

MEETING NOTICE AND AGENDA

TECHNICAL ADVISORY COMMITTEE OF THE SEASIDE BASIN WATER MASTER

DATE: Wednesday, April 9, 2008

TIME: 1:30 p.m. to 3:00 p.m.

LOCATION: City of Seaside City Hall – Portable Buildings Conference Room
440 Harcourt Avenue
Seaside, CA 93955

If you wish to participate in the meeting from a remote location, please call in on the new Watermaster Conference Line by dialing (877)810-9415. Use the Access Code of 4560043.

OFFICERS

Chairperson: Diana Ingersoll, City of Seaside

Vice-Chairperson: Tom. Bunosky, California American Water Company

MEMBERS

California American Water Company	City of Del Rey Oaks	City of Monterey
City of Sand City	City of Seaside	Coastal Subarea Landowners
Laguna Seca Property Owners		Monterey County Water Resources Agency
Monterey Peninsula Water Management District		Public Member (John Fischer)

Agenda Item

Page No.

- | | |
|---|----|
| 1. Administrative Matters: | |
| A. Approve Minutes from March 12, 2008 (Bob Jaques) | 1 |
| 2. Progress Reports (Derrick Williams and Joe Oliver) | 7 |
| 3. Draft Interim Seawater Intrusion Contingency Plan (Joe Oliver) | 11 |
| 4. Request Board Direction Regarding Calculation of Replenishment Assessments (Bob Jaques) | 15 |
| 5. Solicitation of Proposals to Perform Well Surveying Work (Bob Jaques) | 21 |
| 6. Schedule (Bob Jaques) | 35 |
| 7. MRWPCA Ground Water Replenishment Project Funding Assistance (Bob Jaques) | 43 |
| 8. Other business | |
| 9. Set next meeting date for Wednesday May 14, 2008 at 1:30 p.m. at the Seaside City Hall Portable Office Buildings Conference Room | |

**SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE**

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

MEETING DATE:	April 9, 2008
AGENDA ITEM:	1.A
AGENDA TITLE:	Approve Minutes from March 12, 2008
PREPARED BY:	Robert Jaques, Technical Program Manager
SUMMARY: Draft Minutes from the March 12, 2008 meeting were emailed to all TAC members. Any changes that were requested have been included in the attached version.	
ATTACHMENTS:	Minutes from the March 12, 2008 meeting
RECOMMENDED ACTION:	Approve the minutes

D-R-A-F-T
MINUTES

**Seaside Groundwater Basin Watermaster
Technical Advisory Committee Meeting
March 12, 2008**

Attendees: **TAC Members**
City of Seaside – Diana Ingersoll (Chair), Tim O’Halloran
California American Water – Tom Bunosky (Vice Chair-via telephone)
City of Monterey – Les Turnbeaugh
Laguna Seca Property Owners – Stanley Powell (via telephone)
MPWMD – Joe Oliver
Public Member – No Representative
MCWRA – Kathy Thomasberg
City of Del Rey Oaks – No Representative
City of Sand City – No Representative
Coastal Subarea Landowners – No Representative

Watermaster
Technical Program Manager - Robert Jaques

Consultants
HydroMetrics LLC - Derrik Williams (via telephone)

Others:
None

The meeting was called to order at 1:37 p.m. by Tim O’Halloran. Diana Ingersoll arrived shortly thereafter and took over as the Chair.

1. Administrative Matters:

- A. Approve Minutes from January 9, 2008**
- B. Approve Minutes from February 13, 2008**

On a motion by Mr. Turnbeaugh, second by Ms. Thomasberg, the minutes for both meetings were approved as presented.

2. Conclusions Regarding California American Water Activities Included in the Monitoring and Management Program

Construction of an ASR Monitoring Well near the Seaside Golf Courses in the former Fort Ord:
Mr. Jaques summarized the agenda packet material on this item.

Mr. Bunosky said that work on this project is on hold, as described in the agenda packet materials, and is also on hold while CAW awaits approvals from the RWQCB for the ASR wells, and obtains the stream alteration agreement.

Construction of an In-Lieu Recharge Project for the Laguna Seca Subarea:

Mr. Jaques summarized the agenda packet material on this item.

Mr. Bunosky said that this project would not be proceeding for the reasons listed in the agenda packet, as well as the recently received Draft Cease and Desist Order from the SWRCB. Mr. Bunosky said he did not anticipate this project moving ahead at any time.

3. Response Documents to November 26, 2007 Court Order

Mr. Jaques summarized the agenda packet material on this item. There was no discussion of it.

4. Progress Reports

Mr. Jaques summarized the agenda packet material on this item.

Mr. Oliver reported that at the last TAC meeting the responses from the well-owners had been reviewed, and that MPWMD has started data collection on most of these wells. On the other wells, which are covered by MPWMD's R. F. S. No. 2008-01 (the other monitoring network wells) some of the wells are proving difficult to get data from. These include some wells in the Laguna Seca Subarea, such as York, CAW's Bishop East Valley well, and the existing monitoring well at the Laguna Seca Driving Range. Mr. Oliver said he was looking for replacement wells for these.

Mr. Williams reported that he had received the executed contract with the Watermaster, and that he had begun work on his contract. He said that background information pertaining to CAW's ASR Monitoring Well (Bayonet monitoring well) had been reviewed, and he had discussed this matter with Mr. Oliver. They jointly concluded that a replacement well is needed for both water level and water quality purposes, as well as to provide geological information for the Monitoring Network.

Mr. Oliver said he concurred with Mr. Williams' comments and findings, especially with regard to the need to have additional geologic information from this area, in view of the new geologic information obtained from the Coastal Sentinel Wells when they were installed. He pointed out that earlier geologic assumptions were not borne out by that information, so more information is needed at the proposed ASR well location.

Mr. Bunosky asked if the RWQCB's concerns regarding the ASR wells apply to the Phase 1 ASR wells now being installed by the MPWMD. Mr. Oliver said he would need to review the recent correspondence from the RWQCB in order to be able to respond to the question. Mr. Bunosky said that CAW is not pursuing Phase 2 ASR wells at this time, but if the Bayonet ASR well is needed for Phase 1 ASR purposes (perhaps as a monitoring well for an actual ASR injection and recovery well) CAW would install it at this time as part of the Phase 1 ASR Project. Mr. Oliver said the RWQCB has been talking about requiring both a near-field and a far-field monitoring well for use in conjunction with MPWMD's Phase 1 ASR project. Mr. Oliver will update the TAC on this topic at the next TAC meeting.

Mr. William said that he is setting up a meeting to start Task 1 (Basin Management Action Plan) and Task 2 (Sea Water Intrusion Response Plan) of his work. At that meeting discussions will be

held on subjects including what can and cannot be done, yield, what is known, etc. He said he was planning to hold the meeting on March 24th, but Mr. Jaques reported that he would not be able to attend on that date and would like to be included in the meetings. Mr. Williams will select an alternate date and communicate with the meeting invitees by e-mail.

Ms. Thomasberg said she would like to see a schedule showing when the various documents that Mr. Williams will be producing will be available for review, in order to carry out MCWRA's Tasks I.4.a, b, and c. Mr. Jaques noted that many of these dates are included in the Schedule in today's TAC meeting agenda packet, subject to revision by Mr. Williams as the work proceeds.

Mr. Powell asked if the Database training had been held, and whether any problems were identified as a result of it. Mr. Jaques said that the meeting had been held, and Mr. Oliver said that work is still in progress to resolve some data inputting and report generating problems with the Database. Another meeting with the RBF programmers is scheduled for tomorrow by teleconference.

5. Request Board Direction Regarding Calculation of Replenishment Assessments Schedule

With regard to Issues No. 1 and 2 (as listed in the agenda packet on this item), Mr. Bunosky questioned how to prepare unit costs for the replenishment assessment, if no projects will be available by January 2009, except the Sand City desalination plant.

With regard to Issue No. 3 Mr. Bunosky asked how you would spread out the overpumping amounts between all of the well pumpers in conjunction with the Replenishment Assessment approach.

Ms. Ingersoll said that the City of Seaside is also examining the Standard and Alternative Production classifications, as this pertains to their golf course wells, and may be asking for a reclassification of those wells. She said the Seaside Development Resort was guaranteed by the City of Seaside to get recycled water for the golf courses. Seaside has requested MCWD to provide potable water for this purpose, if recycled water will not be available by January 2009. This could potentially help avert the 10% reduction in pumping that would go into effect under the Court Order in January 2009. She said that negotiations are in progress with MCWD and FORA on this matter. She will update the TAC as things progress. She said that MCWD has substantial water supply available, due to a slowdown in redevelopment of the former Fort Ord.

Ms. Ingersoll said she felt the Board would want the TAC's recommendations, not just a listing of the issues as contained in the agenda packet, for them to consider. She appointed a subcommittee comprised of Mr. Oliver, Mr. Bunosky, and Mr. Jaques to develop recommendations pertaining to each of these issues. It was agreed that the subcommittee would work on these issues and report back to the TAC with their recommendations at the April or May TAC meetings.

6. Plan to Solicit Quotations to Perform Well Surveying Work

Mr. Jaques summarized the agenda packet material on this item.

Mr. Turnbeaugh asked what Mr. Jaques thought the work would cost, and Mr. Jaques responded that he would not know until he received proposals. Mr. Oliver commented that getting the survey data now would probably be less expensive than in the past due to the advent of GPS technology.

Mr. Bunosky asked where the benchmarks were located for each well. Mr. Jaques said that at each well a determination would be made as to what benchmark is being used at that site for purposes of measuring the depth to water.

Mr. Williams recommended getting survey level data as accurately as is fiscally feasible. Mr. Oliver said it may be desirable to solicit costs for various levels of accuracy. Mr. Williams said that one foot above or below sea level is important, particularly for wells located near the coast, and thus his recommendation that the level data be obtained with as much accuracy as is affordable.

