M E E T I N G N O T I C E AND A G E N D A

TECHNICAL ADVISORY COMMITTEE
OF THE
SEASIDE BASIN WATER MASTER

DATE: Wednesday, August 13 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)**

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SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	August 13, 2008
AGENDA ITEM:	1.A
AGENDA TITLE:	Approve Minutes from July 9, July 21, July 31, and August 6, 2008
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

Draft Minutes from these meetings were emailed to all TAC members. Any changes that were requested have been included in the attached versions.

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ATTACHMENTS:	Minutes from these meetings
RECOMMENDED ACTION:	Approve the minutes

D-R-A-F-T
MINUTES

Seaside Groundwater Basin Watermaster
Technical Advisory Committee Meeting
July 9, 2008

Attendees: **TAC Members**
City of Seaside – Rick Riedl
California American Water – Tom Bunosky
City of Monterey – Les Turnbeaugh
Laguna Seca Property Owners – Stanley Powell
MPWMD – Joe Oliver
Public Member – John Fischer
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, Martin Feeney

Others:
MRWPCA - Brad Hageman (via telephone)

The meeting was called to order by Mr. Bunosky, Vice Chair, at 1:35 p.m.

1. **Administrative Matters:**
   - **A. Approve Minutes from June 11, 2008**

   On a motion by Mr. Bunosky, seconded by Mr. Oliver, the minutes were unanimously approved as presented.

2. **Progress Reports and Draft Agreements**
   - **A. Routine Monthly Progress Reports**

   Mr. Oliver summarized the agenda packet material pertaining to MPWMD's Progress Report on this item. Mr. Jaques reported that Central Coast Surveyors has finished the field work on their contract to provide surveying data on the wells, and is in the process of reducing the data. He said he expects to have their report within several days. Mr. Oliver said he would like to review the report when it comes in to verify that all wells have been properly included. Mr. Jaques briefly reported that resolution of the database deficiencies with RBF have still not been resolved, in spite of commitments by RBF to do so. Mr. Jaques said he is continuing to press RBF for resolution of these issues, and that no progress payments are currently being made to RBF pending resolution of these issues.

   Mr. Williams summarized the agenda packet material pertaining to HydroMetrics' Progress Report on this item. He said he anticipates a number of meetings with the TAC to review and discuss the remaining sections of the Basin Management Action Plan (BMAP) which will be sent

out to the TAC in the near future, as well as the sections that have already been received by the TAC.

Mr. Jaques recommended consideration be given to including the Seawater Intrusion Response Plan (SIRP) in the BMAP, so that all related documents will be together in a single document. Mr. Powell and Ms. Thomasberg recommended that the SIRP be kept separate, as it may have more policy and political issues to deal with and could take longer for the Board to approve than the BMAP itself. There was TAC consensus to keep the SIRP as a separate document.

There was discussion regarding the Schedule milestones that need to be met for the various sections of the BMAP.

There was discussion regarding the pros and cons of providing sections of the BMAP to the Board as the TAC completes approving the sections, versus waiting until the full BMAP has been drafted along with the SIRP and then presenting them to the Board. Mr. Bunosky and Mr. Turnbeaugh felt it was better to wait until the full documents were complete and then plan on perhaps two Board meetings for approval: Meeting 1: Present the documents as a final draft with a presentation followed by questions and answers and Meeting 2: A follow-up meeting with responses to Board member comments and questions leading to presentation of the Final-Final versions of the documents for Board approval. There was consensus to take this approach.

There was then further discussion with regard to seeing if we can have the first meeting with the Board in September and possibly have the second meeting with the Board in October. It was agreed that if we cannot meet this schedule, due to the amount of time necessary for TAC deliberations before presentation to the Board, it would be suggested that the Board have no September meeting and instead perhaps have two Board meetings in the month of October.

Mr. Bunosky asked Mr. Jaques to prepare an informational item for the August Board meeting agenda listing the sections of the BMAP that are currently under development and the planned schedule for presentation of material to the Board. In addition, a listing of the additional TAC Special Meetings that are being scheduled as of today would be included, as well as a note that additional funding may be needed for HydroMetrics, MCWRA and/or MPWMD due to the additional meetings and time being spent on development and refinement of these critical Watermaster documents.

Mr. Jaques expressed concern that CEQA requirements may be applicable to some of the actions proposed for approval by the Watermaster in the BMAP and/or the SIRP. He will research this and report back.

Questions arose with regard whether any deadlines that needed to be met to comply with the Court Decision with regard to adoption of any of these documents. Mr. Jaques will review the Court Decision to see if the budget adoption date or other deadlines for the BMAP and/or the SIRP approvals were specified in the Court Decision, and report back.

Mr. Fischer asked if the Operating Yield is specified in the Court Decision, and Mr. Williams replied that it was.

B. Draft Sections of the Basin Management Action Plan (BMAP)

Mr. Williams briefly introduced each of the three draft Sections described on pages 8 to 11 of the agenda packet.

1. Supplemental Water Supplies

The question of whether or not we need to rank the alternative water supply sources was discussed. Mr. Bunosky said that CAW's Coastal Water Project EIR will analyze all the projects and rank them, so the Watermaster need not do this. There was consensus to use the scheduled dates and costs from this Section, once the TAC is satisfied with it, and not to also "rank" them. There was brief discussion and that projects which were deemed to be "pie in the sky" probably would be scheduled beyond the ten-year Replenishment Assessment planning horizon, and therefore would not impact the Replenishment Assessment cost calculations.

It was noted that the Replenishment Assessment calculation only applies to overpumping beyond the allocated Natural Safe Yield levels. There was discussion with regard to whether the Watermaster should also seek supplemental water beyond that needed to offset annual overpumping, so that wells could be shut down in the future in order to lower the Operating Yield closer to the Natural Safe Yield. There was consensus that the concept of having the Watermaster pursue supplemental water beyond the Replenishment Assessment amounts should be raised in the BMAP for the Board to consider.

