ATTACHMENT 4.1: PROJECT DESCRIPTION

NORTH SEBP BASIN CHARACTERIZATION STUDY

DETAILED PROJECT DESCRIPTION:

Summary:

One (1) deep exploratory and monitoring well will be installed at a location as to be selected to provide reference information for the northern portion of the South East Bay Plain (SEBP) Basin (in northern portion of SEBP GMP study area that is currently monitored sparsely). It is anticipated that the depth of the borehole will be approximately 600 ft. This well will serve as a permanent monitoring fixture for the CASGEM program. EBMUD anticipates that a consultant will be used to provide assistance during well installation. In addition, EBMUD anticipates the need to hire a third party Labor Compliance provider.

Project Description (Goals / Objectives, Needed Facilities, Location / Area Covered):

EBMUD will construct a monitoring well in the northern portion of the SEBP Basin (an area within which little is known regarding basin / aquifer properties). A site location map is provided in Figure 1 of Appendix 1.

The objective of this effort will be to characterize the northern portion of the SEBP Basin and collect water quality data.

EBMUD will conduct geophysical logging during the boring exercise to determine lithologic conditions in the area. In combination with the geologic well log, geophysical information will be used to design the monitoring well.

Opportunities to locate the boring/monitoring well adjacent to existing production well(s) will be evaluated prior to the field work. Doing so may allow aquifer testing to be performed in future years.

Quality and Usefulness of the Information Obtained:

This activity, in combination with other projects funded by this grant, will yield greater knowledge of the northern part of the South East Bay Plain basin, in particular an improved understanding of local hydrogeology (and especially deep aquifer properties) in the northern portion of the basin where existing information is sparse.

Following the completion of the grant effort, EBMUD and others will be able to utilize this well to access water level and water quality information. There may be plans in the future to expand existing water storage operations by EBMUD (as part of the Bayside Groundwater Project), and hence more data to the north will be of great value. Further, having a monitoring well in place within this portion of the basin will provide for CASGEM reporting for years to come. The updated groundwater model

will also be useful to all of the SEBP Basin Groundwater Management Plan (GMP) stakeholder organizations.

Collaboration with Other Local Agencies with Regard to This Effort:

The Stakeholder group formed for the ongoing SEBP Basin GMP effort will be informed of the plans for drilling a well in the northern portion of the Basin. Data derived will be used to update documentation and models prepared as part of the GMP, and hence will be of use / of benefit to all stakeholders (City of Oakland, City of Alameda, City of Hayward, the Port of Oakland, City of San Leandro, San Lorenzo Unified School District, Hayward Area Recreation District, Alameda County Water District, Alameda County Public Works Department., Alameda County Environmental Health Department., San Francisco Bay Regional Water Quality Control Board, and Metropolitan Golf Course).

Funding Consideration(s) Following Grant Completion:

EBMUD staff, as part of its routine monitoring program for the SEBP Basin, with the support of other SEBP Basin GMP stakeholders, will maintain and operate the well instrumentation. For example, EBMUD will be supplying well data to DWR as part of their CASGEM reporting responsibilities for the SEBP Basin. Water level and water quality readings as collected over the years from the well will be stored as part of the overall monitoring database prepared in keeping with GMP implementation.