

**SEASIDE GROUNDWATER BASIN WATERMASTER  
NOTICE  
BUDGET AND FINANCE COMMITTEE  
MEETING TUESDAY, AUGUST 21, 2018  
1:30 P.M. - SEASIDE CITY HALL  
CONFERENCE ROOM**

**AGENDA**

**Committee Members**

City of Seaside

*Daphne Hodgson - Chair*

California American Water

*Chris Cook/Nina Miller*

City of Sand City

*Todd Bodem*

Coastal Subarea Landowners

*Paul Bruno*

*The public may comment on any item within the committee's jurisdiction. Please limit comments to three minutes in length.*

**Action Items:**

1. Request for Increase in Technical Program Manager Hourly Rate
2. Discuss/Consider Recommendation to the Watermaster Board for Proposed Fiscal Year 2019 Annual Budgets.
  - A. Administrative Fund
  - B. Monitoring and Management Fund—Operations
  - C. Monitoring and Management Fund—Capital (None)
  - D. Replenishment Fund (No Action Required)
3. Discuss/Consider Recommendation to the Watermaster Board to Approve the Proposed Replenishment Assessment Unit Costs for Operating Yield and Natural Safe Yield Overproduction for Water Year October 1, 2018 through September 30, 2019.
4. Discuss/Consider Recommendation to the Watermaster Board to Approve Amendment No.1 to Brownstein, Hyatt, Farber, Schreck (Russ McGlothlin) RFS No. 2018-01.

*If requested, the agenda and documents in the agenda packet shall be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof.*



**SEASIDE BASIN WATER MASTER  
BUDGET AND FINANCE COMMITTEE**

**\*\*\* AGENDA TRANSMITTAL FORM \*\*\***

<b>MEETING DATE:</b>	August 21, 2018
<b>AGENDA ITEM:</b>	1.
<b>AGENDA TITLE:</b>	Request for Increase in Technical Program Manager Hourly Rate
<b>PREPARED BY:</b>	Robert Jaques, Technical Program Manager
<b>SUMMARY:</b>	<p>When I was hired at the Watermaster's Technical Program Manager on June 6, 2007 my hourly rate was set at \$100/hour. I pay all of my own travel, office, printing, and other work-related expenses within that hourly rate.</p> <p>Since my date of employ some 11 years ago I have maintained that same hourly rate, while the hourly rates for all of the consultants the Watermaster uses, as well as the employees of MPWMD and the other governmental agencies that we work with, have increased during that same time period.</p> <p>The hourly rates that we are billed for these consultants and employees working in professional positions comparable to the Technical Program Manager are shown in the attached table. As the table indicates, those hourly rates have grown significantly since the date I was hired by the Watermaster.</p> <p>I have over 40 years of experience working on local and regional water, wastewater, recycled water, stormwater, and groundwater projects and issues, and 11 years working as the Watermaster's Technical Program Manager.</p> <p>To reflect the experience that I bring to this position, and to recognize that hourly rates for all of the consultants working for us have increased significantly since the date of my employment with the Watermaster, I request that my hourly rate as the Watermaster's Technical Program Manager be increased to \$150/hr. effective October 1, 2018.</p> <p>This should not require an increase in the amount budgeted for this position either this year or in 2019, since the amount budgeted has never been reached in any of the prior years.</p>
<b>ATTACHMENTS:</b>	None
<b>RECOMMENDED ACTION:</b>	Approve the request to increase the Technical Program Manager's hourly rate to \$150/hr. effective October 1, 2018

ENTITY	JOB TITLE	2007/2008 BILLABLE HOURLY RATE	2018 BILLABLE HOURLY RATE
Martin Feeney	Professional (Martin Feeney)	Field rate \$115/hr.; office rate \$150/hr.	Field rate \$165/hr.; office rate \$195/hr.
MPWMD	Senior Hydrologist (Jon Lear)	\$99/hr.	\$149/hr.
HydroMetrics (now Montgomery & Associates)	Scientist VI (Georgina King)	\$125//hr.	\$200//hr.
	Scientist VIII (Derrick Williams)	\$145/hr.	\$225/hr.
Todd Groundwater	Senior Hydrologist (Gus Yates)	\$140/hr.	\$220/hr.

**SEASIDE GROUNDWATER BASIN WATERMASTER**

**TO:** Budget/Finance Committee  
**FROM:** Laura Dadiw, Administrative Officer  
**DATE:** August 21, 2018  
**SUBJECT:** Proposed Fiscal Year (Calendar Year) 2019 Annual Administrative Fund Budget

**PURPOSE:**

To advise the Board of the estimated amount necessary to properly fund the Administrative oversight portion of the Seaside Groundwater Basin Watermaster for Fiscal Year 2019.

**RECOMMENDATION:**

Recommended Board approval of the attached proposed Administrative Fund Budget for FY 2019.

**DISCUSSION:**

The court decision states that next fiscal year's budgets must be approved by the Board of Directors no later than the end of October each year in order for the tentative budgets to be circulated to each Party to the adjudication "no earlier than November 1 and no later than November 15" of each fiscal year. Technical Program Manager will be unavailable next month, so budgets are being presented at this earlier-than-in-past-years committee meeting.

To control legal costs, the technical program manager develops the first drafts of the annual report and case management (CM) statement. The annual report is now due January 15<sup>th</sup> so legal expense for the 2018 Annual Report is budgeted in 2019.

Staff fields whatever issues it can however there have been significant, and mounting, unanticipated issues in 2018 determined to require the expertise of WM legal counsel. These include to date:

Additional information requested by the Judge re: 2018 CM (concluded):	7,695.00
CAW Production of LSRA APA (concluded):	90.00
Bishop McIntosh & McIntosh (concluded):	405.00
PRA records request & comments (on-going & extensive):	<u>4,900.00</u>
Total	\$13,090.00
Budgeted expenditures	7,000.00

The PRA records request and comments information will be filed with Judge Nichols; the course of the issue from there is unknown. The appointment of a new Watermaster judge was unanticipated and is likely to increase 2019 CM conference costs. The unanticipated 2018 issues tumble into the annual report and will most likely cause an increase in legal expenses in its preparation in 2019.

The proposed legal expenditures in 2019 is as follows:

Annual report:	\$ 3,000
CM Statement and Conference:	11,000
Unanticipated Issues:	<u>11,000</u>
Total:	\$ 25,000

An estimated \$23,000 in unspent 2018 funds are expected to be carried over to 2019 – to be placed in the 2019 reserves and the reserve balance brought up to the customary \$25,000 with 2019 assessments.

**FISCAL IMPACT:**

An Administrative Fund Assessment of \$77,000 is proposed:

$$\$50,000(\text{AO}) + \$25,000(\text{Legal}) + \$25,000(\text{Reserve}) = \$100,000 - \$23,000(\text{Carryover}) = \$77,000$$

The assessments for the parties required to contribute to the Administrative Fund are:

California American Water	83.0%	\$63,910
City of Seaside	14.4%	11,088
City of Sand City	2.6%	2,002

**ATTACHMENTS**

1) Proposed Administrative Fund Budget for FY (Calendar Year) 2019

**Seaside Groundwater Basin Watermaster  
Administrative Fund  
Proposed Budget  
Administrative Year 2019**

	<u>2018 Adopted</u> <u>Revised</u> <u>Budget</u>	<u>2018</u> <u>Estimated</u> <u>Total</u>	<u>2019</u> <u>Proposed</u> <u>Budget</u>
Assessment Income			
Reserve/Rollover*	\$ 42,000	\$ 42,000	\$ 23,000
Administrative Assessment	40,000	40,000	77,000
Totals	<u>82,000</u>	<u>82,000</u>	<u>100,000</u>
Expenditures			
Contractual Services - Administrative	40,000	33,500	50,000
Legal Services**	17,000	23,500	25,000
Total Expenses	<u>57,000</u>	<u>57,000</u>	<u>75,000</u>
Total Available	25,000	25,000	25,000
Less Reserve	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>
Net Available	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

*\* Note: The reserve/rollover balance of \$23,000 was determined upon completion by Watermaster staff of a detailed reconciliation from 2006 through July 2018 of the Administrative Fund financial records held at the Watermaster office against the Administrative Fund financial records held by the City of Seaside - the Watermaster fiscal agent.*

*\*\* October 4, 2018 board action to amend 2018 Administrative Fund Budget to include \$10,000 additional for legal services for unanticipated expenses and \$10,000 reduction in contract services for no net change in the bottom line.*





***SEASIDE BASIN WATER MASTER  
BUDGET AND FINANCE COMMITTEE***

***\*\*\* AGENDA TRANSMITTAL FORM \*\*\****

<b>MEETING DATE:</b>	August 21, 2018
<b>AGENDA ITEM:</b>	2. C. & D.
<b>AGENDA TITLE:</b>	Discuss/Consider Recommendation to the Watermaster Board for Proposed Fiscal Year 2019 Annual Budgets: Monitoring and Management Fund—Operations and Monitoring and Management Fund—Capital
<b>PREPARED BY:</b>	Robert Jaques

Attached are the proposed 2019 Monitoring and Management Program (M&MP), and the proposed M&MP Operations and Capital Budgets for 2019 and 2020. The Board has asked that two-year budgets be developed to alert the Board to potential changes in scope and/or cost in near future years.