2. Long Term Seawater Intrusion Response Plan

Mr. Williams said that the long-term SIRP is largely based on the interim SIRP and other documents, but it includes more fully developed response actions to be taken.

Mr. Bunosky questioned whether the proposed set of actions was realistic, or whether more of evaluation of actual impacts of detected sea water intrusion should be undertaken before deciding what action(s) to take.

Mr. Williams and Mr. Feeney commented that we know that the Basin is down-gradient from the ocean, but we don't know the exact pathway that sea water will enter into the aquifers. Therefore, and we don't know how long it will take for sea water intrusion to actually occur in the proximity of production or monitoring wells within the Basin.

Mr. Williams explain that the SIRP is a response plan, not a prevention plan for sea water intrusion.

Mr. Williams said that turning off wells throughout the Basin would not stop sea water intrusion, unless so-doing would raise the water levels up to the Protective Levels needed to prevent sea water intrusion. Mr. Feeney commented that there is a hydrogeologic solution for sea water intrusion, but that the solution also needs to be politically acceptable and viable in order for the solution to be implemented.

3. State of the Basin (titled "Seaside Basin Conceptual Model" in the preliminary draft)

Mr. Williams briefly summarized the principal findings and conclusions of this Section. Mr. Williams said he had not been provided the Seaside Basin boundary map which was used in the Amended Court Decision to define the Basin boundary. Mr. Oliver will send this map to Mr. Williams.

Mr. Williams reported that estimating Total Usable Storage was a challenge, because many assumptions had to be made. The Total Usable Storage volume is very high, and is most likely far in excess of the amount water that would need to be stored for any scenarios currently being considered.

Mr. Bunosky recommended that in an Executive Summary for each of the Sections, a listing of the objectives and the results of each Section be provided, so they are easily located and understood by the reader.

There was consensus that a series of additional Special TAC meetings will be necessary in order to make progress on preparation of the BMAP and the SIRP in keeping with the milestone dates in the Schedule.

All of these Special TAC meetings will be held in the normal TAC meeting room adjacent to Seaside City Hall. [Note: Following today's TAC meeting Mr. Riedl confirmed that he has reserved this room for each of the following meetings]. Each meeting is expected to last at least two hours. Teleconferencing will be available for each of these meetings.

The following dates and times were selected for these Special TAC meetings:

Monday July 21 @ 1:30 p.m. Focus: Supplemental Water Supplies Section
Thursday July 31 @ 9:00 a.m. Focus: SIRP
Wednesday August 6 @ 10:00 a.m. Focus: State of the Basin Section
Wednesday August 13 @ 1:30 p.m. (normal TAC meeting time/date). Focus: Seaside Basin Modeling
Wednesday August 20 @ 1:30 p.m. Focus: TBD
Wednesday August 27 @ 10:00 a.m. Focus: TBD

3. Schedule

There was only a brief discussion of the Schedule as it pertained to the topics discussed in the preceding agenda items.

4. Regional Urban Water Augmentation Project (RUWAP) Status

Mr. Jaques summarized the agenda packet material on this item. There were no questions or comments.

5. Proposed Additional Monitoring Well

Mr. Jaques summarized the agenda packet materials for this item. There was consensus to defer further work on this topic until the TAC's work on the BMAP and the SIRP documents has been completed.

6. Other business

Mr. Bunosky asked Mr. Jaques for a status report on MRWPCA's work on preparation of the G. W. R. P. documents for which Watermaster funding is being provided. Mr. Jaques responded that very shortly after the Agreement had been approved by the Watermaster Board, changes in scope and direction of MRWPCA's project occurred as a result of RPOG actions. Therefore, the scope work described in the Watermaster's Agreement with MRWPCA does not match the work that is actually being performed.

Several members of the TAC expressed surprise and disappointment that MRWPCA had not formally notified the Watermaster of these changes in the scope of their work. Mr. Jaques said he has requested MRWPCA to send him a revised scope of work that matches the work actually being done, with the intent of amending the original Agreement to be consistent with the work actually being performed.

Mr. Jaques said he had recently received a document from MRWPCA, and that he was in the processor reviewing it with the intent of providing it to the full TAC for its review shortly thereafter. He said it appeared to him that the document accomplishes the objectives of the work described in the original Agreement. If the TAC concurs, once the Agreement had been amended it would probably be appropriate to provide payment to MRWPCA upon receipt of their request to do so.

7. Set next <u>Regular</u> meeting date for Wednesday August 13, 2008 at 1:30 p.m. at the Seaside City Hall Portable Office Buildings Conference Room

The next Regular TAC meeting was set for this date, time, and location. Additional Special TAC meetings will be scheduled as discussed above.

The meeting adjourned at 3:28 p.m.

D-R-A-F-T
MINUTES

Seaside Groundwater Basin Watermaster
Technical Advisory Committee
Special Meeting
July 21, 2008

Attendees: **TAC Members**
City of Seaside – Rick Riedl
California American Water – Tom Bunosky and Craig Anthony
City of Monterey – Les Turnbeaugh
Laguna Seca Property Owners – No Representative
MPWMD – Tom Lindberg
Public Member – John Fischer
MCWRA – Robert Johnson
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

Others:
None

The meeting was called to order at 1:35 p.m.

There was no set agenda for this Special meeting. Its focus was to discuss the Draft Section 3 of the Basin Management Action Plan (BMAP)-Supplemental Water Supplies.