Mr. Powell suggested consideration be given to having a higher level of accuracy for the Coastal Wells, if providing that level of accuracy would be unaffordable for all the wells. Ms. Thomasberg recommended that all wells be surveyed to the same level of accuracy.

Mr. Jaques will obtain cost proposals and bring them to the TAC for review and direction.

7. Schedule

Mr. Jaques briefly reviewed some of the milestone events in the schedule. Mr. Williams said he saw no problem meeting those dates. He said he will prepare draft reports and provide them to the Watermaster for review approximately one month prior to the completion dates shown in the schedule for each of the reports.

8. Other business

A. Mr. Bunosky asked if the TAC should get the details of the scope of work for MRWPCA's \$100,000 funding for their Ground Water Replenishment Project (GWRP). He said that he understood the work was intended to get the GWRP developed to the "Project Level," so it can be included in the Public Utility Commission's EIR for the Coastal Water Project and alternatives to it. He said he also understood that MRWPCA would be putting about \$30,000 of its own money toward this work, in conjunction with the \$100,000 amount being provided by the Watermaster.

Ms. Ingersoll requested Mr. Jaques to ask Mr. Evans to put this item on the Board agenda again to clarify MRWPCA's scope of work and also what the TAC's role in reviewing or monitoring the work should be.

B. Mr. Turnbeaugh asked what Dave Berger's new role would be at CAW. Mr. Bunosky said that Mr. Berger starts his new job March 24th and will handle the Coastal Water Project and the San Clemente Dam Project. Mr. John Klein will work for Mr. Berger. Mr. Turnbeaugh asked Mr. Bunosky if he could provide an organizational chart for CAW, and Mr. Bunosky said that he would.

9. Set next meeting date for Wednesday April 9, 2008 at 1:30 p.m. at the Seaside City Hall Portable Office Buildings Conference Room

The next TAC meeting was set for this time, date, and location.

The meeting adjourned at 2:43 p.m.

**SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE**

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

MEETING DATE:	April 9, 2008
AGENDA ITEM:	2
AGENDA TITLE:	Progress Reports
PREPARED BY:	Robert Jaques, Technical Program Manager
SUMMARY:	<p>As a regular part of each monthly TAC meeting, progress reports will be provided by the consultants and entities that are working for the Watermaster on 2008 Monitoring and Management Program activities. These are primarily HydroMetrics, with its team members, and MPWMD. MCWRA is also under contract with the Watermaster in 2008, but its role is essentially to review documents and activities being performed by these other parties, and to provide its comments and recommendations in this regard.</p> <p>Today's reports will be oral. In the future, short written reports will be contained in the agenda packets, with oral updates made during the TAC meetings.</p> <p>Under this agenda topic TAC members are encouraged to raise any questions or issues of concern regarding this work.</p>
ATTACHMENTS:	Task descriptions of the Scopes of Work in each contract, and Progress Reports from each of these parties
RECOMMENDED ACTION:	None required – information only

TASKS IN THE SCOPE OF WORK FOR THE HYDROMETRICS CONTRACT

CONTRACT TASK NO.	WORK TO BE PERFORMED
Task 1	Develop Basin Management Action Plan
Task 2	Develop Seawater Intrusion Response Plan
Task 3	Update the 2007 Seawater Intrusion Analysis Report
Task 4	Meetings and Presentations
Task 5	Ongoing Hydrogeologic Support

Work Performed by Hydrometrics Since Last Progress Report

Work began on two documents: the Basin Management Action Plan (BMAP) and the Interim Seawater Intrusion Contingency Plan. To initiate this work, a meeting was held among various technical experts who will be working on these documents. The purposes of the meeting included:

- Reviewing previous seawater intrusion contingency ideas
- Agreeing on the scope of the Interim Seawater Intrusion Contingency Plan
- Presenting an overview of the BMAP purpose and structure
- Defining roles for producing the documents
- Brainstorming local groundwater management actions

Members of the HydroMetrics LLC team are currently analyzing data and producing parts of the BMAP. The initial focus is on the existing state of the basin, groundwater budget, and amount of water in storage.

A separate meeting was held with RMC Water and Environment to begin work on the Long Term Supply Options chapter of the BMAP. RMC is now under contract, and working on updating the information in the Long Term Supply Options chapter.

Upcoming Work

Actions anticipated in the upcoming month include further work on the state of the basin chapter of the BMAP, and beginning work on the final Seawater Intrusion Contingency Plan. Additionally, we will look for additional input of local groundwater management options.

TASKS IN THE SCOPE OF WORK FOR THE MPWMD CONTRACTS

CONTRACT NO. 1 (RFS 2008-01):

M&MP TASK NO.	WORK TO BE PERFORMED
I. 2. a.	Water level and water quality data entry and data editing. Review water production data entered by Watermaster for quality assurance and quality control.
I. 2. b. 1.	Review the list of monitoring wells described in the report titled “Enhancement of Seaside Groundwater Basin Monitor Well Network” dated October 23, 2007, and if warranted identify additional monitoring well sites to fill data gaps or to develop additional data that would be beneficial to the management of the basin.
I. 2. b. 2.	Obtain water level data from selected wells. Some data will come via dataloggers and some data will come from manual measurements.
I. 2. b. 3.	Obtain water quality data from selected wells This data may either come from water quality samples that are collected by the airlift method, by the positive displacement method during induction logging of these wells and/or other data gathering techniques, or combinations of these methods.
I. 2. b. 4.	Conduct periodic reviews of the data collection program and provide recommendations for improvements or modifications that would be beneficial to the program. These reviews will be performed at least twice during calendar year 2008, and recommendations will be provided in the form of a memorandum.
I. 2. c.	<ol style="list-style-type: none"> 1. Prepare four quarterly reports summarizing and analyzing the water quality and water level data. 2. Prepare One annual report that contains tables consolidating the data from the quarterly reports and a narrative summarization of the findings, conclusions, and recommendations from the quarterly reports.
I. 3. b.	Participate in meetings with the consultants that are preparing the Basin Management and Action Plan and provide review comments and recommendations.
I. 4. a, b, and c	Participate in meetings with the consultants that are preparing the seawater intrusion analyses and provide review comments and recommendations.
I. 4. d.	Prepare an Interim Seawater Intrusion Response Plan, based on the measures detailed in Exhibit A of the Decision, for use in the interim prior to the completion (by consultants) of a Long-term Seawater Intrusion Response Plan. Also provide review comments and recommendations regarding the consultant’s work and work products, as the consultant prepares the Long-term Seawater Intrusion Contingency Response Plan.

CONTRACT NO. 2 (RFS 2008-02):

Collect water level and water quality data from certain wells located within the Seaside Basin, if the owners/operators of those wells expressed this desire to the Watermaster. This data collection work is performed on an as-directed basis, with formal authorization from the

Watermaster being required prior to performing such work. This will provide the Watermaster with full control over which wells are provided this service, as well as over the costs for having this work performed. This work is only performed after the Watermaster has received an application and a check from a well owner asking the Watermaster to perform this work on the well owner's behalf.

Work Performed by MPWMD Since Last Progress Report

- Held three meetings/teleconferences with RBF database specialists and /or Watermaster staff to review database features and request assistance on refining and resolving operational features.
- Continued ongoing water level and water quality data entry into database.
- Began water level and water quality data collection under enhanced monitoring program (RFS 2008-01).
- Collected quarterly water quality samples from coastal monitor well sites.
- Worked with consultant Martin Feeney to coordinate and collect induction logging data from Watermaster Sentinel Well sites.
- Participated in initial meeting of Watermaster consultant team working on Basin Management Action Plan (BMAP), Seawater Intrusion Response Plan (SIRP) and Seawater Intrusion Analysis Report (SIAR).
- With input and concurrence from Watermaster consultant team, prepared draft *Interim Seawater Intrusion Contingency Plan* document.
- Began data collection for specified Watermaster owner/operators as part of Watermaster required producer data collection program (RFS 2008-02).

Upcoming Work

- Continue data collection efforts under RFS 2008-01 and 2008-02.
- Conduct well rehabilitation and well modifications at specific monitor wells to allow required data collection.
- Continue database data compilation.
- Support Watermaster consultant team on data acquisition and document preparation efforts.

**SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE**

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

MEETING DATE:	April 9, 2008
AGENDA ITEM:	3
AGENDA TITLE:	Interim Seawater Intrusion Contingency Plan
PREPARED BY:	Robert Jaques, Technical Program Manager
<p>SUMMARY: As required in the M&MP, the Watermaster is to develop an Interim Seawater Intrusion Contingency Plan, to be implemented in the event seawater intrusion is detected prior to the development of a long-term Seawater Intrusion Contingency Plan. The long-term plan will be developed by HydroMetrics, and will be completed in the fall of 2008. In the meantime, Joe Oliver of MPWMD has prepared the attached Interim Seawater Intrusion Contingency Plan to fulfill this commitment.</p> <p>Following TAC review and input, Mr. Oliver will finalize this document and it will be presented to the Board for its approval and adoption at its May 2008 meeting.</p>	
ATTACHMENTS:	Draft Interim Seawater Intrusion Contingency Plan
RECOMMENDED ACTION:	Provide review comments so that the document can be finalized and presented to the Board for its approval and adoption at its May 2008 meeting

SEASIDE BASIN WATERMASTER

INTERIM SEAWATER INTRUSION CONTINGENCY PLAN

MARCH 2008

Purpose

This *Interim Seawater Intrusion Contingency Plan* document formalizes the Seaside Groundwater Basin Watermaster's (Watermaster) proposed interim contingency plan for addressing potential seawater intrusion of the Seaside Basin, in accordance with the court adjudication decision and adopted *Seaside Basin Monitoring and Management Program* (SBMMP). This document will serve as the Watermaster's interim contingency plan until a more specific and detailed long-term contingency plan is developed in the fall of 2008. This long-term *Seawater Intrusion Response Plan* (SIRP) is currently under development as part of the Watermaster's Phase 2 implementation of the SBMMP.

