MEMORANDUM OF AGREEMENT

BETWEEN THE SEASIDE BASIN WATERMASTER THE MONTEREY PENINSULA WATER MANAGEMENT DISTRICT AND MONTEREY ONE WATER

TO SHARE IN THE COSTS OF UPDATING THE SEASIDE BASIN GROUNDWATER MODEL

THIS AGREEMENT is made and entered into this 10th day of FEBRUARY, 2018, by and between the SEASIDE BASIN WATERMASTER, hereinafter referred to as the "WATERMASTER" and the MONTEREY PENINSULA WATER MANAGEMENT DISTRICT, hereinafter referred to as the "DISTRICT", and MONTEREY ONE WATER, hereinafter referred to as "M1W" as follows.

In this Agreement the terms "Party" and "Parties" refer to the WATERMASTER, the DISTRICT, and or M1W, either individually or collectively

RECITALS:

A. Under Case No. M66343, California Superior Court, Monterey County, on March 27, 2006 by entry of Judgment ("Judgment") the WATERMASTER was created. The purpose of the WATERMASTER is to assist the Court in the administration and enforcement of the provisions of the Judgment

B. As part of carrying out its duties and responsibilities under the Judgement, the WATERMASTER had a hydrogeologic model ("Model") of the Seaside Groundwater Basin ("Seaside Basin") prepared by its consultant HydroMetrics WRI. Preparation of the Model was completed by HydroMetrics in November 2009.

C. Periodic recalibration and updating of the Model is necessary to ensure the Model simulates groundwater levels within an acceptable industry standard accuracy. The Model was last updated in 2014, and has not been recalibrated since it was originally prepared in 2009 Therefore, the WATERMASTER intends to recalibrate and update the Model in 2018.

D. M1W and the DISTRICT are together developing a project referred to as the Pure Water Monterey Project (PWM) that will store highly treated reclaimed wastewater in the Seaside Basin for subsequent recovery and reuse.

E. Because the Pure Water Monterey project will need to use the Model for further studies and reporting purposes, the Parties wish to enter into this Agreement to share in the cost of recalibrating and updating the Model.

Terms and Conditions

In consideration of the mutual promises contained herein, the WATERMASTER, the DISTRICT, and MIW hereby agree to the following terms and conditions.

A. Work to be performed. The WATERMASTER will have its consultant, HydroMetrics WRI, recalibrate and update the Model. The Scope of Work and the estimated costs to update and recalibrate the Model are described in Attachment 1 to this Agreement. The staff of each of the Parties to this Agreement will be invited to attend any key milestone meetings and conference calls that are held between the WATERMASTER and its consultant as the work is being performed, in order to enable each of the Parties to stay abreast of the work, raise pertinent questions in a timely manner, and provide input as appropriate.

The Parties hereto understand, as stated in Attachment 1, that it is difficult for HydroMetrics to accurately estimate the costs to perform the work to update and recalibrate the Model, and that the costs listed in Table 1 of Attachment 1 are HydroMetrics' best estimates. In the event it is determined, during the course of the work, that the cost to complete the work will be greater than the total cost listed in Table 1, the Parties agree to meet and confer to reach agreement on a revised cost that will be shared as described in paragraph B, so that the work can be completed. Agreement on said revised cost shall not be binding on any Party unless and until that Party formalizes its agreement to the revised cost in writing to each of the other Parties.

B. Costs to be shared. The costs to be shared are listed in Table 1 of Attachment 1. These costs will be shared in the following percentages.

Watermaster share = 50% ($27,185)
District and MIW combined share = 50% ($27,185).

(In the event a revised cost is agreed to, as described in paragraph A, these dollar figures will change).

C. Documents to be provided. After completion of Task 1 as described in Attachment 1, the WATERMASTER will provide the DISTRICT and MIW each with one copy of the Final Technical Memorandum documenting the model update and calibration results.

D. Payment of costs and reimbursement to the WATERMASTER. The WATERMASTER will make progress payments to HydroMetrics as it

satisfactorily performs the work described in Attachment 1. After the satisfactory completion of the work, the WATERMASTER will provide to the DISTRICT and to M1W copies of the payments it made to HydroMetrics. Within 30 days of receiving those documents, the DISTRICT and M1W will reimburse the WATERMASTER for 50% of those costs.