The 2019 M&MP which is attached reflects revisions resulting from the TAC’s discussion and input, input from HydroMetrics, Martin Feeney, Todd Groundwater, and MPWMD.

The TAC approved the attached M&MP and Budgets at its meeting of July 13, 2018.

Other than small changes due to changes in hourly rates for some of the consultants, the following are the principle differences between the 2018 M&MP and the proposed 2019 M&MP, and their respective budgets:

**Task I.2.b.3 (Collect Quarterly Water Quality Samples):** In 2018 the total amount budgeted for this Task was \$51,128. That cost included collecting and analyzing water quality samples from the Watermaster’s Sentinel Wells. In 2018 it was determined that water quality samples that have historically been collected from the Sentinel Wells were not representative of the quality of the water in the aquifers. Therefore, the decision was made to discontinue collecting and analyzing samples from these wells. This led to the reduction in cost for this Task to \$42,083 in 2019.

**Task I.3.a.1 (Update the Existing Model):** \$54,370 was included in the 2018 budget for this Task to have HydroMetrics update the existing groundwater model of the Seaside Basin. That work was completed in 2018 and therefore does not need to be included in the M&MP budget for 2019. This led to the reduction in cost for this Task to \$0 in 2019.

**Task I.3.c (Refine and/or Update the Basin Management Action Plan):** \$45,260 was included in the 2018 budget for this Task to have HydroMetrics update the existing Basin Management Action Plan. That work is scheduled to be completed in 2018 and therefore does not need to be included in the M&MP budget for 2019. This led to the reduction in cost for this Task to \$0 in 2019.

**Task I.3.e (Seaside Basin Geochemical Model):** This was a new Task for 2018, and the amount for this Task in the 2018 budget was \$50,000. The Task is being performed by MPWMD’s Consultant, Pueblo Water Resources, Inc., and is expected to be completed in 2018. However, HydroMetrics (now

<b>AGENDA ITEMS:</b>	2. C. & D.
<p>Montgomery &amp; Associates) may need to work on this task if the initial modeling results find that there could be adverse water quality impacts in the aquifers due to the introduction of water from the Monterey Peninsula Water Supply Project (desalinated water), the Pure Water Monterey Project (advance treated wastewater) and/or Aquifer Storage and Recovery Water (Carmel Basin water). If the modeling results in this finding, Montgomery &amp; Associates may need to use the Seaside Basin groundwater model to help Pueblo Water Resources develop means/measures to mitigate such impacts. A \$10,000 amount is included in the 2019 budget to cover the costs of Montgomery &amp; Associates work, if such work needs to be done.</p> <p>The full cost of the geochemical modeling being performed in 2018 is being borne by the three proponents of the projects that intend to inject new sources of water into the Basin. These are California American Water, MPWMD, and Monterey One Water (formerly MRWPCA).</p> <p>It is anticipated that, if Montgomery &amp; Associates needs to perform work on this Task in 2019, these same parties will reimburse the Watermaster for all of the costs to perform this work. Therefore, there should be no net cost to the Watermaster for the work of this Task.</p> <p>As indicated by the right-hand column titled “Comparative Costs from 2018 Budget” in the proposed 2019 M&amp;MP Operations Budget in <u>Attachment 2</u>, the proposed Budget is \$162,552 lower (\$369,473-\$206,921) than the 2018 Budget. This significant reduction in cost is largely because of the work items in the 2018 budget that were completed in 2018 and therefore do not need to be included in the 2019 budget.</p>	
<b>ATTACHMENTS:</b>	<ol style="list-style-type: none"> <li>1. 2019 M&amp;MP</li> <li>2. 2019 M&amp;MP Operations Budget</li> <li>3. 2020 M&amp;MP Operations Budget</li> <li>4. 2019 and 2020 M&amp;MP Capital Budgets</li> </ol>
<b>RECOMMENDED ACTION:</b>	Approve, or make changes to, the attached 2019 M&MP and/or 2019/2020 Budgets and then approve them

# ATTACHMENT 1

## **Seaside Groundwater Basin 2019 Monitoring and Management Program**

The tasks outlined below are those that are anticipated to be performed during 2019. Some Tasks listed below are specific to 2019, while other Tasks are recurring such as data collection, database entry, and Program Administration Tasks. Within the context of this document the term “Consultant” refers either to a firm providing professional engineering or other types of technical services, or to the Monterey Peninsula Water Management District (MPWMD). The term “Contractor” refers to a firm providing construction or field services such as well drilling, induction logging, or meter calibration.

### ***M.1 Program Administration***

<b>M. 1. a Project Budget and Controls (\$0)</b>	Consultants will provide monthly or bimonthly invoices to the Watermaster for work performed under their contracts with the Watermaster. Consultants will perform maintenance of their internal budgets and schedules, and management of their subconsultants. The Watermaster will perform management of its Consultants.
<b>M. 1. b Assist with Board and TAC Agendas (\$0)</b>	Watermaster staff will prepare Board and TAC meeting agenda materials. No assistance from Consultants is expected to be necessary to accomplish this Task.
<b>M. 1. c. &amp; M. 1. d Preparation for and Attendance at Meetings (\$11,500)</b>	<p>The Consultants’ work will require internal meetings and possibly meetings with outside governmental agencies and the public. For meetings with outside agencies, other Consultants, or any other parties which are necessary for the conduct of the work of their contracts, the Consultants will set up the meetings and prepare agendas and meeting minutes to facilitate the meetings. These may include planning and review meetings with Watermaster staff. The costs for these meetings will be included in their contracts, under the specific Tasks and/or subtasks to which the meetings relate. The only meeting costs that will be incurred under Tasks M.1.c and M.1.d will be:</p> <ul style="list-style-type: none"><li>• Those associated with attendance at TAC meetings (either in person or by teleconference connection), including providing periodic progress reports to the Watermaster for inclusion in the agenda packets for the TAC meetings, when requested by the Watermaster to do so. These progress reports will typically include project progress that has been made, problem identification and resolution, and planned upcoming work.</li><li>• From time-to-time when Watermaster staff asks Consultants to make special presentations to the Watermaster Board and/or the TAC, and which are not included in the Consultant’s contracts for other tasks.</li></ul> <p>Appropriate Consultant representatives will attend TAC meetings when requested to do so by Watermaster Staff (either in person or by teleconference connection), but will not be asked to prepare agendas or meeting minutes. As necessary, Consultants may provide oral updates to their progress reports (prepared under Task M.1.d) at the TAC meetings.</p>
<b>M. 1. e Peer Review of Documents and Reports (\$7,500)</b>	When requested by the Watermaster staff, Consultants may be asked to assist the TAC and the Watermaster staff with peer reviews of documents and reports prepared by various other Watermaster Consultants and/or entities.
<b>M. 1. f QA/QC (\$0)</b>	A Consultant (MPWMD) will provide general QA/QC support over the Seaside Basin Monitoring and Management Program. These costs are included in the other tasks.