1. In response to a question from Mr. Jaques, Mr. Williams explained that raising water levels in the Seaside groundwater basin is what will be required to push the seawater intrusion front back towards the Bay. Natural recharge, from rainfall, will raise water levels if pumping is reduced to below the natural recharge rate. However, even if all pumping within the basin were to be terminated, it would likely take years for natural recharge to bring water levels up high enough to cause the seawater intrusion front to retreat appreciably toward the Bay. In order to push the seawater intrusion front back out of the basin in a reasonable period of time it will be necessary to bring in significant amounts of supplemental water.
2. Mr. Fischer discussed sea level rise and beach erosion (due to climate change and global warming) and asked Mr. Williams if these issues were being taken into account in the work he was doing. Mr. Williams said he would investigate these issues as they pertain to the work he is doing for the Watermaster, and will briefly discuss these topics in the BMAP. He did not think that these issues would alter the actions to be taken to mitigate seawater intrusion. Mr. Bunosky pointed out that the Metropolitan Water District in southern California has likely considered these issues in its work and might be a useful resource for Mr. Williams to use.
3. Mr. Williams noted that some projects may help to reduce CAW's water supply demand, e.g. the Pacific Grove Stormwater project, but it was not known whether or not CAW would reduce pumping in the Seaside basin, or the Carmel basin, as a result of this. Hence, it was not clear to

him what benefit such projects would provide for the Seaside basin. After discussion, Mr. Anthony explained that if the Pacific Grove Stormwater project were implemented, and if that resulted in reduced potable water demands in Pacific Grove, and if CAW did not reduce its pumping in the Carmel basin, then it would be possible for CAW to reduce its pumping in the Seaside basin. In related discussions on other projects it was agreed that this Section of the BMAP should include language stating that a written agreement between the Watermaster and the project sponsor would likely be necessary for each project in order to ensure that benefits through reduced pumping from the Seaside basin would result from the implementation of those projects.

4. Mr. Williams reported that RMC is updating costs from the recent RUWAP updated project description and cost materials recently developed. It was recommended that language be added in each of the projects described in this Section that the cost information was "as of _____ date" so it would be clear as to the point in time from which the cost data was obtained.
5. There were numerous comments and questions resulting in clarifying language changes being made to this Section.
6. There was consensus to go through each of the Sections one at a time, as was being done today for Section 3, and then assemble the complete Draft BMAP and present it to the TAC for one final overall review prior to preparing the Final Draft that will be presented to the Board.
7. Mr. Jaques reported that Mr. Williams had sent him a letter requesting an increase in his contract of approximately $7,500 in order for him to attend all of the additional Special TAC meetings that have been scheduled. Mr. Jaques asked how the TAC members felt about having Mr. Williams participate in those meetings via teleconference, in order to reduce his costs. There was consensus that Mr. Williams should be present in person, rather than participating via teleconference, for the rest of the Special TAC meetings that have been scheduled to discuss each of the Sections of the BMAP and the SIRP. Mr. Jaques will prepare and amendment to the HydroMetrics contract for this purpose. Mr. Jaques also reported that if necessary, he will prepare similar amendments for the MPWMD and MCWRA contracts, if those entities determine that they, too, will need additional funding to attend these additional meetings. Mr. Jaques said he would strive to get these amendments on the agenda for the Board's August meeting.

The meeting adjourned at 4:15 p.m.

D-R-A-F-T
MINUTES

Seaside Groundwater Basin Watermaster
Technical Advisory Committee
Special Meeting
July 31, 2008

Attendees: **TAC Members**
City of Seaside – Rick Riedl
California American Water – Tom Bunosky and Craig Anthony
City of Monterey – Les Turnbeaugh
Laguna Seca Property Owners – Stan Powell (by telephone)
MPWMD – Joe Oliver
Public Member – John Fischer
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

Others:
None

The meeting was called to order at 9:00 a.m.

There was no set agenda for this Special meeting. Its focus was to discuss the Draft Seawater Intrusion Response Plan (SIRP) prepared by HydroMetrics.

1. There was a brief review of topics for the series of special TAC meetings that will be coming up. There was a decision to cancel the Aug. 6 2008 special TAC meeting due to a conflict with the R. P. O. G. meeting scheduled that morning. [Note: there was a subsequent decision to reschedule the meeting to the afternoon of August 6 at 2:00 PM rather than canceling the meeting, because the Watermaster Board meeting originally scheduled for the afternoon had itself been canceled thus freeing up that time frame].

2. As requested by Ms. Thomasberg discussion started with Section 4 of the SRIP. Mr. Bunosky noted that this is a response plan, not a prevention plant. There was concurrence with this distinction and revisions will be made to the language in this section to reflect this.

3. Mr. Oliver pointed out that if we want all four quarters of data to be included in the Annual Report, we will need to get the annual water quality samples in the July-August time frame, rather than in September as originally required by the Watermaster to the well owners. Mr. Oliver said that much of the data is collected by the Watermaster itself through its contract with MPWMD, and only about 20 wells, mainly owned by CAW, Seaside, and a few others, would be affected by this. An effort will be made to obtain the data by mid-August rather than mid-September. The Watermaster will send out a notice to well owners making this request.

4. Mr. Jaques reviewed the schedule for deliverables for the Seawater Intrusion Analysis Report (SIAR). As of today's meeting the draft was to be received by the Watermaster by August 14, the TAC was to approve it at the Sept. 10th TAC meeting, and the Board was to approve it at its October 1st meeting. Following discussion with Mr. Oliver and Mr. Williams it was concluded that will be necessary to push back to dates for each of these milestones. The Board approval is likely to be requested at the November Board meeting. Mr. Jaques will update the schedule to reflect this.

5. Mr. Powell recommended citing the actual sections of the Decision whenever a quote is presented in the document. There was further discussion about including the Decision as an appendix to report for ease of reference.

6. Ms. Thomasberg discussed seasonal pumping variations in the Salinas Valley basin, and asked if there were similar seasonal variations in the Seaside basin that would justify rapid initiation of sea water intrusion response actions. There was some discussion on this topic.

7. Mr. Riedl suggested that the Watermaster have a quality assurance/quality control program for its sampling and laboratory work. Ms. Thomasberg will send a copy of MCWRA's quality assurance/quality control program to Mr. Oliver for his use in developing one for this work.

