

Attachment 6
Proposal Monitoring

The City of Orland authorized a feasibility study to determine what efficiency improvements were needed for the City's water system. Various analyses' were performed and documented in the study that will be used as references to verify the water and energy savings and GHG reduction. The new AMI meter reading technology will generate information to use in determining savings.

The total water losses for the system were estimated using an AWWA spreadsheet. These total losses were then divided into two categories, Real and Apparent losses. Apparent losses account for metering inaccuracies as well as data handling errors while Real Losses account for volumes lost as a result of leaks, breaks, and overflows. The un-billed and un-metered totals were then added to the total losses in order to determine the amount of Non-Revenue Water (NRW) within the City's system. The percent Non-Revenue water was estimated at 18.4%. This indicated that there is ample opportunity to improve operational efficiency.

Pump efficiency tests are performed under PG&E's advanced Pump Efficiency Program. The last tests were conducted April 2014 and this information will be used to determine the amount of benefit from the retrofits.

The City Water Clerk will monitor and track water loss continuously by relying on AMI meter reading technology for customer meters with concurrent metering of water at each well site. A third party software will track system input volumes and water losses in real time. Monthly reports will be generated, more if situations (drought, unusually high readings, etc.) warrant.