<b>M.1.g Prepare Documents for SGMA Reporting (\$2,140)</b>	Section 10720.8 of the Sustainable Groundwater Management Act (SGMA) requires adjudicated basins to submit annual reports. Most of the documentation that needs to be reported is already generated by the Watermaster in conjunction with preparing its own Annual Reports. However, some information such as changes in basin storage is not currently generated and will require consultant assistance to do so. This task will be used to obtain this consultant assistance, as needed.
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## ***I. 2 Comprehensive Basin Production, Water Level and Water Quality Monitoring Program***

### **I. 2. a. Database Management**

<b>I. 2. a. 1 Conduct Ongoing Data Entry and Database Maintenance/ Enhancement (\$17,004)</b>	The database will be maintained by a Consultant (MPWMD) performing this work for the Watermaster. MPWMD will enter new data into the consolidated database, including water production volumes, water quality and water level data, and such other data as may be appropriate. Another Consultant will periodically post database information to the Watermaster's website, so it will be accessible to the public and other interested parties. No enhancements to the database are anticipated during 2019.
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<b>I. 2. a. 2 Verify Accuracy of Production Well Meters (\$0)</b>	To ensure that water production data is accurate, the well meters of the major producers were verified for accuracy during 2009 and again during 2015. No additional work of this type is anticipated during 2019.
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### **I. 2. b. Data Collection Program**

<b>I. 2. b. 1 Site Representation and Selection (\$0)</b>	The monitoring well network review that was started in 2008 has been completed, and sites have been identified where future monitoring well(s) could be installed, if it is deemed necessary to do so in order to fill in data gaps. No further work of this type is anticipated in 2019.
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<b>I. 2 b. 2 Collect Monthly Manual Water Levels (\$3,726)</b>	Each of the monitoring wells will be visited on a regular basis. Water levels will be determined by either taking manual water levels using an electric sounder, or by dataloggers. The wells where the use of dataloggers is feasible or appropriate have been equipped with dataloggers. All of the other wells will be manually measured.
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This Task includes the purchase of one datalogger and parts for the datalogger to keep in inventory as a spare if needed.

<p><b>I. 2. b. 3</b>  <b>Collect Water Quality Samples.</b>  <b>(\$42,083)</b></p>	<p>Water quality data will be collected quarterly from certain of the monitoring wells, but will no longer be collected from the four coastal Sentinel Wells. Discontinuing water quality sampling in those wells is the result of the finding made in 2018 that the water quality samples being extracted from those wells are not representative of the aquifer. Those wells were designed for the purpose of electric induction logging, and will therefore continue to be induction logged twice a year in WY 2019.</p>
	<p>In 2012 water quality analyses were expanded to include barium and iodide ions, to determine the potential benefit of performing these additional analyses. These two parameters have been useful in analyzing seawater intrusion potential in other vulnerable coastal groundwater basins, and are briefly mentioned in the Watermaster's annual Seawater Intrusion Analysis Reports. These parameters were added to the annual water quality sampling list for the four Watermaster Sentinel wells (SBWM-1, SBWM-2, SBWM-3, and SBWM-4), and also for the 3 most coastal MPWMD monitoring wells (MSC, PCA, and FO-09). Barium and iodide analyses will continue being performed on the 3 most coastal MPWMD monitoring wells in 2019, but will no longer be performed on the Watermaster's coastal Sentinel Wells as discussed above.</p>
	<p>Water quality data may come from water quality samples that are taken from these wells and submitted to a State Certified analytic laboratory for general mineral and physical suite of analyses, or the data may come from induction logging of these wells and/or other data gathering techniques. The Consultant or Contractor selected to perform this work will make this judgment based on consideration of costs and other factors.</p>
	<p>Under this Task in 2013 retrofitting to use the low-flow purge approach for getting water quality samples was completed on all of the wells that are sampled. This sampling equipment sits in the water column and may periodically need to be replaced or repaired. Accordingly, an allowance to perform maintenance on previously installed equipment has been included in this Task. Also, in the event a sampling pump is found to be no longer adequate due to declining groundwater levels, or if a sampling pump needs to be installed on a Sentinel Well, an allowance to purchase a replacement sampling pump has been included in this Task.</p>
	<p>Improvements to the QA/QC program for the water quality sampling work were adopted in mid-2017 and will be included in this work in 2019.</p>
<p><b>I. 2. b. 4</b>  <b>Update Program Schedule and Standard Operating Procedures.</b>  <b>(\$0)</b></p>	<p>All recommendations from prior reviews of the data collection program have been implemented. No additional work of this type is anticipated in 2019.</p>
<p><b>I. 2. b. 5</b>  <b>Monitor Well Construction</b>  <b>(\$0)</b></p>	<p>An additional monitoring well was installed in 2009. No further work of this type is anticipated in 2019.</p>

I. 2. b. 6 Reports (\$3,576)	<p>The groundwater level and water quality monitoring will be conducted on a monthly, quarterly, semi-annual or annual basis, as described in the Consultant's Scope of Work. Reports summarizing data collected and analyzed will be submitted to the Watermaster on a schedule to be established during the year, and will consist of:</p> <ol style="list-style-type: none"> <li>1. A review of the water quality and water level data at the end of each quarter of the Water Year, including tabularized data summaries of the WQ/WL data twice per year, once for the Q1 and Q2 period and once for the Q3 and Q4 period, so this data can be posted to WATERMASTER's website. No reporting on a quarterly basis is required but the Consultant will promptly notify the Watermaster of any missing data or data collection irregularities that were encountered during the quarterly reporting period.</li> <li>2. An annual report summarizing the water quality and water level data for the Water Year, and containing tables of this data for the complete Water Year. The report will include a brief cover letter describing any missing data or data collection irregularities that were encountered during the reporting period, and any recommendations for changes to be made to the data collection program.</li> </ol>
I.2.b.7 CASGEM Data Submittal (\$2,384)	<p>On the Watermaster's behalf MPWMD will compile and submit data on the Watermaster's "Voluntary Wells" into the State's CASGEM groundwater management database. The term "Voluntary Well" refers to a well that is not currently having its data reported into the CASGEM system, but for which the Watermaster obtains data. This will be done in the format and on the schedule required by the Department of Water Resources under the Sustainable Groundwater Management Act.</p>
<p><b><i>I. 3 Basin Management</i></b></p>	
I. 3. a. Enhanced Seaside Basin Groundwater Model (Costs listed in subtasks below)	<p>The Watermaster and its consultants use a Groundwater Model for basin management purposes.</p>
I.3.a.1 Update the Existing Model {\$0}	<p>The Model, described in the report titled "Groundwater Flow and Transport Model" dated October 1, 2007, was updated in 2009 in order to develop protective water levels, and to evaluate replenishment scenarios and develop answers to Basin management questions. The Model was again updated in 2014.</p> <p>In 2018 the Model was recalibrated and updated. No further work of this type is anticipated in 2019.</p>
I. 3. a. 2 Develop Protective Water Levels {\$0}	<p>A series of cross-sectional models was created in 2009 in order to develop protective water levels for selected production wells, as well as for the Basin as a whole. This work is discussed in Hydrometrics' "Seaside Groundwater Basin Protective Water Elevations Technical Memorandum." In 2013 further work was started to refine these protective water levels, but it was found that the previously developed protective water levels were reasonable. Protective water levels will be updated, if appropriate, as part of the work of Task I.3.c.</p>

<p>I. 3. a. 3  <b>Evaluate Replenishment Scenarios and Develop Answers to Basin Management Questions</b>  (\$20,000)</p>	<p>In 2009 the updated Model was used to evaluate different scenarios to determine such things as the most effective methods of using supplemental water sources to replenish the Basin and/or to assess the impacts of pumping redistribution. This work is described in HydroMetrics' "Seaside Groundwater Basin Groundwater Model Report." In 2010, and again in 2013, HydroMetrics used the updated Model to develop answers to some questions associated with Basin management. Modeling performed in 2014, 2015, and 2016 led to the conclusion that groundwater levels in parts of the Laguna Seca Subarea will continue to fall even if all pumping within that subarea is discontinued, because of the influence of pumping from areas near to, but outside of, the Basin boundary. Additional modeling work may be performed in 2019 to further examine this situation. This Task includes a \$20,000 allowance to perform modeling or other work to develop answers to basin management questions, if so directed by the Watermaster Board.</p>
<p>I. 3. b.  <b>Complete Preparation of Basin Management Action Plan</b>  (\$0)</p>	<p>The Watermaster's Consultant completed preparation of the Basin Management Action Plan (BMAP) in February 2009. The BMAP serves as the Watermaster's long-term seawater intrusion prevention plan. The Sections that are included in the BMAP are:  Executive Summary  Section 1 – Background and Purpose  Section 2 – State of the Seaside Groundwater Basin  Section 3 – Supplemental Water Supplies  Section 4 –Groundwater Management Actions  Section 5 – Recommended Management Strategies  Section 6 – References</p>
<p>I. 3. c.  <b>Refine and/or Update the Basin Management Action Plan</b>  (\$0)</p>	<p>During 2018 the BMAP was updated based on new data and knowledge that has been gained since it was prepared in 2009.   No further work of this type is anticipated in 2019.</p>
<p>I. 3. d.  <b>Evaluate Coastal Wells for Cross-Aquifer Contamination Potential</b>  (\$0)</p>	<p>If seawater intrusion were to reach any of the coastal wells in any aquifer, and if a well was constructed without proper seals to prevent cross-aquifer communication, or if deterioration of the well had compromised these seals, it would be possible for the intrusion to flow from one aquifer to another. An evaluation of this was completed in 2012 and is described in MPWMD's Memorandum titled "Summary of Seaside Groundwater Basin Cross-Aquifer Contamination Wells Investigation Process and Conclusions" dated August 8, 2012. This Memorandum did not recommend performing any further work on this matter at this time, other than to incorporate into the Watermaster's Database data from wells that were newly identified by the work performed in 2012. That data has now been incorporated into the Database, and no further work by the Watermaster on this matter is anticipated. In late 2017 a request was made to MPWMD to destroy one of its no-longer-used monitoring wells that is perforated in multiple aquifers (Well PCA-East Multiple). MPWMD performed this work in 2018.   No further work of this type is anticipated in 2019.</p>