8. There is discussion of creating a new Section that would discuss the value and/or benefit of putting in an additional new monitoring well. Mr. Bunosky felt that this should be described as something the Watermaster could consider, but not necessarily making it required action. Mr. Turnbeaugh suggested using some of the Watermaster's money to help provide water to the parties that would be affected by the shutting down of well(s).

9. There was discussion about section 4.3.3 with regard of what actions the Watermaster should ask water producers to take if sea water intrusion is detected. There was discussion with regard to having the Board "declare" that sea water intrusion has been detected, and that the SIRP is being implemented. This might require a Special Board meeting, depending on when the next word regular Board meeting would be after such detection actually occurs.

10. Mr. Jaques commented that if stopping all pumping in the Basin still won't stop sea water intrusion, then it would be hard for the Board to adopt a Pumping Redistributions Plan that involves shutting down wells with potentially significant associated socio- economic impacts.

11. Mr. Riedl suggested doing "what if" scenarios under the proposed Pumping Redistribution Plan to evaluate the likely impacts of implementing it.

12. There was much discussion about what the Pumping Redistribution Plan should be targeted to accomplish. Ideas such as sea water intrusion barriers, injection wells, bringing in supplemental water, across the board 10% cutbacks for all wells in the basin, etc.

13. Mr. Powell commented that it was his opinion that shutting wells down in the Laguna Seca subarea would have no impact on sea water intrusion in the Northern Coastal subarea. There was much discussion this topic. Mr. Bunosky said he felt that all producers in the Basin should share equally in any initial pumping cutbacks.

14. Mr. Jaques encouraged using existing data and knowledge, such as cone of depression locations, to try to anticipate what actions would be recommended, if sea water intrusion was detected in specific coastal monitoring or production wells. Mr. Williams briefly described various approaches that have been used elsewhere such as trough pumping barriers and injection barriers, but noted that

most of these could take considerable time to implement. Also, many of these would require supplemental water.

15. There was discussion with regard to how long the SIRP is intended to be carried out, for example would it be expected to be carried out only until supplemental water supplies become available.

16. There was discussion about setting water quality criteria to be used to determine if sea water intrusion has been slowed, not stopped, since stopping sea water intrusion apparently cannot be accomplished by discontinued pumping alone. One thought was to have the objective of slowing it to a rate that it will not impact production wells before the supplemental water supplies are expected to be online.

17. There was much discussion about whether individual pumping rights under the Decision would be superseded by the implementation of the SIRP. There was consensus that this is a legal issue to be considered.

18. Mr. Williams will examine existing data to estimate specific production well pumping revisions to slow sea water intrusion and provide scenarios for this depending on where thus seawater intrusion is detected, for further review by the TAC.

The meeting adjourned at 12:05 p.m.

D-R-A-F-T
MINUTES

Seaside Groundwater Basin Watermaster
Technical Advisory Committee
Special Meeting
August 6, 2008

Attendees: **TAC Members**
City of Seaside – Rick Riedl
California American Water – Tom Bunosky and Craig Anthony
City of Monterey – Les Turnbeaugh
Laguna Seca Property Owners – Stan Powell (by telephone)
MPWMD – Joe Oliver (had to leave immediately after the meeting began to attend to upcoming CAW-SWRCB Hearing Items
Public Member – John Fischer
MCWRA – Kathy Thomasberg
City of Del Rey Oaks – No Representative
City of Sand City – Steve Matarazzo
Coastal Subarea Landowners – No Representative

Watermaster
Technical Program Manager - Robert Jaques

Consultants
HydroMetrics LLC - Derrik Williams

Others:
None

The meeting was called to order at 2:00 p.m.

There was no set agenda for this Special meeting. Its focus was to continue discussions from the prior meeting on the Draft Seawater Intrusion Response Plan (SIRP) prepared by HydroMetrics.

1. Mr. Bunosky provided a brief overview of today's R. P. O. G. meeting. The Moss Landing desalination plant and the North Marina desalination plant are the only proposed CAW projects that are intended to just meet regulatory requirements. These projects include no capacity for future growth. This project is expected to be able to be online by 2015. A third alternative is the Regional Water Supply solution which includes provisions for additional growth and a larger service area. Components of that project include desalination, Salinas River water treatment, brackish/sea water desalination supply wells, Seaside ground water replenishment, and the Regional Urban Water Augmentation Project.

There are many institutional and ownership issues involved with this Regional Water Supply Project that will not be analyzed in the public utility commissions EIR. The R. P. O. G. is continuing development of a Strategic Implementation Plan. CAW has offered to continue to fund the R. P. O. G. costs for the near term, if another party such as MCWRA becomes the contracting entity for the R. P. O. G.'s contract with UCSC.

Mr. Kasower has estimated it will cost approximately $330,000 to evaluate all the other issues that will not be covered by the EIR. No funding is currently offered by any party for this work. The EIR is expected to be completed by the end of 2008, and certification of the EIR is expected to occur by the end of 2009. Then CAW would get approval from the PUC to proceed with some project.

2. Mr. Williams summarized the status of work since last the last meeting. He will redraft the actual "Actions" part of Section 4, and hopes to have that information out by August 18 in redrafted form for further TAC review. The objective will be to slow sea water intrusion to protect production wells until supplemental supplies can come online. The "at risk" production wells will be identified and actions will be proposed to protect them.

Mr. Bunosky pointed out that the decision already includes 10 % cutbacks scheduled every three years, even if sea water intrusion does not occur. Mr. Jaques pointed out that if replenishment water becomes available to offset the prior year's overpumping, then it may be possible to avoid these already scheduled 10 % cutbacks. For example if the City of Seaside is successful in obtaining water from MCWD to allow the Seaside golf course wells to discontinue pumping, this would be one source of replenishment water.