Background

A Court Decision¹ in the Seaside Basin adjudication case was filed in Monterey County Superior Court on March 27, 2006, and was amended on February 9, 2007. The Court Decision included, in part, the requirement "to develop a plan of action to be implemented to avoid various effects in the Basin, including seawater intrusion" and to "develop a plan of action to contain seawater intrusion, should it occur". In addition, the Decision set forth an "Interim Contingency Procedure to Contain Seawater Intrusion", if it is detected before such long-term procedures are in place². This procedure was subsequently refined by modifications that were incorporated into the SBMMP³.

Interim Definition of Seawater Intrusion

1 Monterey County Superior Court Case M66343. *California American Water vs. City of Seaside, et al.*

2 See page 2 of the "Principles and Procedures of the Seaside Basin Monitoring and Management Plan", which is Exhibit A to the Court Decision.

3 See Section IV C, page 24, of the *Seaside Basin Monitoring and Management Program*, approved by the Watermaster Board on May 17, 2006, revised September 5, 2006, and approved by the Court on February 9, 2007.

The following interim definition of seawater intrusion is adopted from Section IV B. of the SBMMP:

For the purposes of defining when actions described in [Section IV C] will be taken, the seaside groundwater basin aquifers will be defined as seawater intruded when the chloride concentrations in a coastal monitor well reach approximately 100 mg/l and 250 mg/l for the Paso Robles and Santa Margarita formations respectively. For a coastal production well, the standard will be when chloride concentrations reach 250 mg/l, given that some production wells have multiple aquifer completions with water quality that reflects a blend from these sources. These standards will be used until more comprehensive standards based on historical water quality data at individual monitor and production wells can be developed. Each monitoring well and production well in the groundwater network will be evaluated on site-specific criteria. In addition, the Watermaster will institute interim standards for notice of potential seawater intrusion so that appropriate preventative actions may be taken. Interim notice for seawater intrusion will be defined as a 50 percent increase above ambient chloride concentrations for any specific monitoring well location. Generally accepted laboratory protocols and hydrogeologic methods will be employed for the determinations of seawater intrusion.

The above interim definition recognizes that limited data were available to more definitively describe historical groundwater quality variations, both spatially and vertically throughout the coastal area of the basin. In addition, the above interim definition did not include reference to the Purisima Formation in the Seaside Basin, as the occurrence and distribution of this aquifer unit have only recently been established and partially characterized with the installation of the four new coastal sentinel wells by the Watermaster in 2007. Accordingly, the above interim definition will be refined as part of the planned work to develop the SIRP, based on data that have been compiled from existing and new wells since this interim definition was developed in 2006. The basis for determining ambient chloride concentrations will be the mean value at each well as calculated from the historical data available prior to the adoption of the adjudication decision in March 2006. These mean values for the coastal monitor wells will be provided with the quarterly groundwater quality reports prepared for the Watermaster.

Interim Procedures to Control Seawater Intrusion

The following interim procedures to control seawater intrusion are adopted from Section IV C. of the SBMMP:

- 1. If seawater intrusion is detected in a coastal production or monitoring well ("Contaminated Well"), the Contaminated Well will discontinue pumping and all other wells that produce groundwater from the intruded aquifer that are within one-half mile of the affected monitoring well ("Threatened Wells") will immediately reduce their monthly production to the equivalent of one-half of their*

average monthly production within the previous five years upon notification from Watermaster of the detection of seawater intrusion within the Contaminated Well.

- 2. Watermaster shall increase monitoring of groundwater levels within the one-half mile radius of the Contaminated Well to determine if the requisite pumping reductions sufficiently affect groundwater gradients to prevent the further spread of seawater intrusion toward the Threatened Wells. This increased monitoring effort will include installing at least one new monitoring well as a sentinel well between the Contaminated Well and the nearest down-gradient active Threatened Well.*
- 3. After six months of reduced pumping of the Threatened Wells, the threat of further seawater intrusion will be re-evaluated. If the requisite pumping reductions have failed to sufficiently affect groundwater gradients to prevent the further spread of seawater intrusion toward the Threatened Wells, those wells will further reduce their monthly production to the equivalent of one-third of their average monthly production within the previous five years upon notification by Watermaster that such further reductions are required.*
- 4. After another six months of monitoring, the direction of groundwater gradients will again be evaluated. If there continues to be a groundwater gradient that would pull the detected seawater towards the Threatened Wells, then the Threatened Wells shall discontinue pumping, unless in Watermaster's determination, doing so would create a public health and/or safety risk.*
- 5. If, after the initial discovery of the initial seawater intrusion, seawater is encountered in an additional monitoring or production well, pumping reductions will be required for nearby threatened production wells (i.e., production wells within one half mile of the recently contaminated well) in the same manner as set forth above for first Contaminated Well.*

Similar to the interim seawater intrusion definition, the above interim procedures to control seawater intrusion will be further refined and modified as part of the SIRP, based on additional review and interpretation of hydrogeologic and groundwater quality data being compiled for the SBMMP Phase 2 implementation effort currently underway.

**SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE**

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

MEETING DATE:	April 9, 2008
AGENDA ITEM:	4
AGENDA TITLE:	Request Board Direction Regarding Calculation of Replenishment Assessments
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

At its last meeting the TAC Chair appointed a subcommittee to develop recommendations to be made to the Board in conjunction with bringing these questions to the Board. Due to scheduling conflicts it was not possible to convene the subcommittee since the last TAC meeting. Therefore, at today's TAC meeting there will be an opportunity for discussion by the full TAC on each of these issues. The subcommittee will then be convened to take the TAC's input and develop that into formal recommendations to be made to the Board.

The issues that the TAC will be seeking Board direction and/or clarifications on are listed below. I have prepared some "Potential Recommendation Thoughts" for discussion at today's TAC meeting.

1. Issue: To date the calculation of the Replenishment Assessment unit price has been made using only those water replacement projects that would come on-line, and be available to provide water to the Seaside Basin, prior to January 2009, which is the date that the first 10% reduction in Seaside Basin production is scheduled to be imposed. This is the target date that has been historically used to prepare the Replenishment Assessment Unit Costs for each year since the creation of the Watermaster.

Questions: Should January 2009 continue to be used as the basis for selecting the replenishment projects used in making this calculation, or should projects that will not come on-line until after that date also be included? If projects beyond that date are to be included, should all such projects be included, or should a new "target date" be established for use in selecting the projects to be included? What should the new target date be?

Potential Recommendation Thoughts: There are so few projects that have the potential to come on-line by January 2009, that it would seem more realistic to include projects that will come on-line at later dates. Also, once we reach January 2009 we will need to use a new target date anyway. It would seem more appropriate to use all projects that have been identified with enough detail and timing information, and which would provide replenishment water to the Seaside Basin. In this case there would be no new target date. It will be difficult to obtain or develop very accurate cost information for those projects, but there will likely be some cost information that can be used for this purpose, and this will at least allow the proper magnitude of those costs to be included in the calculations. Also, there is likely to be uncertainty as to

**SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE**

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

AGENDA ITEM:

4 (Cont'd)

when those projects will come on-line. However, this has proven to be the case even with the projects that were supposedly going to come on-line in the very near future. I think the best we can do is include all of the reasonably feasible projects, use the best cost data and scheduling information their proponents can provide us, and thereby develop a Unit Cost that will at least be representative of the mix of projects that are being pursued.

2. **Issue:** To date the unit costs of replenishment water from each of the potential replenishment projects have been updated to the current year each time the calculations are made. No inflation projections to try to estimate what these unit costs might be in the actual year a project will come on-line have been made. This was based in part on the expectation that monies collected through Replenishment Assessments would be invested in acceptable forms for the investment of public agency funds, so that they would earn interest that would offset the inflationary impacts on these unit costs. It is my understanding that, to date, no Replenishment Assessment monies have actually been collected. Further, it is also my understanding that the City of Seaside, which serves as Treasurer for the Watermaster, does not credit the Watermaster's accounts with any of the interest that the City earns on the monies in the Watermaster's accounts. If these understandings are correct, then the Watermaster's Replenishment Fund is not keeping pace with inflation.

Questions: Should the unit costs of the potential replenishment projects be inflated to some future "target year" when the annual calculation of replenishment assessments is performed? If so, what should be used as the target year?

Potential Recommendation Thoughts: It would seem appropriate to develop the costs to be reflective of the costs that will be incurred at the time the projects come on-line, rather than using current-year cost estimates from the project proponents. We could do that by applying a 3% per year inflation factor up to the dates the projects will come on-line. I think we should inflate the costs, because the Watermaster is not receiving any interest on the monies it collects and saves in its Replenishment Assessment account with the City of Seaside. By inflating the costs, the Unit Cost will be higher, more realistically reflecting what the cost of water under the various projects is likely to be.

3. **Issue:** The Court Decision created the Seaside Basin Watermaster for the purposes of managing the groundwater resources of the Basin, and to bring water production into balance with the Natural Safe Yield. However, the Decision does not appear to make it clear whether or not the Watermaster is expected to replace the cumulative overpumping in order to bring the groundwater levels back up to historically higher levels. Mr. Williams of HydroMetrics said it may be necessary to do this to some extent in order to raise groundwater levels high enough to prevent sea water intrusion. However, development of the Basin Management Action Plan will be necessary before these types of determinations can be made.

**SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE**

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

AGENDA ITEM:	4 (Cont'd)
<p>Questions: Should the water volumes that are sought with the use of Replenishment Assessment revenues be sufficient to:</p> <p>(1) Offset annual volumes that are pumped in excess of the Operating Safe Yield, <u>and</u></p> <p>(2) Replenish the cumulative amounts pumped in excess of the Natural Safe Yield since the creation of the Watermaster?</p> <p>Potential Recommendation Thoughts: As noted above, we won't know what the true Natural Safe Yield is, and whether we will need to bring groundwater levels back up to higher levels than they currently are, until we have the Basin Management Action Plan later this year. Therefore, I think we should hold off on presenting this topic to the Board until after that document has been received. At that time we will have a better understanding of the condition of the Basin and will be better able to pose and discuss this issue for the Board.</p>	
ATTACHMENTS:	Paper discussing the Replenishment Assessment, its purpose and intent under the Court Order
RECOMMENDED ACTION:	Provide input to the TAC subcommittee to develop specific recommendations to the Board on each of these Issues

Replenishment Assessments

What is the Replenishment Assessment?

The Amended Decision filed with the Court February 9, 2007 contains the following statements and/or requirements pertaining to the Replenishment Assessment on pages 32 and 33:

Each Water Year, the Watermaster will determine a Replenishment Assessment for Artificial Replenishment of the Seaside Basin necessary to offset the cumulative Basin Over-Production (as defined in Section III.A. 21), and levy a Replenishment Assessment. Replenishment Assessments based on Over-Production and on Operating Yield Over-Production shall be assessed within 60 days of the end of each Water Year on a per acre-foot basis on each acre-foot, or portion of an acre-foot, of Over-Production, and payment shall be due no later than January 15th of the following year. 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.

Section III.A.21 of the Order defines Over-Production to mean, with regard to all Production from the Seaside Basin, “...that quantity of Production which exceeds an initially assumed Natural Safe Yield of 3,000 AFY.” With regard to each Producer, Over-Production means “...that quantity of Water Produced in any Water Year in excess of that Producer’s Base Water Right, as applied to an assumed Natural Safe Yield of 3,000 AFY.”

There are **two** components to the Replenishment Assessment:

1. The **Artificial Replenishment Assessment** is a fee that is charged proportionately against the cumulative amount that all Producers pump over the (assumed) 3,000 AFY Natural Safe Yield of the basin. However, the Order provides that for Alternative Producers there is no fee charged if the Alternative Producer does not pump any water in excess of the fixed amount allocated to it in Table 2 of the Order, and
2. The **Operating Yield Over-Production Assessment** is a fee that is charged against each Standard Producer for the amount of water the Standard Producer pumps in excess of its Base Water Right, as determined using the Allocation percentages in Table 1 of the Order, and against each Alternative Producer that pumps in excess of its allocation in Table 2 of the Order.

The actual calculation of each of these Assessment components gets complex and will therefore not be discussed or explained in this paper. The purpose of this paper is to describe the Replenishment Assessments and what the monies collected through these Assessments is intended to be used for.

The first component of the Replenishment Assessment collects monies from all of the Standard Producers (and Alternative Producers if they exceed their allocations) in proportion to the amount that they have cumulatively pumped in excess of the Natural Safe Yield of 3,000 AFY.

So even if a Standard Producer pumps no water in excess of its Allocation, if cumulative pumping has exceeded the Natural Safe Yield, this Standard Producer will still have to pay a fee under this first component in proportion to its contributing toward the over-pumping of the Basin in excess of the Natural Safe Yield.

The second component of the Replenishment Assessment collects monies only from those Standard Producers who pumped amounts of Native Water in excess of their Standard Production Allocations, again as calculated using the percentages in Table 1 of the Order. Alternative Producers are only subject to the second component of the Replenishment Assessment if they pump amounts in excess of their fixed allocations in Table 2 of the Order. So if a Standard Producer does not pump amount of water in excess of its Allocation, it will not have to pay a fee under the second component.

What Are the Monies Collected Through the Replenishment Assessments to be Used for?

Per page 33 of the Order, funds generated through the Artificial Replenishment Assessments “...are to be used solely for replenishment of the Basin Groundwater supply with Non-Native water.” Non-native water is defined in the Order to mean “...all water that would not otherwise add to the Groundwater supply through natural means or from return flows from surface applications other than intentional Spreading.”

Also per page 33 of the Order, funds generated through the Operating Yield Over-Production Assessments “...shall be utilized by the Watermaster to engage in or contract for Replenishment of the Operating Yield Over-Production occurring in the Preceding Water Year as expeditiously as possible.”

On Page 34 of the Order it states that “...All proceeds of Replenishment Assessments shall be used to procure Non-Native water, including, if appropriate, substitute reclaimed water.”

Although there is some variation in language between these sections of the Order, it is clear that the monies collected through the Replenishment Assessments are intended to be used to obtain water to recharge the Basin to the extent necessary to reduce the net water production taken from the Basin to a level at or below the Natural Safe Yield of 3,000 AFY. The recharge water could be such things as water imported from another water supply outside the Basin, recycled water used to reduce pumping for landscape irrigation, or recycled water used for recharge through direct injection or spreading.

How is the Per Acre-Foot Cost of the Replenishment Assessments to be Determined?

Per page 33 of the Order, “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 in October of 2007 will be used to calculate Replenishment Assessments for pumping that occurs during the Water Year which begins on October 1, 2007 and ends on September 30, 2008.

On pages 9 and 10 (Section 6.5) of the Watermaster Rules and Regulations, there is a discussion of how the Replenishment Assessment per acre-foot costs are to be calculated. It states that

“The per acre-foot cost of Replenishment Assessments for Production in excess of Natural Safe Yield shall be based on the anticipated cost of Artificial Replenishment, including the cost to construct, operate, and maintain facilities necessary for replenishment of the Basin. Replenishment Assessment may only be used for Artificial Replenishment.” The Order defines Artificial Replenishment to mean the act of engaging in or contracting for Non-Native Water to be added to the Groundwater Basin through spreading or direct injection to offset the cumulative Over-Production from the Basin in any particular Water Year. It can also include programs in which Producers agree to refrain from exercising their rights to pump their full Production Allocations where the intent is to cause the replenishment of the Basin through forbearance in lieu of the injection or spreading of Non-Native Water.

So the per acre-foot cost used to determine the Replenishment Assessments should be the cost that would have to be paid, per acre-foot, to obtain water to recharge the Basin to the extent necessary to offset the cumulative over-production above the Natural Safe Yield, during a given Water Year.

From work done to date in calculating the per acre-foot cost, it is apparent that there are ongoing changes in projected costs of recharge water and in the timing of the projects which will provide that water. Hence, the per acre-foot cost needs to be recalculated each year using updated cost projections and implementation schedules for these recharge projects.

If recharge water is not available to be purchased in a given Water Year to offset the cumulative over-production that occurred in that year, then the monies collected through the Replenishment Assessments in that Water Year may be accumulated for multiple Water Years until they can be used to purchase recharge water.

It is to be expected that the costs of the recharge projects will increase with inflation, among other things. Therefore, the unspent Replenishment Assessment monies should be invested in interest-earning accounts that will offset these inflation increases, until such time as the recharge projects come on-line and the needed water can then be purchased.

As long as the unit costs of water from the various potential recharge projects is forecast by the agencies sponsoring the recharge projects to the dates at which the projects will come on-line, there should be no need to inflate those unit costs when the per acre-foot cost used to determine the Replenishment Assessments is calculated.

**SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE**

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

MEETING DATE:	April 9, 2008
AGENDA ITEM:	5
AGENDA TITLE:	Solicitation of Proposals to Perform Well Surveying Work
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

At the last TAC meeting there was concurrence in moving ahead with obtaining survey data for the wells that will be reporting water level data throughout the Seaside Basin. The data is typically obtained as the depth-in-feet from a surface benchmark to the water surface in the well. However, many of the wells do not have established benchmark elevations, so it is not possible to convert these depth measurements into water surface elevations.

It was also subsequently concluded through discussions with Mr. Oliver and Mr. Williams that it would be desirable to also obtain accurate horizontal coordinate locations for each of these wells, so that they can be accurately plotted on maps, particularly maps that will be prepared to show water level contours.

The attached RFP was prepared and sent out to the firms listed at the front of the RFP on March 29, asking for Proposals to perform this work. Some initial feedback from one of the firms indicates that GPS technology has advanced to the point that all GPS measurements will be equally accurate, i.e. there is no additional cost to get the highest level of accuracy, so the need to select between the 3 levels of accuracy described in the RFP may be a moot point. However, we will need to see what each of the Proposals says in order to come to a firm conclusion on that matter. From the input I received, it sounds as though it will be no problem to obtain horizontal and vertical accuracies of less than one foot, which will easily meet the needs of the Watermaster.

Assuming this is confirmed when the Proposals are received, and in the interests of moving along with this work as soon as possible to ensure that the survey data is completed and available to HydroMetrics for use in preparing the Basin Management Action Plan, I am requesting the TAC's approval for me to review the Proposals, select the firm with adequate capabilities and with the lowest cost, and to recommend to the Board at its May meeting that a contract be executed with that firm to perform this work. Originally I had envisioned coming back to the TAC with a summary of the Proposals, and my recommendation, at the May TAC meeting, but I realized that this would then delay getting Board approval to award the contract until their June meeting, which would put us at risk of not getting the work done by the time it will be needed by Hydrometrics.

**SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE**

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

AGENDA ITEM:

5 (Cont'd)

There is contingency money in the approved FY 2008 Monitoring and Management Program Operations budget which I anticipate will be sufficient to cover the costs of this activity.

