

**Automated Meter Infrastructure Expansion Project**

**Proposal Monitoring**

**Water Savings:**

EMWD plans to monitor water savings attributable to the AMI meter installations in the Project area by tracking the number of leaks detected through their AMI system. They will maintain a record of the number of leaks detected in the Project area on an annual basis from the 21,250 automated meters installed as part of the Project. The DWR average value for water volume lost due to leaks per household will be multiplied by the number of leaks detected to estimate the leakage volume per year. This calculated value represents the total potential savings that could be realized by leak detection, but it does not represent actual savings until leak issues are addressed. Once leaks are detected, EMWD will notify the customers. EMWD staff members will then follow up to verify whether leaks are repaired and will track this number on an annual basis. Then this number may be multiplied by the DWR average value for water volume lost due to leaks per household to estimate the actual water conserved each year. EMWD is targeting 102 MG/year in water savings through the AMI system.

**Energy and GHG Savings:**

EMWD will calculate system energy usage by applying electricity energy usage factors to the estimated millions of gallons of water saved each year. These calculations will be performed using the DWR spreadsheet that is included in Attachment 2 of this grant application. EMWD is targeting 1,147,009 kWh/year of energy saved, and 318,868 kg CO<sub>2</sub>e/year GHG reduction.

Parameters to Monitor	Numeric Target	Measurement Tools
Water Savings	102 MG/year water saved	Number of leaks detected per year through AMI system in Project area Assumed household water loss due to leaks, estimated using best sources available Spreadsheet to track assumed water savings
Energy Savings	1,147,009 kWh/year of energy saved	Estimated water savings Record of annual imported water purchases by EMWD (5-year average) DWR Spreadsheet to calculate total annual energy savings
GHG Reduction	318,868 kg CO <sub>2</sub> e/year GHG reduction	Estimated water savings Record of annual imported water purchases by EMWD (5-year average) DWR Spreadsheet to calculate total annual GHG savings