3. One of the future Special TAC meetings will focus on Mr. William's just-distributed BMAP section on interim actions.

4. There was much discussion on, and suggested wording changes for clarification throughout, Sections 1 through 3. Several particularly substantive topics included:

- Mr. Powell noted that the Decision allowed for a non-pro rata approach in Exhibit "A" of the Decision when responding to sea water intrusion.

- Much discussion with regard for Fort Ord Well No. 10, which is outside the Seaside Basin boundary, being part of the triggering of implementation of SIRP actions. There was consensus to only have the SIRP actions implemented if (1) sea water intrusion is detected within the Basin and (2) if sea water intrusion is declared to exist by the Watermaster.

- There was much discussion with regard to the various indicators of sea water intrusion and clarifying what they are and how to use them.

- Because many of the terms and discussion topics in these documents are very technical in nature, it was recommended that as much as possible the language in the body of the documents be prepared so as to be understandable by a lay audience. Technical details should also be included, but in appendices to the body of the documents.

The meeting adjourned at 5:08 p.m.

SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	August 13, 2008
AGENDA ITEM:	2
AGENDA TITLE:	Progress Reports
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

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.

Under this agenda topic TAC members are encouraged to raise any questions or issues of concern regarding this work.

ATTACHMENTS:	Task descriptions of the Scopes of Work in each contract, and Progress Reports from each of these parties
RECOMMENDED ACTION:	Provide comments and proposed edits on the Draft Sections of the BMAP

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

- A draft of Section 2 of the Basin Management Action Plan (BMAP) was completed and sent to the TAC for review. Section 2 covers the state of the basin, along with estimates of the amount of groundwater in storage and the storage capacity of the Basin.

- A draft of Section 4 of the Basin Management Action Plan (BMAP) was reviewed by Mr. Jaques, edited, and sent to the TAC for review. Section 4 covers interim actions and short-term water supplies that can be used to manage the basin until the supplemental supply is available.

- A series of TAC meetings were held to edit chapters of the BMAP and SIRP.

Upcoming Work

- Holding a meeting with the consultant team and interested TAC members to rank the local groundwater management actions. This ranking will result in the recommended management strategy that constitutes Section 5 of the BMAP.

- Additional TAC meetings will be held to edit the remaining chapters of the BMAP. The edits will be incorporated, and a final draft BMAP will be produced.

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.	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.

CONTRACT NO. 3 (RFS 2008-03):

Assist Central Coast Surveyors in performing surveying at certain water wells. Contact each of the well owners where survey data is to be obtained in order to arrange access to the well sites where the reference points are to be surveyed, and to determine what reference point is being used by the well owner to measure water levels. Accompany Central Coast Surveyors personnel to each well site to show them the reference point locations, and provide such other assistance is appropriate to aide Central Coast Surveyors in performing the survey work.

Work Performed by MPWMD Since Last Progress Report

- Finalized 2nd quarter Water Year 2008 water level and water quality monitoring report.
- Continued ongoing water level and water quality data entry into Watermaster database, and coordinated with MCWRA staff on data quality assurance and control assistance.
- Reviewed and provided comments on draft *Seawater Intrusion Response Plan* and sections of draft documents for *Basin Management Action Plan*.
- Continued water level and water quality data collection under enhanced monitoring program, including third quarter WY 2008 sampling, including Sentinel well data collection schedule (RFS 2008-01).
- Continued data collection for specified Watermaster owner/operators as part of Watermaster required producer data collection program (RFS 2008-02).
- Reviewed compiled wellhead elevation survey data collected by Central Coast Surveyors (RFS 2008-03).

Upcoming Work

- Continue data collection efforts under RFS 2008-01 and 2008-02.
- Continue support for wellhead elevation surveys under RFS 2008-03.
- Continue coordination efforts with Army BRAC office for existing well monitoring authorization, and to begin process of securing a site for an additional "inland" monitor well, as per court decision and SBMMP.
- Work with Watermaster and RBF consultants on resolution of remaining database issues.
- Continue Watermaster database data compilation.
- Support Watermaster technical consultant team on data acquisition and document preparation efforts.

MCWRA CONTRACT

Work Performed by MCWRA Since Last Progress Report

- Reviewed and commented on the July 30, 2008 *Report of Water Year 2008, Second Quarter – Groundwater Quality and Level Data*
- Submitted MCWRA proposal for amended contract hours for document review and special TAC meetings
- Attended the following Special TAC meetings:
    - July 21 – Reviewed Section 2 Supplemental Water Document
    - July 31 – Reviewed Seawater Intrusion Response Plan (SIRP)
    - Aug. 6 – Continued Review of SIRP

Upcoming Work

- Continued review/comment of BMAP document and attendance at Special TAC Meetings (if needed)

SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	August 13, 2008
AGENDA ITEM:	3
AGENDA TITLE:	Updating the Watermaster's Data Collection Program
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY: As required in the Watermaster's contracts with MPWMD and MCWRA, the Watermaster's Data Collection Program is to be periodically reviewed by these agencies, and recommendations made by them regarding any updating to this Program which they believe will be beneficial.

Mr. Oliver and Ms.Thomasberg will discuss their findings and recommendations from their recent review of the Program.

ATTACHMENTS:	None
RECOMMENDED ACTION:	Provide direction to Technical Program Manager on whether or not to implement the changes that are recommended by Mr. Oliver and/or Ms. Thomasberg

SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	August 13, 2008
AGENDA ITEM:	4
AGENDA TITLE:	Replenishment Assessment Issue
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

In previous TAC meetings we have discussed a series of issues for which we have sought Board direction pertaining to calculation of the annual Replenishment Assessments.

One additional issue has to do with which projects to include in the assessment calculations. We have recommended to the Board that we consider only those projects expected to come online within a 10 year planning horizon. However, we have not formalized to the Board any recommendation as to whether we should consider ALL projects within that 10 year horizon, or just those projects that would collectively provide enough water to offset the overpumping that occurred in the previous year.

