

Monitoring and Management Program Operations Budget For Tasks to be Undertaken in 2022							Comparative Costs from 2021 Budget	
Task	Subtask	Sub-Subtask	Cost Description	CONSULTANTS & CONTRACTORS ⁽³⁾				Total
				MPWMD	Private Consultants	Contractors		
Labor								
			Technical Project Manager ⁽¹⁸⁾	\$0	\$75,000	\$0	\$75,000	\$60,000
M.1 Program Administration								
	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, & M.1.e		Preparation for and Attendance at Meetings and Peer Review of Documents and Reports ⁽⁸⁾	\$0	\$27,560	\$0	\$27,560	\$23,000
	M.1.f		QA/QC	\$0	\$0	\$0	\$0	\$0
	M.1.g		SGMA Documentation Preparation	\$0	\$2,380	\$0	\$2,380	\$2,320
I.1 Initial Phase 1 Monitoring Well Construction (Task Completed in Phase 1)								
I.2 Production, Water Level and Quality Monitoring								
	I.2.a.		Database Management					
		I.2.a.1.	Conduct Ongoing Data Entry/ Database Maintenance/Enhancement ⁽¹⁵⁾	\$20,776	\$2,400	\$0	\$23,176	\$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 ⁽⁷⁾	\$0	\$0	\$0	\$0	\$0
		I.2.b.2.	Collect Water Levels ⁽⁶⁾	\$21,490	\$0	\$0	\$21,490	\$3,726
		I.2.b.3.	Collect Quarterly Water Quality Samples and Perform Sentinel Well Induction Logging ⁽¹⁾⁽⁵⁾	\$18,770	\$0	\$20,565	\$39,335	\$42,101
		I.2.b.4.	Update Program Schedule and Standard Operating Procedures.	\$0	\$0	\$0	\$0	\$0
		I.2.b.5.	Monitor Well Construction ⁽⁷⁾	\$0	\$0	\$0	\$0	\$0
		I.2.b.6.	Reports	\$3,136	\$0	\$0	\$3,136	\$2,086
		I.2.b.7.	CASGEM Data Submittal for Watermaster's Voluntary Wells	\$4,704	\$0	\$0	\$4,704	\$5,960
I.3 Basin Management								
	I.3.a.		Enhanced Seaside Basin Groundwater Model	(Costs Shown in Subtasks Below)				
		I.3.a.1	Update the Existing Model ⁽¹¹⁾	\$0	\$0	\$0	\$0	\$0
		I.3.a.2	Develop Protective Water Levels ⁽¹²⁾	\$0	\$0	\$0	\$0	\$0
		I.3.a.3	Evaluate Replenishment Scenarios and Develop Answers to Basin Management Questions ⁽¹⁰⁾	\$0	\$20,000	\$0	\$20,000	\$70,000
	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	\$0
	I.3.d		Evaluate Coastal Wells for Cross-Aquifer Contamination Potential	\$0	\$0	\$0	\$0	\$0
	I.3.e		Seaside Basin Geochemical Model ⁽¹³⁾	\$0	\$10,000	\$0	\$10,000	\$10,000
I.4 Seawater Intrusion Contingency Plan								
	I.4.a.		Oversight of Seawater Intrusion Detection and Tracking ⁽¹⁷⁾	\$0	\$0	\$0	\$0	\$0
	I.4.c.		Annual Report- Seawater Intrusion Analysis ⁽¹⁶⁾	\$0	\$26,290	\$0	\$26,290	\$27,502
	I.4.e.		Refine and/or Update the Seawater Intrusion Response Plan ⁽²⁾⁽⁹⁾	\$0	\$0	\$0	\$0	\$0
	I.4.f.		If Seawater Intrusion is Determined to be Occurring, Implement Contingency Response Plan ⁽²⁾	(No Costs are Included for This Task, as This Task Will Likely Not be Necessary During 2021. If it Does Become Necessary, Use of Contingency Funds or a Budget Modification Will Likely be Necessary)				
TOTALS CONSULTANTS & CONTRACTORS				\$68,876	\$88,630	\$20,565		
SUBTOTAL not including Technical Program Manager =							\$178,071	\$203,699
Contingency (not including Technical Program Manager) @ 10% ⁽⁴⁾ =							\$17,807	\$20,370
Technical Program Manager =							\$75,000	\$60,000
TOTAL⁽¹⁹⁾=							\$270,878	\$284,069

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) The MPWMD portion of this Task includes: (1) \$900 to purchase a new sampling pump if an existing one needs to be replaced, (2) \$476 for vehicle mileage costs for both this Task and Task I.2.b.2, (3) \$6,200 for laboratory analytical costs, (4) \$150 for CO2 bottles to run the sample pumps, and (5) \$504 of administrative support costs for preparing billings and processing invoices from the water quality laboratory.
- (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 replacement datalogger at a price of \$850 including installation parts, or to keep in inventory as a spare if needed.
- (7) A replacement for monitoring well FO-9 Shallow is expected to be constructed in 2022. The costs for this work are contained in the Capital Budget for 2022 and no costs for it are included in the Operations Budget for 2022.
- (8) This cost is 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, but not be limited to, 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) The 2021 budget line-item for this Task included doing replenishment water updated modeling for an estimated \$50,000. A cost proposal for this work was received and it was found that this work could be performed for approximately \$40,000. The 2021 budget also included \$20,000 for evaluating other issues the Board might wish to evaluate. At its August 2021 meeting the Board approved having this work performed in 2021 and charged to the 2021 M&MP Budget. Therefore, it was deleted from the 2022 M&MP Budget, and the line-item budget for this Task was reduced to \$20,000 for other issues the Board may wish 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 2022.
- (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 2022.
- (13) This was a new Task that was started in 2018, and was completed for the PWM AWT water in 2019. Funds allocated for this Task in 2022 would only be used if geochemical modeling is performed in 2022 for the MPWSP desalination plant water, and if that modeling indicates 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 desalinated water into the Basin.
- (14) This Task is included to provide funds for the Watermaster to perform modeling and other investigative work to aid in making Basin management decisions.
- (15) Includes \$200/month for an outside consultant to maintain the Watermaster's website and post documents on it. Also includes \$1,960 for MPWMD to respond to requests from consultants and others for data from the database.
- (16) MPWMD's costs to assist in this Task are included in its costs under Task I.2.b.6.
- (17) MPWMD's and Montgomery & Associates' costs to provide oversight in this Task are included under their other Tasks.
- (18) The amount originally budgeted for the Technical Program Manager in 2021 was \$60,000. However, this was increased to \$95,000 by a budget amendment in mid-year when it became apparent that more work needed to be done than was originally anticipated.
- (19) As noted in footnote 10, the Total Cost for the 2022 M&MP budget would be reduced by \$40,000 if the replenishment water modeling update is performed in 2021.