I. 3. e.  
Seaside Basin Geochemical  
Model  
(\$10,000)

When new sources of water are introduced into an aquifer, with each source having its own unique water quality, there can be chemical reactions that may have the potential to release minerals which have previously been attached to soil particles, such as arsenic or mercury, into solution and thus into the water itself. This has been experienced in some other locations where changes occurred in the quality of the water being injected into an aquifer. MPWMD's consultants have been using geochemical modeling to predict the effects of injecting Carmel River water into the Seaside Groundwater Basin under the ASR program.

In order to predict whether there will be groundwater quality changes that will result from the introduction of desalinated water and additional ASR water (under the Monterey Peninsula Water Supply Project) and advance-treated wastewater (under the Pure Water Monterey Project) a geochemical model was developed in 2018 and is being used in the areas of the Basin where injection of these new water sources will occur. If the geochemical modeling indicates the potential for problems to occur, then Montgomery and Associates may use the Watermaster's updated groundwater model, and information about injection locations and quantities, injection scheduling, etc. provided by MPWMD for each of these projects, to develop model scenarios to see if the problem(s) can be averted by changing delivery schedules and delivery quantities. This Task includes an allowance of \$10,000 to have Montgomery and Associates perform such modeling, if necessary.

If the modeling predicts that there may be adverse impacts from introducing these new sources of water, measures to mitigate those impacts will be developed under a separate task that will be created for that purpose when and if necessary.

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#### ***I. 4 Seawater Intrusion Response Plan (formerly referred to as the Seawater Intrusion Contingency Plan)***

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I. 4. a.  
Oversight of Seawater  
Intrusion Detection and  
Tracking  
(\$0)

Consultants will provide general oversight over the Seawater Intrusion detection program under the other Tasks in this Work Plan.

I. 4. b.  
Focused Hydrogeologic  
Evaluation  
(\$0)

MPWMD attempted to compile historical and current water quality data in the coastal area to provide more in-depth evaluation of conditions in the shallow Dune Sand/Aromas Sand aquifer in the vicinity of the Sand City Public Works well, where unique water quality conditions and variability have recently been observed as discussed at TAC meetings. However, it was found that no historical water quality data from Cal Am's now-abandoned wells existed, and consequently it was not possible to answer the question of why water quality in the Sand City Public Works well differs from water quality in other wells in the Basin. The Sand City desalination plant could be affecting water quality in this area, but without the prior water quality data from now-abandoned wells, this could not be determined. The results of this work were summarized in 2013 in a brief Technical Memorandum prepared by MPWMD with conclusions and recommendations, and no further work on this matter is planned.

I. 4. c.  
Annual Report- Seawater  
Intrusion Analysis  
(\$22,742)

At the end of each water year, a Consultant will reanalyze all water quality data. Semi-annual chloride concentration maps will be produced for each aquifer in the basin. Time series graphs, trilinear graphs, and stiff diagram comparisons will be updated with new data. The annual EM logs will be analyzed to identify changes in seawater wedge locations. All analyses will be incorporated into an annual report that follows the format of the initial, historical data report. Potential seawater intrusion will be highlighted in the report, and if necessary, recommendations will be included. The annual report will be submitted for review by the TAC and the Board. Modifications to the report will be incorporated based on input from these bodies, as well as Watermaster staff.

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<p><b>I. 4. d</b>  <b>Complete Preparation of Seawater Intrusion Response Plan</b>  <b>(\$0)</b></p>	<p>The Watermaster's Consultant (HydroMetrics) completed preparation of the long-term Seawater Intrusion Response Plans (SIRP) in February 2009. The Sections that are included in the SIRP are:  Section 1 – Background and Purpose  Section 2 – Consistency with Other Documents  Section 3 – Seawater Intrusion Indicators and Triggers  Section 4 –Seawater Intrusion Contingency Actions  Section 5 - References  No further work on the SIRP is anticipated in 2019.</p>
<p><b>I. 4. e.</b>  <b>Refine and/or Update the Seawater Intrusion Response Plan</b>  <b>(\$0)</b></p>	<p>At the beginning of 2009 it was thought that it might be beneficial or necessary to perform work to refine the SIRP and/or to update it based on new data or knowledge that was gained subsequent to the preparation of the SIRP. However, this did not prove to be necessary, and no further work of this type is anticipated in 2019.</p>
<p><b>I. 4. f.</b>  <b>If Seawater Intrusion is Determined to be Occurring, Implement Contingency Response Plan</b>  <b>(\$0)</b></p>	<p>The SIRP will be implemented if seawater intrusion, as defined in the Plan, is determined by the Watermaster to be occurring.</p>

**ATTACHMENT 2**

Monitoring and Management Program Operations Budget							Comparative Costs from 2018 Budget	
For Tasks to be Undertaken in 2019								
Task	Subtask	Sub-Subtask	Cost Description	CONSULTANTS & CONTRACTORS <sup>(3)</sup>				Total
				MPWMD	Private Consultants	Contractors		
<b>Labor</b>								
			Technical Project Manager	\$0	\$50,000	\$0	\$50,000	\$50,000
<b>M.1 Program Administration</b>								
	M.1.a		Project Budget and Controls	\$0	\$0	\$0	\$0	\$0
	M.1.b		Assist with Board and TAC Agendas	\$0	\$0	\$0	\$0	\$0
	M.1.c & M.1.d		Preparation for and Attendance at Meetings <sup>(8)</sup>	\$0	\$11,500	\$0	\$11,500	\$11,500
	M.1.e		Peer Review of Documents and Reports <sup>(8)</sup>	\$0	\$7,500	\$0	\$7,500	\$7,500
	M.1.f		QA/QC	\$0	\$0	\$0	\$0	\$0
	M.1.g		SGMA Documentation Preparation	\$0	\$2,140	\$0	\$2,140	\$1,900
<b>I.1 Initial Phase 1 Monitoring Well Construction (Task Completed in Phase 1)</b>								
<b>I.2 Production, Water Level and Quality Monitoring</b>								
	I.2.a		Database Management					
		I.2.a.1.	Conduct Ongoing Data Entry/ Database Maintenance/Enhancement	\$14,604	\$2,400	\$0	\$17,004	\$17,004
		I.2.a.2.	Verify Accuracy of Production Well Meters	\$0	\$0	\$0	\$0	\$0
	I.2.b.		Data Collection Program					
		I.2.b.1.	Site Representation and Selection <sup>(7)</sup>	\$0	\$0	\$0	\$0	\$0
		I.2.b.2.	Collect Monthly Water Levels <sup>(9)</sup>	\$3,726	\$0	\$0	\$3,726	\$3,726
		I.2.b.3.	Collect Quarterly Water Quality Samples <sup>(1)(5)(6)</sup>	\$24,542	\$0	\$17,541	\$42,083	\$51,128
		I.2.b.4.	Update Program Schedule and Standard Operating Procedures.	\$0	\$0	\$0	\$0	\$0
		I.2.b.5.	Monitor Well Construction <sup>(7)</sup>	\$0	\$0	\$0	\$0	\$0
		I.2.b.6.	Reports	\$3,576	\$0	\$0	\$3,576	\$3,576
		I.2.b.7.	CASGEM Data Submittal for Watermaster's Voluntary Wells	\$2,384	\$0	\$0	\$2,384	\$2,384
<b>I.3 Basin Management</b>								
	I.3.a.		Enhanced Seaside Basin Groundwater Model	(Costs Shown in Subtasks Below)				
		I.3.a.1.	Update the Existing Model <sup>(11)</sup>	\$0	\$0	\$0	\$0	\$54,370
		I.3.a.2.	Develop Protective Water Levels <sup>(12)</sup>	\$0	\$0	\$0	\$0	\$0
		I.3.a.3.	Evaluate Replenishment Scenarios and Develop Answers to Basin Management Questions <sup>(10)</sup>	\$0	\$20,000	\$0	\$20,000	\$20,000
	I.3.b.		Complete Preparation of Basin Management Action Plan	\$0	\$0	\$0	\$0	\$0
	I.3.c.		Refine and/or Update the Basin Management Action Plan	\$0	\$0	\$0	\$0	\$45,260
	I.3.d.		Evaluate Coastal Wells for Cross-Aquifer Contamination Potential	\$0	\$0	\$0	\$0	\$0
	I.3.e.		Seaside Basin Geochemical Model <sup>(13)</sup>	\$0	\$10,000	\$0	\$10,000	\$50,000
<b>I.4 Seawater Intrusion Contingency Plan</b>								
	I.4.a.		Oversight of Seawater Intrusion Detection and Tracking	\$0	\$0	\$0	\$0	\$0
	I.4.b.		Provide focused area hydrogeologic investigation for Sand City Public Works	\$0	\$0	\$0	\$0	\$0
	I.4.c.		Annual Report- Seawater Intrusion Analysis	\$1,192	\$21,550	\$0	\$22,742	\$22,082
	I.4.d.		Complete Preparation of Seawater Intrusion Response Plan <sup>(2)</sup>	\$0	\$0	\$0	\$0	\$0
	I.4.e.		Refine and/or Update the Seawater Intrusion Response Plan <sup>(2) (9)</sup>	\$0	\$0	\$0	\$0	\$0
	I.4.f.		If Seawater Intrusion is Determined to be Occurring, Implement Contingency Response Plan <sup>(2)</sup>	(No Costs are Included for This Task, as This Task Will Likely Not be Necessary During 2018. If it Does Become Necessary, Use of Contingency Funds or a Budget Modification Will Likely be Necessary)				
<b>TOTALS CONSULTANTS &amp; CONTRACTORS</b>				<b>\$50,024</b>	<b>\$125,090</b>	<b>\$17,541</b>		
SUBTOTAL not including Technical Program Manager =							\$142,655	\$290,430
Contingency (not including Technical Program Manager) @ 10% <sup>(4)</sup> =							\$14,266	\$29,043
Technical Program Manager =							\$50,000	\$50,000
<b>TOTAL=</b>							<b>\$206,921</b>	<b>\$369,473</b>