After due consideration of this issue, it is my recommendation that we consider ALL projects within the 10 year planning horizon, when calculating the Replenishment Assessment unit cost, for the following reasons:

1. There is always uncertainty as to when any project will come online. Therefore, shortening the list of projects to only those necessary to offset the prior year's overpumping could turn out to be shortsighted.

2. The prior year's overpumping does not necessarily represent the amount of overpumping that will occur in the subsequent year. It is the subsequent year's pumping levels to which the Replenishment Assessment unit cost will be applied. It is not possible to reliably or accurately predict the subsequent year's overpumping. Therefore, it would be better to err on the high side in terms of the quantities of replenishment water that will be needed, than to use only the number of projects needed to offset the prior year's overpumping quantities.

3. Using all of the projects that occur within the 10 year horizon will more likely produce a unit cost that is representative of what replenishment water will actually cost, since using all of these projects will include a greater range of types of projects, e.g. desalination, recycled water, groundwater replenishment, ASR, etc.

Further, whatever the TAC's conclusion is on these issues, I do not think it needs to be presented to the Board for approval. Rather, this would be reported to the Board in conjunction with presenting to the Board the Replenishment Assessment unit cost calculations, probably at the Board's October meeting.

ATTACHMENTS:	None
RECOMMENDED ACTION:	Provide TAC direction on this issue

SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	August 13, 2008
AGENDA ITEM:	5
AGENDA TITLE:	Schedule
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

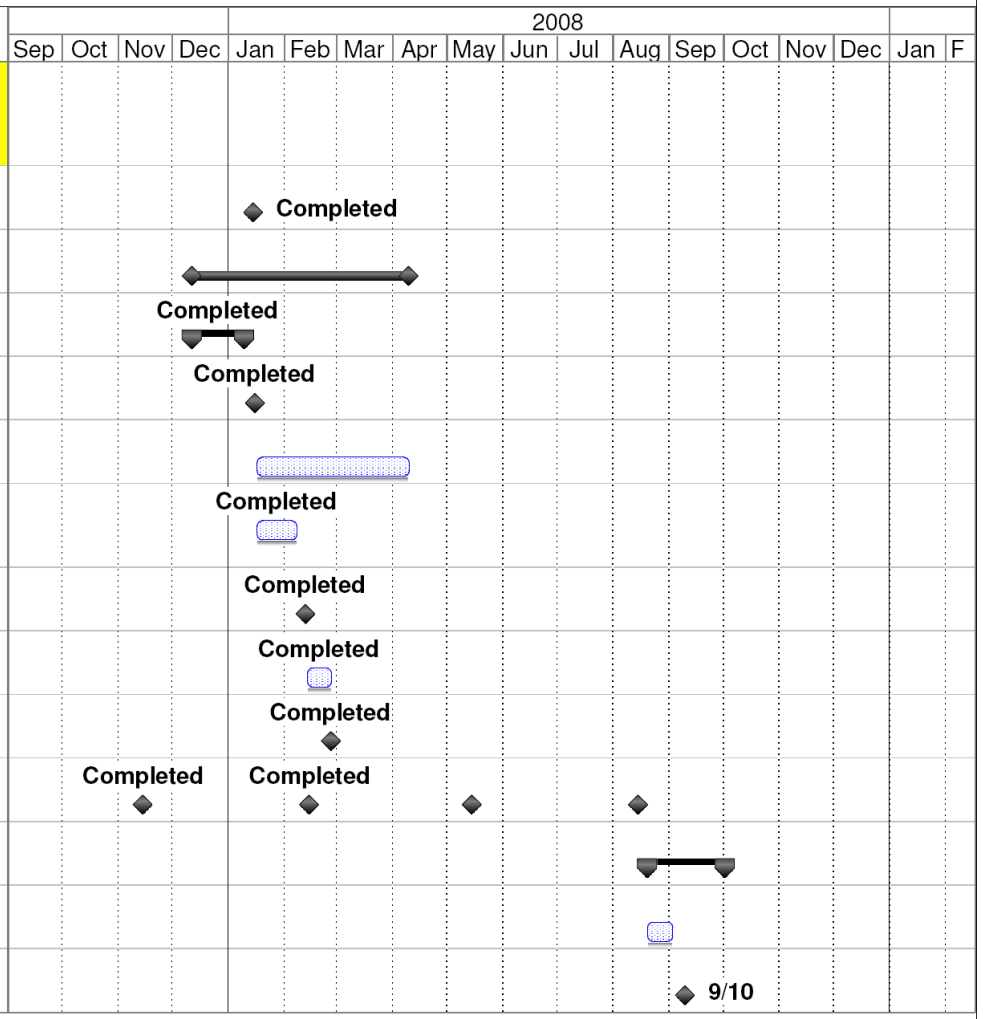
As a regular part of each monthly TAC meeting, I will provide the TAC with an updated Consultants Work Schedule of the activities being performed by the Watermaster's consultants and the public entities (MPWMD and MCWRA) that are performing certain portions of the work, and of the Critical Program Milestones Schedule.

Attached is the Updated Consultants Work Schedule.

