

We applaud the Marin Municipal Water District board of directors for postponing the decision to proceed on constructing their \$105 million desalination plant. The district is not ready to begin this project and here's why.

MMWD has not specified the exact impact on power usage the plant would have. The district is already a large user of electricity due to its pumping requirements and a desalination plant would greatly increase the district's power consumption. The hope is alternative energy sources would mitigate the desalination plant's energy usage. However, the alternative energy sources are not legitimate inputs into the cost/benefit analysis of the desalination plant. Wind and food waste for power generation are technologies in development and won't be available as reliable commercial power sources for several years. Marin Clean Energy Authority has just begun, is still seeking seed money and won't be ready to provide reliable energy for several years. Solar power, which is available today, should be installed with or without the desalination plant. Solar panels would reduce the district's overall power usage, but the desalination plant will greatly increase the district's power usage above the savings gained by solar panels.

PG&E is the only viable, commercial source of energy available. Therefore, a conservative cost/benefit analysis of the desalination plant has to be based on PG&E's current rates. One public speaker at the February 11th board meeting astutely argued that PG&E will have to significantly raise their prices in the near future. The prices of oil, natural gas, and coal will increase as the world's global energy demands expand, and the California drought is drying up the PG&E's hydroelectric sources. PG&E has launched public outreach programs and price incentives to encourage reductions in power usage. Now is not the time to launch an energy intensive process to secure water.

Opponents of desalination for months have advocated aggressive water conservation. According to the *Water Supply Opportunities* paper distributed at the February 11th board meeting, MMWD entered into a six-month consulting agreement with Maddaus Water Management beginning December 1, 2008 to analyze four conservation measures beyond those in the district's current water conservation plans. If the four measures don't achieve the savings goal of 1300 AF (acre feet), Maddaus will analyze up to ten additional conservation measures. The MMWD staff's list of recommended additional conservation measures includes several actions the Public has repeatedly advocated, such as: water resistant landscaping, rainwater catchments, greywater usage, rain barrel program, increase

enforcement of water conservation standards, and new baselines for large landscape customers. Maddaus will complete their study in the May to June 2009 time frame. Until the district has firm data on the costs and water savings of these additional conservation measures, the Public won't accept the case for desalination.

The water source for the desalination plant, the San Francisco Bay, is polluted. Recently a two-inch hole in one of the Sausalito-Marín City Sanitary District's pipes poured 750,000 gals of partially treated sewage into the Bay. Last year the Southern Marin Sanitation District had two spills that put nearly a million gallons of sewage into Richardson's Bay. Commercial fishing of the Bay died years ago due to concentration of mercury and other industrial chemicals found in local fish. The source water for the desalination plant is not clean. The Public has raised this point for months.

MMWD might as well follow the lead of Orange County and use its reverse osmosis process to clean sewage water and thus not disturb the ecology of the Bay.

Since the Bay is polluted, why not look to treated sewage water as another source of water, especially for irrigation? Landscaping is 30% of the water usage in Marin, which does not require drinkable water. MMWD could partner with the Marin sanitary districts to distribute their treated wastewater. The North Marin Water District teamed up with the Novato Sanitary District to develop a recycle system to for the StoneTree Golf Course, and they are working with other agencies to expand the use of recycled water through the North Bay Recycled Water Program. The Sonoma County Water Agency in the summer months uses treated wastewater to irrigate pastureland, vineyards and dairies near the sanitation plant in Sonoma. Based on this success, they have initiated a \$35 million project to upgrade the sanitation plant and to lay 34 miles of pipes to pump treated water to Sonoma Valley, the Alexander Valley, Dry Creek and Russian River areas to businesses, schools and farms that can use it. Please note the cost, \$35 million, which is one-third the cost of the proposed desalination plant.

The Public at the MMWD's board meetings has expressed concerns that deserved to be analyzed and resolved. Michelle Barni of the San Quentin Village Association has raised the health issue of consuming desalinated water. She cites a 2005 World Health Organization report that demineralized water may be a causal factor in numerous degenerative diseases. Is she correct? Pharmaceuticals seep into the

Bay via normal sewage flows. Does the reverse osmosis process effectively remove medicines, fertilizers, PCBs and other powerful toxic chemicals? If MMWD's desalination plant is successful, other water districts in the Bay Area will build their own plants. What is the impact on the ecology of the Bay if five other desalination facilities are operational? Is there a tipping point where cumulative desalination begins to severely impact of the salinity, acidity and other factors of the Bay's sensitive environment? Is it 25 million gallons a day? 50 million? 75 million? The Public deserves to know this before the first plant is built.

Despite the hiring of a PR firm and the extensive outreach program, the Public is not convinced that desalination is needed. At public meetings the audience speakers were overwhelmingly opposed to desalination, and the opposition is growing. It's now to the point that the probability of having an operational desalination plant by 2014 is close to zero. The opposition will fight the district every step of the way.

Again, the district is not ready. The staff has worked hard to get to this point, but more analysis is needed. They need to study and resolve the issues noted above before moving ahead with this project.

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