like the Sonoma County Water Agency.

Agency staff asked me to bring 4 specific opportunities for early actions to your attention today. Our

1. **WATER REUSE.** The California Energy Commission studies show that 19% of the state's electric power is used for all electricity inputs related to water use, conveyance and treatment. The studies also show that substantially less energy is required to convey recycled water for non-potable uses than is required to convey new source water.

In the San Francisco Bay Region more than 600,000 acre-feet per year of highly treated, reusable water is being discharged to the Bay. Were this water reused to offset other water sources the energy savings could be as much as 420 KWH per acre-foot equivalent to a GHG reduction in the range of 70,000 tons per year.

New Water Board discharge requirements may necessitate reverse osmosis treatment prior to discharge, a highly energy intensive technology. Non-potable reuse could prevent this large increase in GHGs associated with wastewater treatment.

EARLY ACTION: Set firm benchmarks for water reuse that will bring the state to zero discharge by 2050.

2. **WATER CONSERVATION.** Advanced water conservation measures can reduce emissions at an even larger rate than reuse programs. Water that is not pumped, not treated,

not distributed, not heated, not treated again nor discharged saves energy at a rate of up to 4,000 KWH per acre-foot [almost 2 tons of CO2 per acre-foot]. Some water suppliers have not fully implemented the basic conservation standards of the CA Urban Water Conservation Council. Yet there are several very reasonable tier 2 or advanced measures that could take savings well beyond the BMP programs. Even a small, 2%, conservation savings could reduce water related power demand by 380,000 MWH and cut GHG emissions by 150,000 tons.

EARLY ACTION: Set new standards for water conservation that take into account energy savings and GHG emissions reductions. Make sure that state and local facilities deploy advanced conservation technologies. Advanced measures could include incentives to reduce turf landscaping (especially in public facilities), design standards for new construction, retrofitting state facilities and institutions, etc.

3. **RENEWABLE POWER.** Water and wastewater agencies have some of the best opportunities in California to implement renewable power supply projects. These agencies already lead in this area. For example SCWA has solar/photo voltaic projects underway that will supply more than 2 MW of power and has contracted about 6 MW of landfill gas power. Combined these are equivalent to up to 80% of our power load.

Water and wastewater agencies have the capacity to finance construction of renewable projects. They often own land adjacent to facilities that may not be usable for housing or that has limited value as habitat, and they have an obligation to serve the public good, that is, they don't need to make a profit on energy production.

EARLY ACTION: Support new regulations that enable water and waste water agencies to aggregate renewable power and provide it to other public agencies.

4. **CA WATER SUPPLY PLANNING.** Finally, we urge the Air Resources Board to consider weighing in via the State's water supply planning process also known as the Bulletin 160 program administered by the Department of Water Resources. DWR is tasked with building a portfolio of water supply alternatives that assure a clean and reliable water supply for our state. Some of the alternative water sources like desalination or increased delivery in the State Water Project have significant energy demands. Other alternatives like conservation and reuse have significantly less energy demand.

EARLY ACTION: Make sure that energy demand is a factor in selecting preferred alternatives for future state water supply projects.

Thank you for the opportunity to comment. If we can be of any assistance to the Board in this matter please feel free contact us.