ATTACHMENTS:	Updated Schedule of Consultants Work Activities
RECOMMENDED ACTION:	Provide Input to Technical Program Manager Regarding Any Corrections or Additions to This Schedule

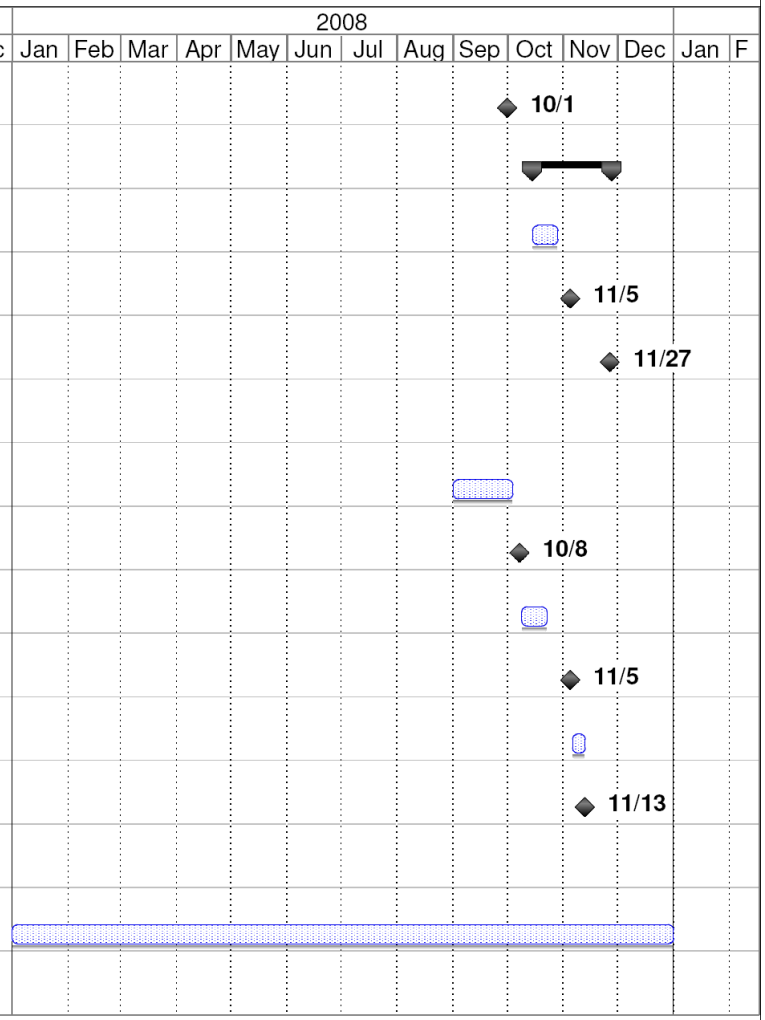
Seaside Basin WaterMaster
Monitoring and Management Program
2008 Work Schedule

ID	Task Name
1	***CRITICAL PROJECT MILESTONES ASSOCIATED WITH TAC, BOARD, AND/OR CONSULTANT WORK***
2	**2008 Administration, Operations and Replenishment Budgets Due**
3	**Respond to November 26, 2007 Court Order**
4	TAC Develops Specific Action Plan to Cure Deficiencies
7	Board Approves Specific Action Plan to Cure Deficiencies
8	Supplemental Water Level and Water Quality Data Collected and Compiled
9	Preparation of Preliminary Draft Response to Court
10	TAC Reviews Preliminary Draft Response to Court
11	Preparation of Final Response to Court
12	Watermaster Submits Final Response to Court
13	**Watermaster Prepares Quarterly Water Production, Water Level, and Water Quality Reports**
18	**Replenishment Assessments for Water Year 2009**
19	TAC Develops Replenishment Assessment Unit Cost for 2009 Water Year
20	TAC Approves 2009 Water Year Replenishment Assessment Unit Cost



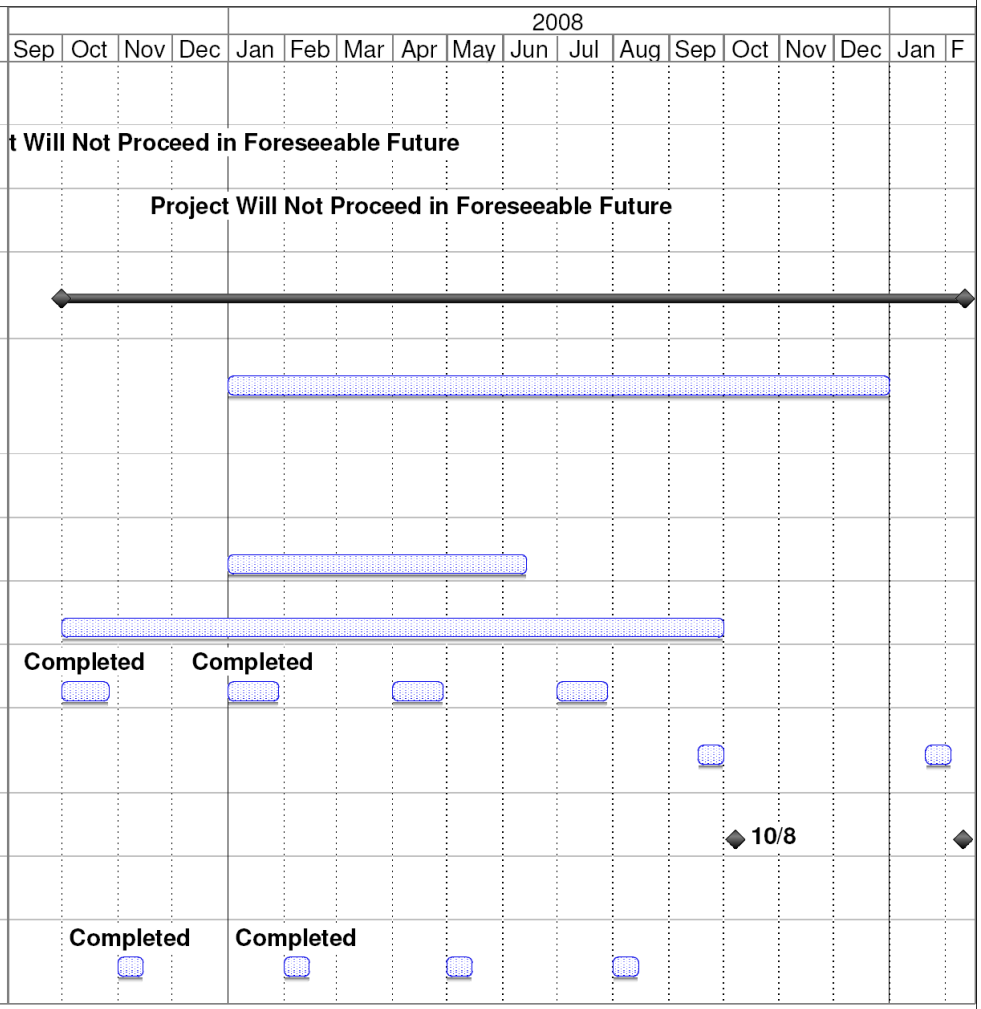
Seaside Basin WaterMaster
Monitoring and Management Program
2008 Work Schedule