**Footnotes:**

- (1) Under this Subtask the Watermaster will directly contract with an outside contractor to perform the Sentinel Well induction logging work, and to also collect water level data in conjunction with doing the induction logging. MPWMD will perform the other portions of the work of this Subtask.
- (2) The response plan would only be implemented in the event sea water intrusion is determined to be occurring.
- (3) Within the context of this document the term "Consultant" refers either to a Private Consultant providing professional engineering or other types of technical services, or to the Monterey Peninsula Water Management District (MPWMD). The term "Contractor" refers to a firm providing construction or field services such as well drilling, induction logging, or meter calibration.
- (4) Due to the uncertainties of the exact scopes of some of the larger Tasks listed above at the time of preparation of this Budget it is recommended that a Contingency of approximately 10% be included in the Budget.
- (5) Includes \$1,000 to maintain equipment previously installed for this purpose, and \$2,000 to purchase a new sampling pump if an existing one needs to be replaced. Also includes lab costs to analyze for barium and iodide ions in certain of these wells as was done in preceding years.
- (6) Does not include costs for MPWMD to collect water level data or water quality samples from wells other than those that are part of the basic monitoring well network, i.e. for private well owners who have requested that the Watermaster obtain this data for them. Costs to obtain that data are to be reimbursed to the Watermaster by those well owners, so there should be no net cost to the Watermaster for that portion of the work under these Tasks. Includes the purchase and installation of one new and/or replacement datalogger at a price of \$700, plus \$50 for installation parts, to keep in inventory as a spare if needed.
- (7) No additional monitoring well is expected to be constructed in 2019.
- (8) For Montgomery and Associates, Todd Groundwater, and Martin Feeney to provide hydrogeologic consulting assistance to the Watermaster, beyond that associated with performing other specified Tasks, when requested to do so by the Technical Program Manager. This work may include participation in conference calls and reviewing documents prepared by others.
- (9) If work under this Task is found to be necessary, it will be funded through the Contingency line item in this Budget.
- (10) Since the Model and BMAP were updated in 2018, this Task would only be used if there were other issues the Board wished to evaluate and which were not covered in the updated BMAP.
- (11) The Model was updated and recalibrated in 2018, so no costs for this Task are anticipated in 2019.
- (12) The protective water levels developed in 2009 were examined in 2013 to see if they needed to be updated. It was concluded that the 2009 protective levels were still satisfactory for Basin management purposes, and that no revisions were needed. No work under this Task is anticipated in 2019.
- (13) This was a new Task that was started, and was expected to be completed, in 2018. Funds allocated for this Task in 2019 would only be used if the geochemical modeling performed in 2018 indicated the need to have Montgomery and Associates use the Seaside Basin groundwater model to provide additional information needed by the geochemical model to develop mitigation measures for any adverse water quality impacts the geochemical model predicts could occur from introducing non-native water into the Basin.

**ATTACHMENT 3**

Monitoring and Management Program Operations Budget							
For Tasks to be Undertaken in 2020 <sup>(12)</sup>							
Task	Subtask	Sub-Subtask	Cost Description	CONSULTANTS & CONTRACTORS <sup>(3)</sup>			Total
				MPWMD	Private Consultants	Contractors	
<b>Labor</b>							
			Technical Project Manager	\$0	\$50,000	\$0	\$50,000
<b>M.1 Program Administration</b>							
	M.1 a		Project Budget and Controls	\$0	\$0	\$0	\$0
	M.1 b		Assist with Board and TAC Agendas	\$0	\$0	\$0	\$0
	M.1 c & M.1 d		Preparation for and Attendance of at Meetings <sup>(8)</sup>	\$0	\$11,845	\$0	\$11,845
	M.1 e		Peer Review of Documents and Reports <sup>(8)</sup>	\$0	\$7,725	\$0	\$7,725
	M.1 f		QA/QC	\$0	\$0	\$0	\$0
	M.1 g		SGMA Documentation Preparation	\$0	\$2,204	\$0	\$2,204
<b>I.1 Initial Phase 1 Monitoring Well Construction (Task Completed in Phase 1)</b>							
<b>I.2 Production, Water Level and Quality Monitoring</b>							
	I.2 a		Database Management				
		I.2 a.1	Conduct Ongoing Data Entry/ Database Maintenance/Enhancement	\$15,042	\$2,472	\$0	\$17,514
		I.2 a.2	Verify Accuracy of Production Well Meters	\$0	\$0	\$0	\$0
	I.2 b		Data Collection Program				
		I.2 b.1	Site Representation and Selection <sup>(7)</sup>	\$0	\$0	\$0	\$0
		I.2 b.2	Collect Monthly Water Levels <sup>(6)</sup>	\$3,838	\$0	\$0	\$3,838
		I.2 b.3	Collect Quarterly Water Quality Samples <sup>(1)(5)(6)</sup>	\$25,278	\$0	\$18,067	\$43,345
		I.2 b.4	Update Program Schedule and Standard Operating Procedures.	\$0	\$0	\$0	\$0
		I.2 b.5	Monitor Well Construction <sup>(7)</sup>	\$0	\$0	\$0	\$0
		I.2 b.6	Reports	\$3,683	\$0	\$0	\$3,683
		I.2 b.7	CASGEM Data Submittal for Watermaster's Voluntary Wells	\$2,456	\$0	\$0	\$2,456
<b>I.3 Basin Management</b>							
	I.3 a		Enhanced Seaside Basin Groundwater Model	(Costs Shown in Subtasks Below)			
		I.3 a.1	Update the Existing Model	\$0	\$0	\$0	\$0
		I.3 a.2	Develop Protective Water Levels	\$0	\$0	\$0	\$0
		I.3 a.3	Evaluate Replenishment Scenarios and Develop Answers to Basin Management Questions	\$0	\$20,000	\$0	\$20,000
	I.3 b		Complete Preparation of Basin Management Action Plan	\$0	\$0	\$0	\$0
	I.3 c		Refine and/or Update the Basin Management Action Plan <sup>(11)</sup>	\$0	\$0	\$0	\$0
	I.3 d		Evaluate Coastal Wells for Cross-Aquifer Contamination Potential <sup>(13)</sup>	\$0	\$0	\$0	\$0
	I.3 e		Seaside Basin Geochemical Model	\$0	\$0	\$0	\$0
<b>I.4 Seawater Intrusion Contingency Plan</b>							
	I.4 a		Oversight of Seawater Intrusion Detection and Tracking	\$0	\$0	\$0	\$0
	I.4 b		Analyze and Map Water Quality from Coastal Monitoring Wells	(Costs Included Under I.4 a)			
	I.4 c		Annual Report- Seawater Intrusion Analysis	\$1,228	\$22,197	\$0	\$23,424
	I.4 d		Complete Preparation of Seawater Intrusion Response Plan <sup>(2)</sup>	\$0	\$0	\$0	\$0
	I.4 e		Refine and/or Update the Seawater Intrusion Response Plan <sup>(2)(9)</sup>	\$0	\$0	\$0	\$0
	I.4 f		If Seawater Intrusion is Determined to be Occurring, Implement Contingency Response Plan <sup>(2)</sup>	(No Costs are Included for This Task, as This Task Will Likely Not be Necessary During 2019. If it Does Become Necessary, Use of Contingency Funds or a Budget Modification Will Likely be Necessary)			
<b>TOTALS CONSULTANTS &amp; CONTRACTORS</b>				<b>\$51,525</b>	<b>\$116,443</b>	<b>\$18,067</b>	
SUBTOTAL not including Technical Program Manager =							\$136,035
Contingency (not including Technical Program Manager) @ 10% <sup>(4)</sup> =							\$13,603
Technical Program Manager							\$50,000
<b>TOTAL=</b>							<b>\$199,638</b>

