

Footnotes to DMM A Calculations Worksheet

- a. Unit Cost of Water: \$325/Million Gallons
- b. City Employee Compensation: \$50/hour
Based on an estimated \$37/hour + 33% of hourly wage for fringe benefits
- c. Annual Vehicle Cost: \$ 6,000 per year
Presumes 10,000 miles per year
- d. Materials Cost: \$ 6,000 per year
Annual budget set aside for purchasing and providing faucet aerators and low-flow shower heads to program participants.
- | | | | |
|------------------------------|----|-------|------------------------------------|
| Cost of facet aerator: | \$ | 10 | |
| Cost of shower head: | \$ | 15 | |
| | | | (total no. of
houses over time) |
| No. of participating houses: | | 1200 | horizon) |
| Time horizon | | | 5 years |
| Annual materials cost: | \$ | 6,000 | |
- e. Single-family Residences: 6614
- f. Number of Persons per residence: 3.5
- g. Water Consumption: 200 gallons per capita per day
- h. Estimated Water Savings: 13% per residence
Assumed typical value based off data provided in City of San Diego's Residential Water Survey Program. Water savings for single-family residences are expected to be larger than multi-family residences due to the large portion of water use dedicated to exterior irrigation.
- i. Program Time Horizon: 5 years
A 5-year time horizon is considered in this study, which coincides with the period between UWMP updates. It is assumed that the maximum program participation during this 5-year period is 20%. All calculations of program costs and water savings are based on a 20% participation rate.

Predicted Participation		Rebate (Individual)	Rebate (Annual)	Other Costs (Disposal fees, advertisement, administrative, etc.)
Year 1	260 res.	\$ 100	\$ 26,000	\$ 500
Year 2	260 res.	\$ 100	\$ 26,000	\$ 500
Year 3	260 res.	\$ 100	\$ 26,000	\$ 500
Year 4	260 res.	\$ 100	\$ 26,000	\$ 500
Year 5	260 res.	\$ 100	\$ 26,000	\$ 500

Expected annual cost: \$ 26,500

Footnotes

a. Unit Cost of Water

b. Average Water Use *Amercian Water Works Association Research Foundation, Residential End Uses of Water , 1999, pp 104 -7*

c. High-efficiency machine use Based on an average per load reduction in water use of 40%

Predicted Participation		Rebate (Individual)	Rebate (Annual)	Other Costs (Disposal fees, advertisement, administrative, etc.)
Year 1	120 res.	\$ 100	\$ 12,000	\$ 500
Year 2	120 res.	\$ 100	\$ 12,000	\$ 500
Year 3	120 res.	\$ 100	\$ 12,000	\$ 500
Year 4	120 res.	\$ 100	\$ 12,000	\$ 500
Year 5	120 res.	\$ 100	\$ 12,000	\$ 500

Expected annual cost: **\$ 12,500**

Footnotes

a. Unit Cost of Water

b. Average Water Use Americian Water Works Association Research
Foundation, *Residential End Uses of Water*, 1999, pp
96 -7