ATTACHMENTS:

RFP sent to surveying firms

**RECOMMENDED
ACTION:**

Authorize Technical Program Manager to review the Proposals and make a recommendation to the Board to award a contract

List of Firms to Which the RFP Was Sent

Bestor Engineers
Attention: John Pettley
9701 Blue Larkspur Lane
Monterey, CA 93940

WWD Corporation
Attention: Chris Stout
2801 Monterey-Salinas Highway
Suite I
Monterey, CA 93940

Monterey County Surveyors, Inc.
235 Salinas Street
Salinas, CA 93901

Baseline Land Surveyors
Attention: Mark Doolittle
201 Hoffman Avenue
Monterey, CA 93940

Central Coast Surveyors
Attention: Dave Edson
5 Harris Court
Monterey, CA 93940

Monterey County Water Resources Agency
Attention: Kathy Thomasberg
893 Blanco Circle
Salinas, CA 93901

Seaside Basin Watermaster

March 29, 2008

Address

Subject: Request for Proposal to Provide Well Surveying Services

Dear _____:

This Request for Proposals (RFP) is for the purpose of obtaining proposals from qualified firms to provide horizontal and vertical survey information for reference points at water wells located within and near the area overlying the Seaside Groundwater Basin.

BACKGROUND

The Seaside Basin Watermaster (Watermaster) was created by the Superior Court of Monterey County in 2006 to manage the water resources of the Seaside Groundwater Basin (Basin). This was the result of an adjudication process involving many of the parties that have wells drawing water from this basin.

As part of its work the Watermaster is collecting water level data from numerous wells within the Basin. This data will be used to monitor the Basin to detect areas of drawdown and for purposes of determining the potential for seawater intrusion to occur.

Currently, the data is reported in the form of measurements of the depth from the ground surface at each well, to the water level within the well casing. However, only a portion of the wells have known ground level elevations for the reference points from which these depth measurements are made. Further, many of the wells for which reference point elevations are known have these elevations based on surveys that were done some years ago, and in some cases are based on estimated elevations from topographic maps.

In addition there is little or no coordinate data available to use for plotting the locations of these wells on maps.

It is important to the Watermaster's work that the elevations and locations of all of the well reference points be known as accurately as feasible, and also that they are all on the same datum and coordinate system.

SCOPE OF WORK

The Scope of Work for which Proposals are being solicited is:

1. To develop accurate elevation and location data for the reference points of each of the 98 wells listed in Attachment A. The locations of these wells are shown on the map in Attachment B. Note that not all of the wells are individually visible on this map, since some of them are in such close proximity that they appear as a single well.
2. To provide this data in tabular form in an Excel spreadsheet, so that the Watermaster can use this data to develop water level elevations from the water depth measurements it receives from the well owners, and so that these wells can be accurately plotted on maps.

The Watermaster recognizes that there may be a number of methods and/or techniques that could be employed to develop the information being requested in this RFP, and that the level of accuracy, and the costs associated with each method and/or technique will vary. Consequently, the Watermaster is asking that Proposals be submitted for the development of elevations accurate to:

1. The nearest 3 feet (plus or minus 3 feet vertically), with appropriate corresponding location coordinates
2. The nearest 1 foot (plus or minus 1 foot vertically), with appropriate corresponding location coordinates, and
3. For sub-one foot accuracy, with appropriate corresponding location coordinates

For horizontal coordinate locations, an accuracy of approximately 1 to 3 feet should be sufficiently accurate for the Watermaster's purposes. However, in the Proposal any recommendations in this regard are invited.

For each of these three components of the Proposal, please briefly describe:

1. The methods and/or techniques that would be employed
2. The type of equipment and personnel that would be used
3. The horizontal and vertical accuracy that will be achieved
4. The estimated cost, and
5. The estimated elapsed time (number of work days) that would be required to perform the work.

The Watermaster will provide personnel to accompany the individual(s) performing the field work to take them to each of the well locations where well reference point elevations and location coordinates need to be developed, and will provide access to each of those sites.

Depending on costs, the Watermaster may decide to have higher levels of accuracy for some wells and lower levels of accuracy for other wells.

FORMAT AND CONTENT OF PROPOSAL

Attachment B to this Request For Proposal prescribes the format and content for the Proposal. The Watermaster will primarily be interested in:

Request for Proposal

Page 26

- (1) The firm's staff and equipment resources to perform the work
- (2) The firm's prior experience in performing similar work, particularly in the Monterey County area
- (3) The availability of the firm to begin and complete the work in a timely manner. The Watermaster needs to have the work completed not later than June 1, 2008.
- (4) The costs to perform the work

Attachment C contains the Professional Services Agreement that the Watermaster intends to use when contracting for the performance of these services.

Proposals will be received by the Watermaster until 5:00 p.m. on Monday, April 14, 2008.

Thereafter, they will be reviewed to select the firm to perform the work. Selection of the firm is expected to be based on this review of the Proposals, and in-person interviews are not expected to be necessary as a part of this selection process. However, if interviews are determined to be necessary, the invited firms will be notified approximately 10 days following the receipt of Proposals of the time and date of their interview.

Thank you for your potential interest for responding to this Request For Proposal. Please direct any questions on this matter to the undersigned, by telephone to (831) 375-0517 or email (preferred) to bobj@mrwpca.com. The undersigned is available for direct questions and answers from individual firms, and will come to the firm's offices for this purpose upon request.

Sincerely,

Robert S. Jaques
Technical Program Manager

Enclosures

- Attachment A – Tabulation and location map of wells for which surveying data is to be developed
- Attachment B – Format and Content of the Proposal
- Attachment C – Form of Contract to be used

Attachment A

**Tabulation
and
Location Map
of
Wells for Which
Surveying Data is to be Developed**

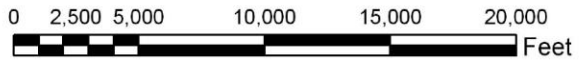
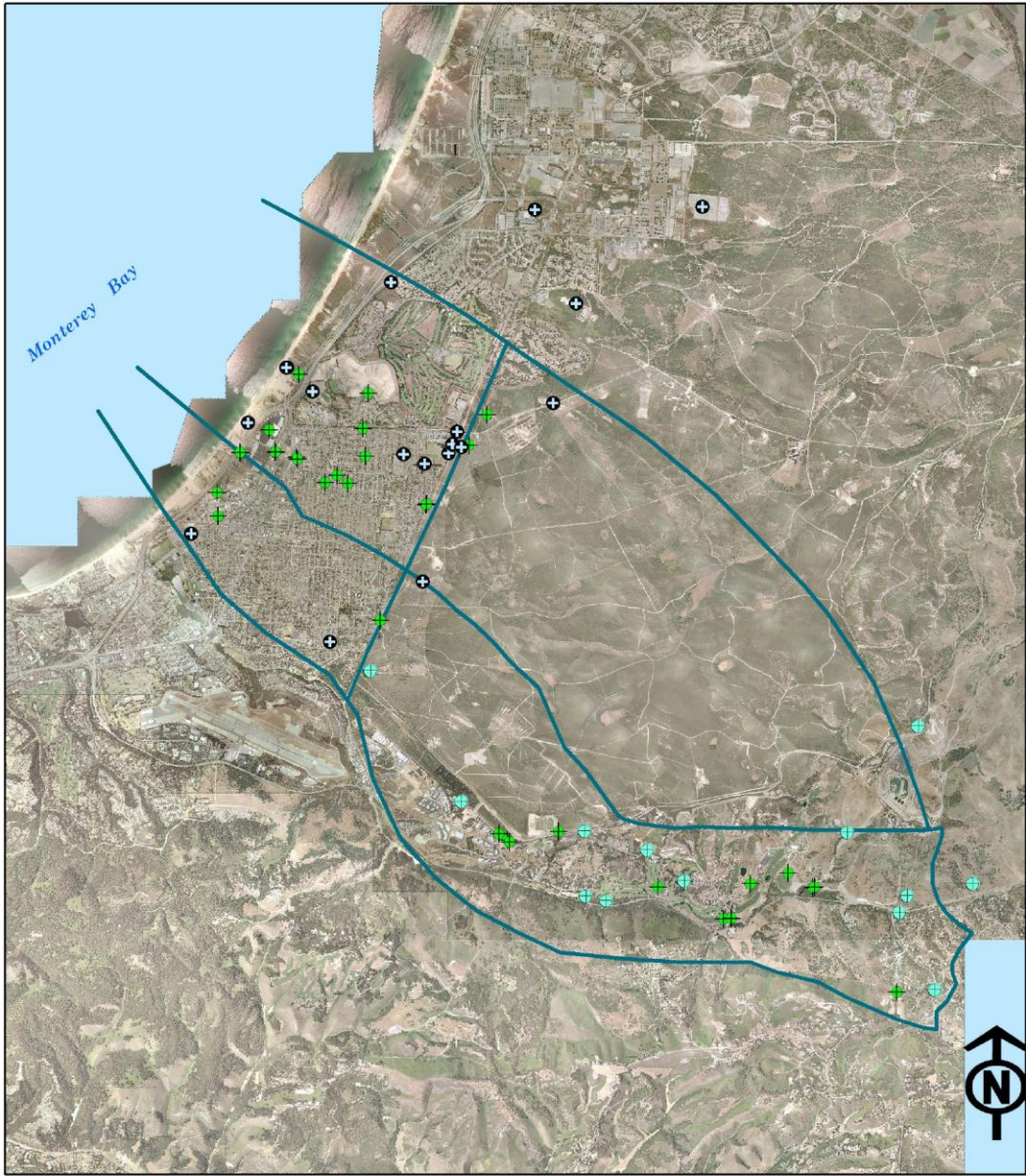
Attachment A Page 28