**Footnotes:**

- (1) An outside contractor would be used to perform the induction logging, and potentially to also collect some water level data in conjunction with doing the induction logging. MPWMD is expected to perform portions of the work of this Subtask, and the Watermaster will be the party that subcontracts with the Contractor to perform the induction logging on certain of the wells.
- (2) The response plan would only be implemented in the event sea water intrusion is determined to be occurring.
- (3) Within the context of this document the term "Consultant" refers either to a Private Consultant providing professional engineering or other types of technical services, or to the Monterey Peninsula Water Management District (MPWMD). The term "Contractor" refers to a firm providing construction.
- (4) Due to the uncertainties of the exact scopes of some of the Tasks listed above at the time of preparation of this Budget, it is recommended that a 10% Contingency be included in the Budget.
- (5) A portion of this cost is for maintaining sampling equipment that was installed in prior years.
- (6) Does not include costs for MPWMD to collect water level data or water quality samples from wells other than those that are part of the basic monitoring well network, i.e. for private well owners who have requested that the Watermaster obtain this data for them. Costs to obtain that data are to be reimbursed to the Watermaster by those well owners, so there should be no net cost to the Watermaster for that portion of the work under these Tasks.
- (7) No additional monitoring well is expected to be constructed in 2020.
- (8) For Montgomery and Associates, Todd Groundwater, and Martin Feeney to provide hydrogeologic consulting assistance to the Watermaster, beyond that associated with performing other specified Tasks, when requested to do so by the Technical Program Manager.
- (9) If work under this Task is found to be necessary, it will be funded through the Contingency line item in this Budget.
- (10) Not used.
- (11) If necessary to reflect knowledge gained from modeling work or other data sources. Since the BMAP was updated in 2018, no work on this Task is anticipated in 2020.
- (12) Includes a 3% inflation factor on most annually recurring costs in the 2019 Budget, except the Technical Program Manager cost which has no inflation factor applied to it.
- (13) No further work on this Task is anticipated in 2020.

<b>Monitoring and Management Program Capital Budget</b>									
<b>For Tasks to be Undertaken in 2019</b>									

No Capital projects are anticipated to be undertaken in 2019, so this budget is \$0.									
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<b>Monitoring and Management Program Capital Budget</b>									
<b>For Tasks to be Undertaken in 2020</b>									

No Capital projects are anticipated to be undertaken in 2020, so this budget is \$0.									
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Water Basin Watermaster Replenishment Fund 2019 Fiscal Year (January 1 - December 31, 2019) 2019 Budget														ITEM 2 D 8/21/18		
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Estimated 2018	Totals WY 2006 Through 2017	Budget WY 2019	Projected Totals Through WY 2018
Assessments:	WY 05/06	WY 06/07	WY 07/08	WY 08/09	WY 09/10	WY 10/11	WY 11/12	WY 12/13	WY 13/14	WY 14/15	WY 15/16	WY 16/17	WY 17/18		WY 18/19	
Unit Cost:	\$1,132 / \$283	\$1,132 / \$283	\$2,485 / \$621.25	\$3,040 / \$760	\$2,780 / \$695	\$2,780 / \$695	\$2,780 / \$695	\$2,780 / \$695	\$2,702 / \$675.50	\$2,702 / \$675.50	\$2,702 / \$675.50	\$2,872 / \$718	\$2,872 / \$718		\$2,872 / \$718	
Cal-Am Water Balance Forward	\$ -	\$ 1,641,004	\$ 4,226,710	\$ (2,871,690)	\$ (2,839,939)	\$ (3,822,219)	\$ (6,060,164)	\$ (8,735,671)	\$ (6,173,771)	\$ (3,102,221)	\$ (676,704)	\$ (676,704)	\$ (491,747)		\$ (371,747)	
Cal-Am Water Production	3710.0 AF	4059.9 AF	3862.9 AF	2966.0 AF	3713.5 AF	3416.0 AF	3070.9 AF	3076.6 AF	3232.1 AF							
Exceeding Natural Safe Yield																
Considering Alternative Producers	2,106,652	2,565,471	5,199,014	3,773,464	4,112,933	3,187,854	2,280,943	2,380,842	2,790,539	2,113,414		184,957	100,000	\$ 30,796,083	100,000	\$ 30,896,083
Operating Yield Overproduction																
Replenishment	-	20,235	8,511	-	-	-	154,963	181,057	281,012	312,103			20,000	977,881	20,000	997,881
Total California American	\$ 2,106,652	\$ 2,585,706	\$ 5,207,525	\$ 3,773,464	\$ 4,112,933	\$ 3,187,854	\$ 2,435,907	\$ 2,561,899	\$ 3,071,550	\$ 2,425,516		\$ 184,957	\$ 120,000	\$ 31,773,964	\$ 120,000	\$ 31,893,964
CAW Credit Against Assessment	(465,648)		(12,305,924)	\$ (3,741,714)	(6,095,213)	(5,425,799)	(5,111,413)							(32,145,711)		(32,145,711)
CAW Unpaid Balance	\$ 1,641,004	\$ 4,226,710	(2,871,690)	(2,839,939)	(3,822,219)	(6,060,164)	(8,735,671)	(6,173,771)	(3,102,221)	(676,704)	(676,704)	(491,747)	(371,747)	(371,747)	(251,747)	(251,747)
City of Seaside Balance Forward	\$ -	\$ 243,294	\$ 426,165	\$ 1,024,272	\$ 1,619,973	\$ 891,509	\$ (110,014)	\$ (773,813)	\$ (1,575,876)	\$ (2,889,325)	\$ (3,346,548)	\$ (3,232,420)	\$ (3,142,500)		\$ (3,032,500)	
City of Seaside Municipal Production	332.0 AF	387.7 AF	294.3 AF	293.4 AF	282.9 AF	240.7 AF	233.7 AF	257.7 AF	223.6 AF	223.6 AF	185.01 AF					
Exceeding Natural Safe Yield																
Considering Alternative Producers	219,689	174,082	402,540	465,300	314,721	141,335	163,509	236,782	142,410	69,630	102,330	87,512	100,000	\$ 2,619,838	100,000	\$ 2,719,838
Operating Yield Overproduction																
Replenishment	12,622	85	4,225	16,522	20,690	-	1,689	27,007	3,222	38	11,959	2,409	10,000	110,467	10,000	120,467
Total Municipal	232,310	174,167	406,764	481,823	335,412	141,335	165,198	263,788	145,631	69,667	114,290	89,920	110,000	2,730,305	110,000	2,840,305
City of Seaside - Golf Courses																
Exceeding Natural Safe Yield - Alternative Producer			131,705	69,701										201,406		201,406
Operating Yield Overproduction																
Replenishment			32,926	17,427										50,353		50,353
Total Golf Courses			164,631	87,128										251,759		251,759
Total City of Seaside*	\$ 232,310	\$ 174,167	\$ 571,395	\$ 568,951	\$ 335,412	\$ 141,335	\$ 165,198	\$ 263,788	\$ 145,631	\$ 69,667	\$ 114,290	\$ 89,920	\$ 110,000	\$ 2,982,064	\$ 110,000	\$ 3,092,064
City of Seaside Late Payment 5%	10,984	8,704	26,712	26,750	15,737									88,887		88,887
In-lieu Credit Against Assessment					(1,079,613)	(1,142,858)	(829,996)	(1,065,852)	(1,459,080)	(526,890)	(162)			(6,103,451)		(6,103,451)
City of Seaside Unpaid Balance	\$ 243,294	\$ 426,165	\$ 1,024,272	\$ 1,619,973	\$ 891,509	\$ (110,014)	\$ (773,813)	\$ (1,575,876)	\$ (2,889,325)	\$ (3,346,548)	\$ (3,232,420)	\$ (3,142,500)	\$ (3,032,500)	\$ (3,032,500)	\$ (2,922,500)	\$ (2,922,500)
Total Replenishment Fund Balance	\$ 1,884,298	\$ 4,652,874	\$ (1,847,417)	\$ (1,219,966)	\$ (2,930,710)	\$ (6,170,178)	\$ (9,509,483)	\$ (7,749,648)	\$ (5,991,546)	\$ (4,023,252)	\$ (3,909,125)	\$ (3,634,247)	\$ (3,404,247)	\$ (3,404,247)	\$ (3,174,247)	\$ (3,174,247)
Replenishment Fund Balance Forward		\$ 1,884,298	\$ 4,652,874	\$ (1,847,417)	\$ (1,219,966)	\$ (2,930,710)	\$ (6,170,178)	\$ (9,509,483)	\$ (7,749,648)	\$ (5,991,546)	\$ (4,023,252)	\$ (3,909,125)	\$ (3,634,247)		\$ (3,404,247)	
Total Replenishment Assessments	2,349,946	2,768,576	5,805,632	4,369,165	4,484,082	3,329,189	2,601,104	2,825,688	3,217,182	2,495,183	114,290	274,877	230,000	34,844,915	230,000	35,074,915
Total Paid and/or Credited	(465,648)	-	(12,305,924)	(3,741,714)	(6,174,826)	(6,568,657)	(5,940,409)	(1,065,852)	(1,459,080)	(526,890)	(162)	-	-	(38,249,162)	-	(38,249,162)
Grand Total Fund Balance	\$ 1,884,298	\$ 4,652,874	\$ (1,847,417)	\$ (1,219,966)	\$ (2,930,710)	\$ (6,170,178)	\$ (9,509,483)	\$ (7,749,648)	\$ (5,991,546)	\$ (4,023,252)	\$ (3,909,125)	\$ (3,634,247)	\$ (3,404,247)	\$ (3,404,247)	\$ (3,174,247)	\$ (3,174,247)





