

Las Posas Basin Plan Discussion Paper No. 7

Costs and Quantities

May 26, 2010 Draft and Subject to Change

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Reference: Discussion Paper No. 7 Management Alternatives

The purpose of this discussion paper is to provide a quantification of worst case scenarios for balancing groundwater available to meet demands and costs for developing supplemental water supplies.

Disclaimer: The purpose of this paper is not to propose these calculations as a solution for the Las Posas Basin Management Plan, but rather to provide a starting point to explore more cost-effective and sustainable alternatives. Please note it is premature to panic.

Please forward comments to Henry Graumlich at hgraumlich@calleguas.com. Additional opportunities for comment will be available as the plan progresses.

I. Estimated Basin Yield [From Discussion Paper No. 6

A. East/South Las Posas

1. Basin yield estimated from 13,500 to 16,500 af/yr, or approximately 15,000 af/yr.
2. Estimated overdraft: 2,000 to 5,000 af/yr.
3. Irrigated acreage: 10,000 acres
4. Sustainable yield per currently irrigated acre: $(15,000 \text{ af/yr}) / 10,000 \text{ acres} = 1.5 \text{ acrefeet/acre}$
5. Cost to supply imported water to cover overdraft: $(2,000 \text{ to } 5,000 \text{ acrefeet} \times \$938/\text{acrefoot}) = \$1,876,000 \text{ to } \$4,690,000$
6. Overdraft cost per irrigated acreage: $\$1,876,000/10,000 = \$187.60/\text{acre}$ to $\$4,690,000/10,000 = \$469.00/\text{acre}$

B. West Las Posas

1. Basin yield estimated $\leq 12,000$ af/yr.
2. Estimated overdraft: \geq approximately 1,000 af/yr.
3. Irrigated acreage: 10,300 acres
4. Sustainable yield per currently irrigated acre: $(12,000 \text{ af/yr}) / 10,300 \text{ acres} = 1.17 \text{ acrefeet/acre}$
5. Cost to supply imported water to cover overdraft: $1000 \text{ acrefeet} \times \$938/\text{acre} = \$938,000$
6. Overdraft cost per irrigated acreage: $\$938,000/10,300 = \$91.07/\text{acre}$