ATTACHMENT 6
Proposal Monitoring

Project monitoring will be performed for a period at least ten years to verify that the project is meeting its stated water and energy goals. The Kern County Water Agency already measures flows and seepage losses in the Cross Valley Canal (CVC) Extension, and continuing that effort will be simple. The results will be made available to DWR, if requested. All of the parameters that will be monitored are quantifiable. Following is a general discussion on the monitoring methodology.

Water Savings

Seepage in CVC Pool No. 8 is currently estimated by the following formula:

Seepage = Flow entering Pool No. 8 at Pumping Plant No. 7 – Flow leaving canal into the Henry C. Garnett Water Purification Plant – diversions from Pool 8 (Kern River diversions, Calloway Canal diversion, etc.) – evaporation + precipitation.

The total seepage loss will be compared to the seepage losses before the canal lining, which are estimated to be 4.4% per year between 2004 and 2013. The change in canal seepage in terms of percent reduction and total volume saved will be reported.

Energy Savings

Energy savings will be directly linked to the water savings. As described in Attachment 2, energy savings occurs from no longer having to pump seeped water from Kern Fan area groundwater bank wells and convey it back to Pool No. 8. Energy savings can be estimated with the following formula:

Energy Savings = 1,057 kWh/MG conserved

Greenhouse Gas Emission Reduction

Greenhouse gas emission reduction is linked directly to energy savings. As described in Attachment 2, reductions can be estimated with the following formula:

Greenhouse gas emission reductions = 0.313 kg CO2e/kWh conserved