

SEASIDE BASIN WATERMASTER
REQUEST FOR SERVICE

DATE: December 3, 2015

RFS NO. 2015-04 Amendment No. 1
(To be filled in by WATERMASTER)

TO: Derrick Williams
HydroMetrics WRI
PROFESSIONAL

FROM: Robert Jaques
WATERMASTER

Services Needed and Purpose: Groundwater Modeling - See Amended Scope of Work in Attachment 1.

Completion Date: All work of this RFS as amended shall be completed not later than March 1, 2016.


Method of Compensation: Time and Materials (As defined in Section V of Agreement.)

Total Price: The revised Total Price for RFS No. 2015-04, as authorized by this Amendment No. 1 thereto, is \$13,000.00.

Total Price may not be exceeded without prior written authorization by WATERMASTER in accordance with Section V. COMPENSATION.

Requested by:  Date: 12/3/15
WATERMASTER Technical Program Manager

Authorized by:  Date: 12/9/15
WATERMASTER Chief Executive Officer

Agreed to by:  Date: 12/04/2015
PROFESSIONAL

ATTACHMENT 1

The original Scope of Work of RFS No. 2015-04 was to be performed using estimated future pumping condition scenarios from previous modeling work to prepare projected flow divide locations in February and August of 2010 and 2018. The results of that work was to be shown on a set of four maps to provide an indication of whether the flow divides were moving or whether they were relatively stable. The maps were to be accompanied by a short Technical Memorandum explaining the methodology used and an outline of the results.

Preliminary findings of this work led to the conclusion that it would be beneficial to perform some additional work. The additional work would largely consist of modeling some additional scenarios going out further into the future and under different pumping assumptions in order to better understand the impacts on the Laguna Seca Subarea from pumping in the Corral de Tierra area. Some refinements to the draft report were also recommended to improve the reader's understanding of the groundwater flow paths under the various scenarios. It was felt that this additional work would provide a clearer and better understanding of the near-term and long-term impacts of that pumping on groundwater levels in the Laguna Seca Subarea.

Specifically, the additional work authorized by this Amendment No. 1 will consist of:

- Putting additional flow arrows on the maps to improve the reader's understanding of groundwater flow paths.
- Producing additional flow divide maps for the baseline pumping conditions scenario (no CAW pumping in the LSSA and only Alternative Producers pumping) at year 2041 (February and August).
- Producing additional flow divide maps for the scenario with all LSSA pumping halted for years 2010, 2018, and 2041 (February and August).
- Adding the locations of pumping wells on all maps.
- Producing a map showing the amount of pumping at each well near the boundary of the LSSA and the El Toro area. The amount of pumping will be shown by either a bar graph or a bubble map.
- Producing a cross-section of the LSSA/ El Toro area to demonstrate what aquifer thicknesses are included in the model.
- Updating the draft report by including information about the amount of pumping in each simulation, and addressing comments that were raised during the review of the draft report.

The results of this additional work will be integrated with the original scope of work to develop a revised Technical Memorandum.

The estimated cost to perform this additional work is \$7,500. The original cost authorized by RFS No. 2015-04 was \$5,500, so the revised cost authorized by this Amendment No. 1 is \$13,000.