WELL NAME	OWNER	LOCATION
CAW - Plumas #4	California American Water Co.	Plumas Ln., Seaside
CAW - Darwin	California American Water Co.	West side of Darwin Ave. midway between Pine St and Manzanita St., Seaside
CAW - Military	California American Water Co.	Military Avenue, Seaside
CAW - Ord Grove #2	California American Water Co.	Off Ord Grove Ave. near cemetery, Seaside
CAW - New Luzern	California American Water Co.	Luzern Street, Seaside
CAW - Playa #3	California American Water Co.	40 feet East of East Front Street 255 feet North of Playa Street, Seaside
CAW - Playa #4	California American Water Co.	Playa (North side of alley), Seaside
CAW - Paralta	California American Water Co.	North end of Paralta Ave., Seaside
Reservoir Well	City of Seaside	Bayonet/Blackhorse Golf Course, Seaside
Coe Avenue Well	City of Seaside	Along Coe Ave. 240 ft. westerly from Ord Ave., then 115 ft. south, Seaside
Public Works Corp. Yard	City of Sand City	1 Sylan Park, Sand City
Cypress Pacific	Monterey Peninsula Engineering	Tioga Ave. & Hwy 1, Seaside (???)
Robinette -Design Ctr.	City of Sand City	Hickory & Shasta St., Sand City
Target	Dayton Hudson Corp. (?)	Sidewalk by Target store
PRTIW -operated by MMP	Mission Memorial Park	Northeast corner of Mission Memorial Park Cemetery
SNB	Security National Guaranty, Inc.	Pratto Plant, Hwy 1 across from Fort Ord Village, Sand City OR Hwy 1 at California St. in Sand City (???)
City #4	Seaside Municipal Water System	1760 Juarez St., Seaside
City #2	Seaside Municipal Water System	Costa & Broadway, Seaside
City #1	Seaside Municipal Water System	Del Monte Heights, off Broadway, Seaside
City #3	Seaside Municipal Water System	Next to Fort Ord fence Juarez & San Pablo St., Seaside
well lot Bishop #1 (west)	CAW - Bishop Unit	In Pasadera subdivision
well lot Bishop #2 (east)	CAW - Bishop Unit	In Pasadera subdivision
Mutual	CAW - Hidden Hills Unit	In CAW Hidden Hills well lot
Standex	CAW - Hidden Hills Unit	Off Laureles Grade Rd., approx. 1/2 miles west of Laureles Rd and Baronet Dr. and approx. 200 feet off Baronet Dr.
Bay Ridge	CAW - Hidden Hills Unit	
RR#7	CAW - Ryan Ranch #7	Approximately 1 mile East on Highway 68 from Canyon Del Rey; 300 feet North off road, Monterey
RR#8	CAW - Ryan Ranch #8	Ryan Ranch #8 - Highway 68, Monterey
RR#11	CAW - Ryan Ranch #11	In Ryan Ranch
Old Main Gate (Lot #12)	Pasadera - New Cities Development	160 Pasadera Lane
Paddock #1(Lot #11)	Pasadera - New Cities Development	200' North of Salinas-Monterey Highway and 1 mile west of intersection of Los Laureles Highway, & S & Mont. Hys.
York School	York School	
(new #12)	Laguna Seca Golf Resort	Near No. 12 hole on golf course
(racetrack)	Laguna Seca Golf Resort	Laguna Seca Ranch, off Highway 68, below Clubhouse, Monterey
SPCA	SPCA	
LS Cnty Park #1 (former #3)	Monterey Cnty Parks District	Off of Highway 68
LS Cnty Park #2 (former #4)	Monterey Cnty Parks District	Off of Highway 68
MSC-Shallow	MPWMD	HWY 1, SAND CITY
MSC-Deep	MPWMD	HWY 1, SAND CITY
PCA-W Shallow	MPWMD	HWY 1, SAND CITY
PCA-W Deep	MPWMD	HWY 1, SAND CITY
PCA-E (Multiple) Shallow	MPWMD	HWY 1, SAND CITY
PCA-E (Multiple) Deep	MPWMD	HWY 1, SAND CITY
Ord Grove Test-Shallow/Deep	MPWMD	1987 PARK CT, SEASIDE
Paralta Test-Shallow/Deep	MPWMD	2104 PARALTA AVE., MONTEREY(???)
Ord Terrace-Shallow	MPWMD	1700 block of Ord Grove Ave. near T intersect w/ Baldwin Ct., Seaside
Ord Terrace-Deep	MPWMD	
MPWMD #FO-09-Shallow	MPWMD	N2127579.26693; E???
MPWMD #FO-09-Deep	MPWMD	
MPWMD #FO-10-Shallow	MPWMD	N2130543.48114; E???

Attachment A
Page 29

WELL NAME	OWNER	LOCATION
MPWMD #FO-10-Deep	MPWMD	
Fort Ord Monitor-Dune/Aromas	U.S. Army	
CDM MW-1-Dune/Aromas	MPWMD	
CDM MW-2-Dune/Aromas	MPWMD	
CAW Del Monte Observation-Shallow	CAW	N2120139.85; E???
SBWM MW-1-Deep (Purisima)(6)	Watermaster	
SBWM MW-2-Deep (Purisima)(6)	Watermaster	
SBWM MW-3-Deep (Purisima)(6)	Watermaster	
SBWM MW-4-Deep (Purisima/Santa Margarita)(6)	Watermaster	
MPWMD #FO-01-Shallow	MPWMD	N2115446.81099; E???
MPWMD #FO-01-Deep	MPWMD	
MPWMD #FO-07-Shallow	MPWMD	N2122688.6982; E???
MPWMD #FO-07-Deep	MPWMD	
MPWMD #FO-08-Shallow	MPWMD	N2126741.393; E???
MPWMD #FO-08-Deep	MPWMD	
MPWMD #FO-11-Shallow	MPWMD	N2130660.90472;E???
MPWMD #FO-11-Deep	MPWMD	N2130660.90472, E???
Plumas '90 Test-Deep	MPWMD	1453 PLUMAS AVE., SEASIDE
K-Mart-Dune/Aromas	Home Depot	CANYON DEL REY BLVD, SEASIDE
CDM MW-3-Dune/Aromas	MPWMD	
CDM MW-4-Dune/Aromas	MPWMD	
MW-BW-08A-Dune/Aromas	U.S. Army	
MW-BW-09-180-Shallow	U.S. Army	
MPWMD #FO-03-Shallow	MPWMD	N2109576.68088; E???
MPWMD #FO-03-Deep	MPWMD	
MPWMD #FO-04-Shallow (E)	MPWMD	N2111834.4504; E???
MPWMD #FO-04-Deep (W)	MPWMD	
MPWMD #FO-05-Shallow	MPWMD	N2103180.54186; E???
MPWMD #FO-05-Deep	MPWMD	
MPWMD #FO-06-Shallow	MPWMD	N2102695.44063; E???
MPWMD #FO-06-Deep	MPWMD	
Justin Court (RR M2S)-Shallow	CAW	JUSTIN COURT, MONTEREY
LS Pistol Range (Mo Co TH-1)-Deep	Monterey County	1021 MONTEREY-SALINAS HWY, SALINAS
York Rd-West (Mo Co MW-1 D)-Deep	Monterey County	N2105316.47467; E???
Seca Place (Mo Co MW-2)-Deep	Monterey County	13 SECA PL., SALINAS
Robley Shallow (North) (Mo Co MW-3S)-Shallow	Monterey County	12660 CORTE CORDILLERA, SALINAS
Robley Deep (South) (Mo Co MW-3D)-Deep	Monterey County	12660 CORTE CORDILLERA, SALINAS
LS Driving Range (SCS Deep)-Shallow	Monterey County	10520 YORK RD., MONTEREY
LS No. 1 Subdivision-Deep	Laguna Seca Resort	N2102479.95484; E???
Blue Larkspur-East End-Believed to be Deep	Laguna Seca Resort	N2102676.75507; E???
York School-Shallow	York School	Fort Ord - York School south bound, Monterey
Laguna Seca Driving Range (SCS-Deep)-Shallow	Monterey County	
CAW Granite Construction-Deep	CAW	
Laguna Seca Golf New #12-Deep(9)	Laguna Seca Resort	10520 York Rd., Monterey
Pasadera Main Gate-Deep	Pasadera Country Club	
Laguna Seca_Old No. 12	Laguna Seca Resort	10520 YORK RD., MONTEREY
ASR-1	MPWMD	1910 General Jim Moore Blvd., Seaside
ASR-2	MPWMD	1910 General Jim Moore Blvd., Seaside
ASR MW-1	MPWMD	1910 General Jim Moore Blvd., Seaside

**SEASIDE GROUNDWATER BASIN WATERMASTER
Wells to be Surveyed for Reference Point Elevations**



Legend

- ⊕ Coastal Seaside Subareas Monitor Wells (and vicinity) selection
- ⊕ Laguna Seca Basin Monitor Wells (and vicinity) selection
- ⊕ Seaside Basin Production Wells selection
- Seaside Groundwater Subareas

Prepared by MPWMD
u/tom/pdf08/seasidesurvey

Attachment B
Format and Content of Proposal

General

Firms proposing to perform the work are requested to adhere strictly to the instructions contained in this Attachment. This is intended to provide the Watermaster with uniform presentation of information from each firm.

The Watermaster does not expect the Proposal to be lengthy. Sections I and II should be the most thorough and detailed, but ideally not exceeding five pages in length for each of these sections. The other sections may be shorter, unless additional length is necessary to convey pertinent information in the Proposal.

Format

Three (3) copies of the proposal, bound in any convenient fashion, are to be submitted. Proposals are to be addressed to:

Robert Jaques, Technical Program Manager
Seaside Basin Watermaster
83 Via Encanto
Monterey, CA 93940.

The outside cover should state the firm's name, the submittal date of April 14, 2008, and the title "Proposal to Provide Well Surveying Services."

The Proposal should be indexed into the following section headings:

- Section I: Description of the firm's specific work experience providing similar services
- Section II: The firm's proposed approaches to performing the work
- Section III: Acceptability of proposed contract format

Content

These sections should include the following information:

Section I: Provide a general description or brochure about the firm. Include information focused on the firm's specific experience (citing examples) in performing the type of work requested by this RFP. For at least one of these cited examples of work performed in Monterey County, provide a client reference person's name and telephone number.