SEASIDE GROUNDWATER BASIN WATERMASTER

**TO:** Budget/Finance Committee  
**FROM:** Laura Dadiw, Administrative Officer  
**DATE:** August 21, 2018  
**SUBJECT:** Unit Cost for Water Year 2018/19 Over Production Replenishment Assessment Amounts

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**RECOMMENDATION:**

It is recommended that the Board approve a Proposed Replenishment Assessment Unit Cost of \$2,872 for Operating Yield Overproduction and \$718 (25% of \$2,872) for Natural Safe Yield Over Production for Water Year 2019 (October 1, 2018 - September 30, 2019).

**SUMMARY:**

The Replenishment Assessment Unit Cost is used to calculate the Replenishment Assessments that are charged to any Standard Producer that exceeds its allocations (both Operating Yield and Natural Safe Yield allocations) during the Water Year.

Per page 33 of the Decision, *“The per acre-foot amount of the Replenishment Assessments shall be determined and declared by Watermaster in October of each Water Year in order to provide Parties with advance knowledge of the cost of Over-Production in that Water Year.”* Thus, the per acre-foot amount determined by the Board on or before October of 2018 will be used to calculate Replenishment Assessments for pumping that occurs during the Water Year which begins on October 1, 2018 and ends on September 30, 2019.

**BACKGROUND:**

For each of the three Water Years 2014, 2015, and 2016, the Board adopted a unit cost of \$2,702/AF. This unit cost was developed starting with Water Year 2014 by taking the average of the Base Unit Cost (\$/AF) listed in Table 1 for each project  $[\$3,507+\$1,800+\$2,000+\$3,500]/4$ , as the Replenishment Assessment Unit Cost. The Water Year 2014 unit cost was carried over to the two subsequent Water Years because no updated cost data was available for the projects listed in Table 1, and no other viable projects could be identified. For Water Year 2016/17 the Budget and Finance Committee updated the basis from which the annual calculation of the Unit Cost of replenishment water is established, a blended cost of a reduced size desalination plant for the Monterey Peninsula Water Supply Project and groundwater replenishment provided by the Pure Water Monterey Project  $[(\$4,591+\$2,025+\$2,000)/3] = \$2,872$  (see Table 2).

**DISCUSSION:**

Due to the lack of more supportable data the recommendation is to continue using \$2,872, the average of the Base Unit Cost (\$/AF) listed in Table 2 for each project  $[(\$4,591+\$2,025+\$2,000)/3]$  as the Operating Yield Over Production Replenishment Assessment Unit Cost for the Water Year 2018/2019. The Natural Safe Yield Replenishment Assessment Unit Cost is 25% of that amount, or \$718.

**ATTACHMENTS:**

Table 1: Water Year 2014 Unit Cost Calculation Data  
Table 2: Updated Unit Cost Data

**WATER YEAR 2014 (October 1, 2013-September 30, 2014)**

**ANTICIPATED UNIT COSTS OF REPLENISHMENT WATER FOR THE SEASIDE BASIN**

POTENTIAL SOURCE OF REPLENISHMENT WATER	POTENTIAL DATE REPLENISHMENT WATER COULD BECOME AVAILABLE	POTENTIAL VOLUME OF WATER THAT COULD BE SUPPLIED BY THE PROJECT (AFY) <sup>(1)</sup>	LEVEL OF PROJECT DEVELOPMENT	CONTINGENCY INCLUDED IN BASE UNIT COST <sup>(2)</sup> (%)	BASE UNIT COST (\$/AF)	BASE UNIT COST YEAR	ADDITIONAL CONTINGENCY ADDED TO REFLECT LEVEL OF PROJECT DEVELOPMENT <sup>(3)</sup> (%)	UNIT COST INCLUDING ADDITIONAL CONTINGENCY (\$/AF)	UNIT COST INFLATED @ 3% FROM COST BASIS YEAR TO YEAR REPLENISHMENT WATER COULD BECOME AVAILABLE (\$/AF)	VOLUME-WEIGHTED AVG %
Monterey Peninsula Water Supply Project (Regional Desalination) <sup>(4)</sup>	2018	9,752	Project Report	30%	\$3,507	2012	0%	\$3,507	\$4,188	56.53%
Seaside Basin ASR Expansion <sup>(5)</sup>	2015	1,000	Conceptual	11%	\$1,800	2012	39%	\$2,502	\$2,734	5.80%
Regional Urban Water Augmentation Project <sup>(6)</sup>	2017	3,000	Design	5%	\$2,000	2013	10%	\$2,200	\$2,476	17.39%
Groundwater Replenishment Project (GWRP) <sup>(7)</sup>	2017	3,500	Conceptual	50%	\$3,500	2017	0%	\$3,500	\$3,500	20.29%
<b>Total Quantity of Replenishment Water (AFY) the Listed Projects Could Cumulatively Potentially be Able to Produce Within the Next 10 Years <sup>(8)</sup> =</b>									<b>17,252</b>	

**FOOTNOTES:**

(1) For the Monterey Peninsula Water Supply Project this is the total amount of water from this source which could potentially come to the CAW distribution system. Only a portion of this amount might be available as initially unused capacity that could be used to help replenish the Seaside Basin. For the RUWAP this is the total amount of water from this source. Only a portion of this amount might be used for in-lieu replenishment of the Seaside Basin. For the ASR Expansion Project this is the additional amount of water that could potentially be provided by this project (see footnote 5). For the RUWAP this is the total amount of water that this project is expected to produce. Only a portion of this amount might be used as in-lieu replenishment of the Seaside Basin. For the GWRP this is the quantity of water that is being considered at this time by CAW for inclusion in its Monterey Peninsula Water Supply Project.