E. **Term of Agreement.** The term of this Agreement shall commence on the date of its execution, and shall continue in effect until the WATERMASTER has been reimbursed as described in paragraph D.

F. **Hold Harmless.** Under this Agreement the DISTRICT and M1W do hereby agree to indemnify, defend, and hold the WATERMASTER and its Board members, officers, employees, agents, and representatives harmless from and against any and all liability, claims, suits, actions, damages, and causes of action of any kind arising out of the DISTRICT'S and or M1W's use of the Model in the planning, design, and construction of the PWM Project, and for the subsequent use of the Model in operating and maintaining the PWM Project

G. **Venue**. In the event that suit shall be brought by any Party to this Agreement, the Parties agree that venue shall be exclusively vested in the state courts of the County of Monterey or if brought in federal court, in the United States District Court handling matters arising in Monterey County. Further, the prevailing Party shall be entitled to reasonable attorney fees and costs.

H. **Notices**. Written notice shall be deemed to have been duly served if delivered in person or by mail to the individuals and at the addresses listed below:

A. WATERMASTER:	Technical Program Manager Seaside Basin Watermaster P.O. Box 51502 Pacific Grove, CA 93950
B. DISTRICT:	General Manager Monterey Peninsula Water Management District 5 Harris Court, Building G Monterey, CA 93940
B. M1W:	General Manager Monterey One Water 5 Harris Court, Building D Monterey, CA 93940

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the dates shown below

WATERMASTER

Date: 2/10/18

By: _____
Ralph Rubio, Chair, Board of Directors

DISTRICT

Date: 2-12-18

By: _____
David Stoldt, General Manager

MIW

Date: 2-14-18

By: _____
Paul Sciuto, General Manager

ATTACHMENT 1

Scope of Work and Cost
to
Update and Recalibrate the Model

(Excerpted from HydroMetrics WRI Proposal Letter Dated August 4, 2017)

Task 1: Update Seaside Basin Groundwater Flow Model.

Subtask 1.1. Update Model Input Data.
Groundwater production, groundwater levels, injected water and precipitation data will be sourced and compiled for input into the groundwater model. In addition to precipitation, estimates of storm water percolation, septic tank leakage, and system losses are also needed as they all contribute to the recharge of the basin. Most data are already available from MPWMD or Watermaster, but some other pumpers such as Cal Water Service and Marina Coast Water District, which do not fall under the Watermaster will be contacted for their data.

The updated model input data will be incorporated into the groundwater model. Once the model has been updated and is successfully running, hydrographs comparing measured and simulated groundwater levels will be prepared. The hydrographs produced will be the same ones used in the 2009 model report.

Subtask 1.2. Model Recalibration.
Model calibration is a process that involves varying relatively uncertain and sensitive parameters such as horizontal and vertical hydraulic conductivities, over a reasonable range of values. HydroMetrics will jointly calibrate recharge and aquifer parameters. This is a change from HydroMetrics' previous calibration approach of only calibrating aquifer parameters. Calibration will be completed when simulated results match the measured data within an acceptable measure of accuracy, and when successive calibration attempts do not notably improve the calibration statistics. Parameter Estimation (PEST) software will be used as a tool to improve calibration.

Estimating the effort involved in model calibration is difficult because there is no defined set of steps that can be followed. The costs provided with this scope reflect HydroMetrics' best estimate, but additional costs may be necessary to complete calibration successfully

Subtask 1.3. Model Update Technical Memorandum.
A Draft Technical Memorandum will be prepared documenting the model update and calibration results. After presenting the Technical Memorandum to the Watermaster's Technical Advisory Committee (TAC) and receiving comments, a Final Technical Memorandum will be prepared for submission to the Watermaster's Board. For purposes of estimating costs, HydroMetrics WRI assumed it would present the findings to the TAC

and to the Board. One presentation would be made to the TAC by telephone, and one presentation would be made to the Board in-person.

Estimated Budget
The total estimated cost to update and recalibrate the groundwater model through September 2016 is provided in Table 1.

Schedule
It is expected to take two months to update and recalibrate the groundwater model.