Section II: A concise description of the approaches the firm would use to perform the work for the following levels of elevation accuracy:

1. The nearest 3 feet (plus or minus 3 feet vertically), with appropriate corresponding location coordinates

2. The nearest 1 foot (plus or minus 1 foot vertically), with appropriate corresponding location coordinates, and
3. For sub-one foot accuracy, with appropriate corresponding location coordinates

For each of these three approaches, briefly describe:

1. The methods and/or techniques that would be employed
2. The type of equipment and personnel that would be used
3. The horizontal and vertical accuracy that will be achieved
4. The estimated cost, and
5. The estimated elapsed time (number of work days) that would be required to perform the work.

Section III: Provide any comments regarding the acceptability of the proposed contract format contained in Attachment C. Specifically describe any changes the firm would request to that format, if the firm is selected to perform the work.

Attachment C

Professional Services Agreement

**(INCLUDED IN THE ACTUAL RFP BUT NOT INCLUDED IN THE TAC AGENDA
PACKET TO SAVE PAGES IN THE AGENDA)**

**SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE**

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

MEETING DATE:	April 9, 2008
AGENDA ITEM:	6
AGENDA TITLE:	Schedule
PREPARED BY:	Robert Jaques, Technical Program Manager
SUMMARY:	
<p>As a regular part of each monthly TAC meeting, I will provide the TAC with an updated Consultants Work Schedule of the activities being performed by the Watermaster's consultants and the public entities (MPWMD and MCWRA) that are performing certain portions of the work, and of the Critical Program Milestones Schedule.</p> <p>Attached is the Updated Consultants Work Schedule.</p>	
ATTACHMENTS:	Updated Schedule of Consultants Work Activities
RECOMMENDED ACTION:	Provide Input to Technical Program Manager Regarding Any Corrections or Additions to This Schedule

Seaside Basin WaterMaster Monitoring and Management Program 2008 Work Schedule

ID	Task Name	2008												Jan	F							
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug			Sep	Oct	Nov	Dec			
36	I.1 CONSTRUCT MONITORING WELLS (CAW ASR MONITORING WELLS)																					
37	Resolve ASR Monitoring Well Permitting/Approval Issues	t Will Not Proceed in Forseeable Future																				
38	ASR MW Construction (by CWP)	Project Will Not Proceed in Forseeable Future																				
39	I.2 COMPREHENSIVE BASIN PRODUCTION, WATER LEVEL, AND WATER QUALITY MONITORING PROGRAM																					
40	I.2.a Conduct Ongoing Data Entry/Database Maintenance (Data Entry by MPWMD & Watermaster; Database Maint. By RBF; QA/QC by MPWMD with Assistance from MCWRA))																					
41	I.2.b Data Collection Program Enhancements																					
42	<i>I.2.b.1 Site Representation & Selection (MPWMD)</i>																					
43	<i>I.2.b.2 Collect Monthly Water Levels for 2008 (MPWMD)</i>																					
44	<i>I.2.b.3 Collect and Analyze Quarterly Water Quality Samples for 2008 (MPWMD)</i>	Completed																				
49	<i>I.2.b.4 Update Program Schedule and Standard Operating Procedures (MPWMD & MCWRA)</i>																					
52	TAC Provides Input on Updating Schedule and SOPs																					
55	I.2.c Reports																					
56	Water Quality & Water Level Quarterly Reports for 2008 (MPWMD Prepares Reports; MCWRA Provides Review Comments)	Completed																				

Seaside Basin WaterMaster Monitoring and Management Program 2008 Work Schedule

ID	Task Name	2008																	
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	F
73	Consultants Notified to Attend Interviews (if Necessary)																		
74	Subcommittee Holds Consultant Interviews (if Necessary)																		
75	TAC Approves Subcommittee's Consultant Selection Recommendation (by email)																		
76	Initial Contract Negotiations with Selected Consultant(s)																		
77	Board Authorizes Award of Contract(s) to Selected Consultant(s) for Not-to-Exceed Amounts																		
78	Final Contract Negotiations with Selected Consultant(s) and Execution of Contract(s)																		
79	<i>I.3.b.1 Supplemental Water Supplies</i>																		
80	Consultant Updates Phase 1 Supplemental Water Supplies Analysis																		
81	Consultant Provides Draft Update to Watermaster																		
82	TAC Approves Updated Water Supplies Analysis																		
83	<i>I.3.b.2 Pumping Redistribution Strategies</i>																		
84	Consultant Prepares Pumping Redistribution Strategies Report																		
85	Consultant Provides Draft Report to Watermaster																		
86	TAC Approves Pumping Redistribution Strategies Report																		
87	<i>I.3.b.3 Basin Storage Capacity & Natural Safe Yield</i>																		

Seaside Basin WaterMaster Monitoring and Management Program 2008 Work Schedule

ID	Task Name	2008												Jan	F							
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug			Sep	Oct	Nov	Dec			
88	Consultant Performs Analyses to Determine Basin Storage Capacity and Natural Safe Yield																					
89	Consultant Provides Draft Analyses to Watermaster																					
90	TAC Approves Basin Storage Capacity and Natural Safe Yield																					
91	I.3.c Preparation of Basin Management Action Plan																					
92	Consultant Prepares Basin Management Action Plan																					
93	Consultant Provides Draft Plan to Watermaster																					
94	TAC Approves Basin Management Action Plan																					
95	Board Approves Basin Management Action Plan																					
96	I.4 SEAWATER INTRUSION CONTINGENCY PLAN																					
97	I.4.a Consultant Provides Oversight of Seawater Intrusion Detection and Tracking																					
98	I.4.b Consultant Analyzes and Maps Water Quality from Coastal Monitoring Wells																					
99	I.4.c Consultant Prepares Annual Seawater Intrusion Analysis Report																					
100	Consultant Provides Draft Report to Watermaster																					
101	TAC Approves Annual Seawater Intrusion Analysis Report																					
102	Board Approves Annual Seawater Intrusion Analysis Report																					

Seaside Basin WaterMaster Monitoring and Management Program 2008 Work Schedule

ID	Task Name	2008												Jan	F							
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug			Sep	Oct	Nov	Dec			
103	I.4.d Seawater Intrusion Response Plan																					
104	MPWMD Prepares Interim Seawater Intrusion Response Plan																					
105	MPWMD Provides Draft Plan to Watermaster																					
106	TAC Approves Interim Seawater Intrusion Response Plan																					
107	Board Approves Interim Seawater Intrusion Response Plan																					
108	Consultant Prepares Longterm Seawater Intrusion Response Plan																					
109	Consultant Provides Draft Plan to Watermaster																					
110	TAC Approves Longterm Response Plan																					
111	Board Approves Longterm Response Plan																					

**SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE**

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

MEETING DATE:	April 9, 2008
AGENDA ITEM:	7
AGENDA TITLE:	MRWPCA Ground Water Replenishment Project (GWRP) Funding Assistance
PREPARED BY:	Robert Jaques, Technical Program Manager
<p>SUMMARY: As requested by the TAC at its last meeting, I pursued getting clarification of the Scope of Work that MRWPCA will be performing in return for the \$100,000 in funding assistance that the Watermaster has offered to provide to them for this project.</p> <p>Attached is the Agreement I prepared between the Watermaster and MRWPCA for this work. It was approved by the Board at its April 2, 2008 meeting, and contains the Scope of Work as well as the deliverables that we will be provided for our review, and to keep us abreast of that work. As those deliverables are received, I will include them in the TAC agenda packets, or email them out separately to TAC members.</p> <p>Also, if there are any meetings or teleconferences to which we are invited, as provided for in the Agreement, I will provide a summary of what transpired in them.</p>	
ATTACHMENTS:	Agreement between Watermaster and MRWPCA for funding assistance to MRWPCA's GWRP
RECOMMENDED ACTION:	Provide Input to Technical Program Manager Regarding Any Corrections or Additions to This Schedule

MEMORANDUM OF AGREEMENT

Between the SEASIDE BASIN WATERMASTER and the Monterey Regional WATER POLLUTION CONTROL AGENCY

THIS AGREEMENT is made and entered into this _____ day of _____, 2008, by and between the SEASIDE BASIN WATERMASTER, hereinafter referred to as the “WATERMASTER”, and the MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY, hereinafter referred to as the “AGENCY”, as follows.

In this Agreement the terms “Party” and “Parties” refer to the WATERMASTER and/or the AGENCY, 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. One of the duties and responsibilities assigned to the WATERMASTER by the Judgment is to collect Artificial Replenishment Assessments from water producers within the Seaside Basin, under terms and conditions set forth in the Judgment. The purpose of funds generated from the collection of these Artificial Replenishment Assessments is to procure Non-Native water, including, if appropriate, substitute reclaimed water, for replenishment of the Seaside Basin.
- C. The AGENCY is developing a Ground Water Replenishment Project (GWRP) that will use highly treated reclaimed wastewater to help recharge the Seaside Basin.
- D. The WATERMASTER wishes to provide financial assistance to the AGENCY to aid the AGENCY in developing its GWRP.
- E. In and for their mutual interests the WATERMASTER and the AGENCY wish to enter into this Agreement for the purpose of furthering the development of the GWRP.