(2)(3) The following Contingency percentages were considered reasonable for the indicated levels of project development: Conceptual Level - 50%, Project Report Level - 30%, and Design Level - 15%. The sum of the values in the columns titled "Contingency Included in Base Unit Cost" and "Additional Contingency Added to Reflect Level of Project Development" equals the Contingency appropriate for the project's level of development.

(4) Project data based on documents provided by Cal Am and MPWMD.

(5) Project data provided by MPWMD. The 1,000 AFY of potential water that this project could supply would be in addition to the 1,300 AFY included as part of the Monterey Peninsula Water Supply Project, and would be an annual average taking into account river flow and hydrologic conditions that change from year to year.

(6) Project data provided by MCWD.

(7) Project data provided by MRWPCA. MRWPCA reported that the GWRP quantity being used in the current CEQA documentation is 3,500 AFY, but that the project could potentially supply 6,500 AFY or more. The unit cost would be lower if a quantity larger than 3,500 AFY were produced.

(8) This value is the cumulative production capacity of all of the Potential Sources of Replenishment Water that listed in this table, and is used only to determine the "Volume-Weighted Average." It is not the amount of water that is expected to be available to the Seaside Basin.

TABLE 2

WATER YEAR 2017 (October 1, 2016-September 30, 2017)				
ANTICIPATED UNIT COSTS OF WATER COULD POTENTIALLY BE USED FOR REPLENISHMENT OF THE SEASIDE BASIN				
POTENTIAL SOURCE OF REPLENISHMENT WATER	POTENTIAL DATE REPLENISH-MENT WATER COULD BECOME AVAILABLE	POTENTIAL VOLUME OF WATER THAT COULD BE SUPPLIED BY THE PROJECT (AFY) <sup>(1)</sup>	BASE UNIT COST (\$/AF)	BASE UNIT COST YEAR
Regional Desalination <sup>(2)</sup>	2020	6,250	\$6,147	2019
Groundwater Replenishment Project (Pure Water Monterey) <sup>(2)</sup>	2018	3,500	\$1,811	2018
Monterey Peninsula Water Supply Project (Combined Regional Desalination with Groundwater Replenishment Project)	GWRP in 2018 Regional Desalination in 2020	9,750	\$4,591	
Seaside Basin ASR Expansion <sup>(3)</sup>	2020	1,000	\$2,025	2016
Regional Urban Water Augmentation Project <sup>(4)</sup>	2018	1,400-1,700	\$2,000	2018
FOOTNOTES:				
(1) For the Regional Desalination Project this is the total amount of water from this source which could potentially come to the CAW distribution system, based on the desalination plant having a 6.4 MGD capacity which is equivalent to 7,169 AFY. Only a portion of this amount might be available as initially unused capacity that could be used to help replenish the Seaside Basin. For the RUWAP this is the total amount of non-potable water from this source. Only a portion of this amount might be used for in-lieu replenishment of the Seaside Basin. For the ASR Expansion Project this is the additional amount of water that could potentially be provided by this project (see footnote 3). For the GWRP this is the quantity of water that is being planned at this time by CAW for inclusion in its Monterey Peninsula Water Supply Project.				
(2) Base unit cost data based on PUC filing documents and provided by Dave Stoldt of MPWMD .				
(3) Base unit cost data provided by MPWMD. The 1,000 AFY of potential water that this project could supply would be in addition to the 1,300 AFY included as part of the Monterey Peninsula Water Supply Project, and would be an annual average taking into account river flow and hydrologic conditions that change from year to year.				
(4) Project data provided by MCWD.				



**SEASIDE GROUNDWATER BASIN  
WATERMASTER**

TO: Board of Directors  
FROM: Laura Dadiw, Administrative Officer  
DATE: August 21, 2018  
SUBJECT: Discussion/Consider Approving Amendment No.1 to Brownstein, Hyatt, Farber, Schreck (BHFS) (Russ McGlothlin) RFS No. 2018-01

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**RECOMMENDATIONS:** Approve Amendment No.1 to BHFS RFS No. 2018-01 raising the total authorized cost of the RFS by \$17,000 to \$24,000.00.

**BACKGROUND:**

The original Total Price of RFS No. 2018-01 was \$7,000 for PROFESSIONAL to provide, on an ongoing and as-requested basis, legal services to WATERMASTER on a variety of topics.

Staff fields whatever issues it can however there have been significant, and mounting, unanticipated issues in 2018 determined to require the expertise of WM legal counsel. These include to date:

Additional information requested by the Judge re: 2018 CM (concluded):	7,695.00
CAW Production of LSRA APA (concluded):	90.00
Bishop Mcintosh & Mcintosh (concluded):	405.00
PRA records request & comments (on-going & extensive):	<u>4,900.00</u>
Total additional expenditures	\$13,090.00
Budgeted expenditures	2,160.00

This unanticipated work that needed to be performed resulted in all of the monies allocated to providing legal services being exhausted in March 2018. The Board at its August 1, 2018 meeting approved a budget adjustment moving \$10,000 from the Contract Services Administrative Officer (AO) budget line to the Legal Services budget line, increasing the budgeted amount for legal services to \$17,000 and reducing AO to \$40,000.

**DISCUSSION:**

In order for PROFESSIONAL to continue providing these types of services during the remainder of 2018, this Amendment No.1 to RFS No. 2018-01 hereby adds \$17,000.00 to the authorized cost of RFS No. 2018-01. This amount includes the \$10,000 budget revision approved by the Board at its 8/1/18 meeting and the \$7,000 movement proposed from the Administrative Fund Reserve. Therefore, the revised cost of RFS No. 2018-01 authorized by this Amendment No.1 is \$24,000.00.

**FISCAL IMPACTS:**

The \$7,000 from the Administrative Fund Reserve leaves an estimated \$18,000 in the fund to be carried over to 2019 reserves and the reserve balance brought up to the customary \$25,000 with 2019 assessments.

**ATTACHMENTS:**

Amended RFS 2018-01 with Brownstein, Hyatt, Farber, Schreck (BHFS) (Russ McGlothlin)

**SEASIDE BASIN WATERMASTER**  
**REQUEST FOR SERVICE**

DATE: October 3, 2018

RFS NO. 2018-01 Amendment No.1

TO: Russ McGlothlin  
Brownstein Hyatt Farber Schreck, LLP  
1020 State Street  
Santa Barbara, CA 93101-2711

FROM: Laura Dadiw  
Watermaster  
PO Box 51502  
Pacific Grove, CA 93950

**Services Needed and Purpose:** Provide legal services to prepare and file a motion, and attend a status conference hearing via CourtCall on March 30, 2018 with Judge Nichols of the Superior Court; assist as may be requested with preparing the Watermaster Annual Report to Court to be filed by January 15, 2019; and provide miscellaneous legal consultation as may be needed by Watermaster. See Amended Scope of Work in Attachment 1.

**Completion Date:** All work under this RFS will be completed no later than December 31, 2018.

**Method of Compensation:** Time and Expense Payment Method. Hourly rates and costs for Other Direct Costs and Expenses are described in Attachment I.

**Total Price Authorized by this RFS:** The revised Total Price for RFS No. 2018-01, as authorized by this Amendment No.1 thereto, is \$24,000  
(Cost is authorized only when evidenced by signature below.)

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

**Requested by:** Not Applicable to this RFS Date: \_\_\_\_\_

**Authorized by:** \_\_\_\_\_ Date: \_\_\_\_\_  
Ralph Rubio  
WATERMASTER Chairman of the Board

**Agreed to by:** \_\_\_\_\_ Date: \_\_\_\_\_  
PROFESSIONAL

## **ATTACHMENT 1**

The original Total Price of RFS No. 2018-01 was \$7,000. A portion of that amount was for PROFESSIONAL to provide, on an ongoing and as-requested basis, legal services to WATERMASTER on a variety of topics.

Unanticipated work that needed to be performed in 2018 resulted in all of the monies allocated to providing legal services being exhausted in March 2018.

In order for PROFESSIONAL to continue providing these types of services during the remainder of 2018, this Amendment No.1 to RFS No. 2018-01 hereby adds \$17,000.00 to the authorized cost of RFS No. 2018-01. Therefore, the revised cost of RFS No. 2018-01 authorized by this Amendment No.1 is \$24,000.00.