TERMS AND CONDITIONS

In consideration of the mutual promises contained herein, the WATERMASTER and the AGENCY hereby agree to the following terms and conditions:

1. **Responsibilities of the Parties.** The responsibilities of the Parties under this Agreement are set forth in this section, as follows:

A. What the WATERMASTER Will Do.

1. The WATERMASTER will provide funding assistance to the AGENCY in the total fixed amount of \$100,000.00 to aid the AGENCY in the development of its GWRP. The work that the AGENCY will perform in return for this funding assistance is described in Attachment A to this Agreement.
2. The WATERMASTER will provide its funding assistance in accordance with the following schedule:
 - a. Two-thirds of the total fixed amount of funding assistance will be provided to the AGENCY within 30 days following the receipt by the WATERMASTER of the Task 1.10 Technical Memorandum No. 05-1 described in Attachment A.
 - b. The remaining one-third of the total fixed amount of funding assistance will be provided to the AGENCY within 30 days following the receipt by the WATERMASTER of the Task 3.3 Draft Project Description Report (TM 05-2) described in Attachment A.

B. What the AGENCY Will Do.

1. The AGENCY and/or its consultant will perform the work described in Attachment A to this Agreement. This work will be performed in order to develop the AGENCY's GWRP to the level of detail necessary for it to be included as part of an alternative project in the administrative draft of the Environmental Impact Report (EIR) that will be prepared by the California Public Utilities Commission (PUC) for California American Water Company's Coastal Water Project. This administrative draft EIR is expected to be completed by the PUC in June 2008.
2. WATERMASTER staff will be invited to attend any key milestone meetings that are held locally between the AGENCY and its consultant, and any conference calls that occur under Task 4 –Conference Calls, as the work described in Attachment A is being performed, in order to enable the WATERMASTER to stay abreast of the work, raise pertinent questions in a timely manner, and provide input as appropriate.
3. The WATERMASTER will be provided one electronic copy, and 10 hard copies, of all deliverables that the consultant provides to the AGENCY in conjunction with performing the work described in Attachment A, so that the WATERMASTER's Technical Advisory Committee and its Board of Directors can review these documents.

2. **Term of Agreement.** The term of this Agreement shall commence on the date of its execution, and shall continue in effect unless and until terminated by either Party hereto, by giving the other Party at least a thirty (30) day written notice. If the AGENCY terminates this Agreement, termination shall constitute forfeiture of all of the WATERMASTER's payments to the AGENCY under this Agreement, and the AGENCY shall return those payments to the WATERMASTER in full within 30 days of the date of the AGENCY's termination of this Agreement. If the WATERMASTER terminates this Agreement, the WATERMASTER's obligations under this Agreement shall be reduced and limited to the amount of the WATERMASTER's payments made

prior to the date of termination, and the WATERMASTER shall have no further obligations under this Agreement.

3. **Hold Harmless.** Under this Agreement the AGENCY does 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 AGENCY's planning, design, and construction of the AGENCY's GWRP, and from the AGENCY's subsequent use, operation, and maintenance of its GWRP.

4. **Venue.** In the event that suit shall be brought by either 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.

5. **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: Chief Executive Officer
 Seaside Basin Watermaster
 2600 Garden Road, Suite 228
 Monterey, CA 93940

B. PROFESSIONAL: General Manager
 Monterey Regional Water Pollution Control Agency
 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

AGENCY

Date: _____

Date: _____

By: _____

By: _____

Dewey D. Evans
Title: Chief Executive Officer

Keith E. Israel
Title: General Manager

ATTACHMENT A

Scope of Work

Planning Phase Tasks for MRWPCA's GWRP

Note: Within this Attachment A the term “MRWPCA” refers to AGENCY, and the term “CDM/Todd team” refers to the AGENCY’s consultant, as these terms are used in the body of this Agreement.

Task 1 – Evaluation of Two Alternative Replenishment Projects

1.1 Define Two Alternative Replenishment Projects

- a. Select candidate sites for two project types: Coastal Barrier/Replenishment Project and Upgradient Replenishment Project. Import parcel boundaries into project GIS to review size, surrounding land use, and general access.
- b. Identify data needs and sources for the conceptual design and evaluation of each project.

1.2 Describe Site-Specific Hydrogeology

- a. Compile and analyze readily-available, existing data surrounding the two replenishment projects from nearby monitoring wells and published reports regarding aquifer thickness, lithology, and texture, depth to water and water levels, changes in water levels over time, and aquifer parameters. Describe the hydrogeologic conditions associated with each project, based on existing data.
- b. Evaluate the regional setting of each project including location and production of nearby pumping wells, proximity to regional cones of depression (as mapped by Yates and others), and aquifer flow regime.

1.3 Identify Target Aquifers and Recharge Methods

- a. Identify target aquifers and recharge methods applicable to each replenishment project using analysis from Tasks 1.1 and 1.2.
- b. Incorporate the data and information compiled and summarized in previous Technical Memoranda prepared by the CDM/Todd team on aquifers and recharge methods.
- c. Assess the potential for a combination of recharge methods for each project.

1.4 Determine Conveyance Facilities Required

- a. Determine conceptual alignment and pipe sizes for recycled water supply from the Regional Urban Recycled Water Pipeline to site of each Alternative Replenishment Project.
- b. Develop conceptual construction cost estimates for the supply pipelines.

1.5 Describe Physical Site Conditions and Identify Preliminary Site Constraints for Each Replenishment Project

- a. Describe the general site conditions with respect to ownership, topography, access, and proximity to utilities, based on readily-available data. The description will focus on the ability to conduct preliminary field investigations at the site as well as general information on long-term operation of a replenishment project.
- b. Identify physical constraints to future investigation and/or implementation of a replenishment project at each site.

1.6 Summarize Relevant Regulatory Requirements

- a. Review CDPH draft regulations for Groundwater Recharge Reuse with recycled water for application to the two replenishment projects.
- b. Assess potential regulatory constraints for each project. Identify regulatory requirements that may be more difficult to meet for one project versus the other.
- c. Discuss possible sources and quantities of required diluent water.
- d. Work with MRWPCA staff member that is knowledgeable on regulations relevant to the replenishment projects.

1.7 Develop Conceptual Construction Cost Estimates

- a. Develop conceptual cost estimates for the construction of the two alternative replenishment projects including vadose zone wells, injection wells, basins, conveyance, and other site-specific project costs. Costs are being developed to allow for comparison of the two alternative projects rather than a representation of total project cost. Monitoring costs or other costs that are currently unknown but are likely to be similar for both projects may not be included.
- b. Incorporate cost data compiled in previous Technical Memoranda prepared by the CDM/Todd team.

1.8 Identify Data Gaps and Additional Investigation Required

- a. Identify hydrogeologic data gaps associated with each of the two replenishment projects.
- b. Recommend a preliminary field program or data acquisition effort to address data gaps at the two proposed replenishment project sites, to assist with project definition. Program will recommend investigative methods, analysis techniques, and field data deliverables.
- c. Provide preliminary costs associated with the field program and note site limitations for the field program, if any.

1.9 Compare Alternative Replenishment Projects

- a. Evaluate the technical, economic, and regulatory feasibility with implementation of each replenishment project, based on existing data.
- b. Define criteria and priorities for ranking the sites for application to each replenishment project.

c. Provide table of major advantages and disadvantages associated with the two replenishment project recognizing limitations of existing data.

d. In collaboration with Agency staff, recommend preferred Replenishment Project

1.10 Deliverable: Prepare Technical Memorandum No. 05-1 summarizing the work of Tasks 1.1 through 1.9. Include summary of relevant information and data contained in TMs 1-2 and 2 from RFS GWR-02. Submit five (5) copies of a draft of TM 05-1 and one electronic copy. TM is estimated to be no longer than 30 pages plus no more than 10 tables and 10 graphics. Respond to Agency's review comments on the draft TM. Integrate revisions as appropriate into the Project Description Report, under Task 3, below.

1.11 Schedule: Submit draft TM within 2 months of receipt of notice to proceed with RFS-05.

Task 2 – Advanced Recycled Water Treatment Plant

2.1 Review and Update Draft TM Report on Task 8 of GWR RFS-01. Submit five (5) copies of the updated draft of TM Task 8 and one electronic copy for Agency's information.

2.2 Prepare Preliminary Conceptual Site Plan for AWT Plant: Design flow will be 6.0 mgd. Agency will provide general location at site of Agency's RTP. Show major site pipelines for effluent supply to the AWT and reject flows (MF backwash, brine reject and chemical cleaning). Integrate site plan and revisions to Task 8 TM, as appropriate into the Project Description Report, under Task 3, below.

Task 3 – Prepare Draft Project Description Report

3.1 Integrate the work products of Tasks 1 and 2 into a Draft Project Description Report The goal of the Draft Project Description Report is to provide a sufficient level of detail to allow the preferred Replenishment Project, and perhaps an alternative, to be included in an environmental review process for a regional water supply plan. This review, being conducted by the California Public Utilities Commission (PUC), will require a defined project location, recharge methods and target aquifers, preliminary technical feasibility, and conceptual costs in order to consider potential environmental impacts during the preparation of an Environmental Impact Report (EIR), to be prepared by others.

3.2 Assumptions: Tasks included in this RFS-GWR-05 have been scoped to provide information for said environmental review, based on existing data and budgetary constraints. This task provides for a draft report only. If it is determined by the EIR team that additional information is required, a cost estimate associated with the additional work will be provided.

3.3 Deliverable: Submit five (5) copies of the Draft Project Description Report (TM 05-2) and one electronic copy. TM is estimated to be no longer than 50 pages plus no more than 12 tables and 15 graphics.

3.4 Schedule: Submit draft Project Description Report within 3 months of receipt of notice to proceed with RFS-05.

Task 4 –Conference Calls

4.1 Participate in Conference Calls with Agency and Other Project Team Members: The level of effort for this task includes three (3) calls, 1.5 hours each, attended by three (3) persons.

Task 5 – Project Management and Quality Assurance

5.1 Project Management: Manage the work of this RFS to maintain schedule, budget and quality. Manage subconsultants. Keep Agency informed of schedule and budget limitations in a timely manner.

5.2 Quality Assurance: Provide internal independent review of deliverables in conformance with CDM's QA policy.

5.3 Deliverables: Monthly invoices and progress reports.