ID	Task Name
21	Board Declares 2009 Water Year Replenishment Assessment Unit Cost
22	**Replenishment Assessments for Water Year 2008**
23	Watermaster Prepares Replenishment Assessments for Water Year 2008
24	Watermaster Board Approves Replenishment Assessments for Water Year 2009
25	Watermaster Levies Standard Replenishment Assessment for 2008
26	**2008 Annual Report**
27	Watermaster Prepares Draft 2008 Annual Report
28	TAC Provides Input on Draft 2008 Annual Report
29	Watermaster Prepares Revised Draft 2008 Annual Report (Incorporating TAC Input)
30	Board Provides Input on Revised Draft 2008 Annual Report
31	Watermaster Prepares Final 2008 Annual Report (Incorporating Board Input)
32	Watermaster Submits Final 2008 Annual Report to Judge
33	***MANAGEMENT***
34	**M.1 PROGRAM ADMINISTRATION (All Work Performed by Watermaster Staff)**
35	***IMPLEMENTATION***



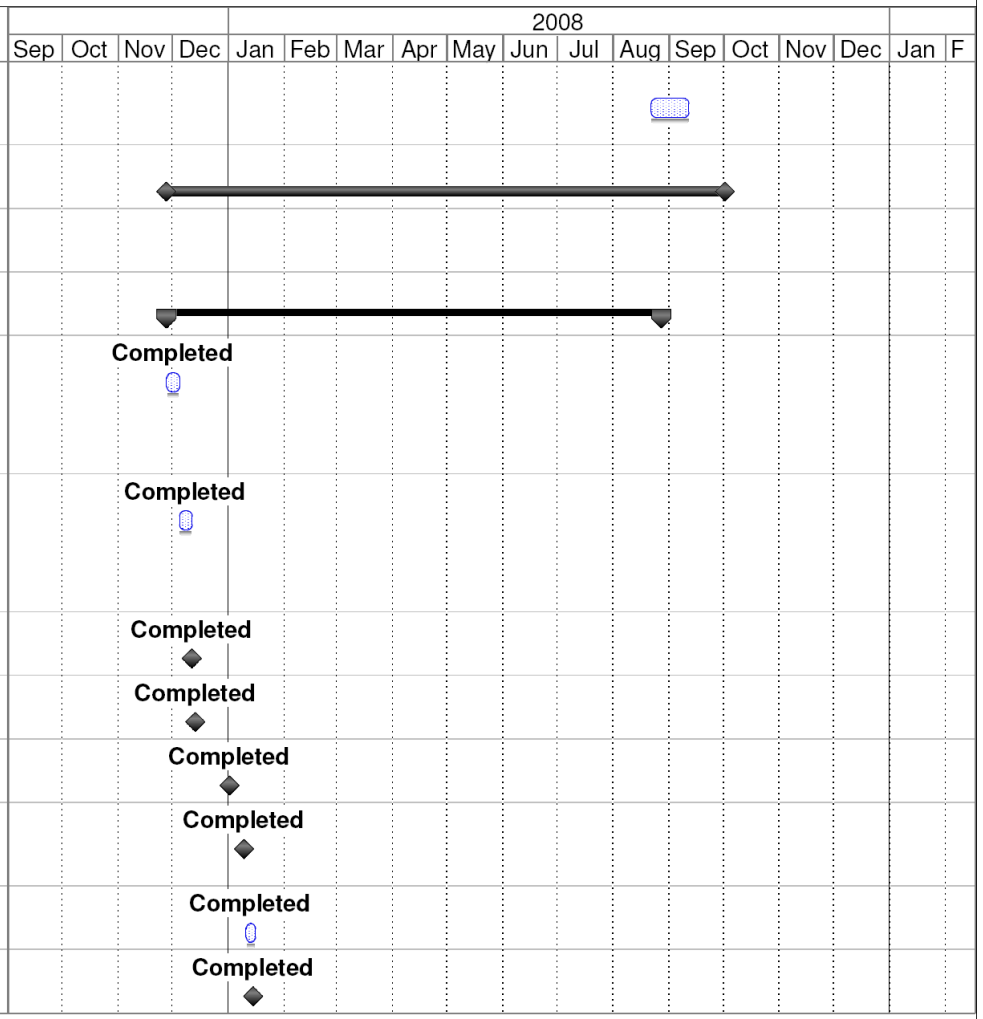
Seaside Basin WaterMaster
Monitoring and Management Program
2008 Work Schedule

ID	Task Name
36	**I.1 CONSTRUCT MONITORING WELLS (CAW ASR MONITORING WELLS)**
37	Resolve ASR Monitoring Well Permitting/Approval Issues
38	ASR MW Construction (by CWP)
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.2.b.1 Site Representation & Selection (MPWMD)*
43	*I.2.b.2 Collect Monthly Water Levels for Water Year 2008 (MPWMD)*
44	*I.2.b.3 Collect and Analyze Quarterly Water Quality Samples for Water Year 2008 (MPWMD)*
49	*I.2.b.4 Update Program Schedule and Standard Operating Procedures (MPWMD & MCWRA)*
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)



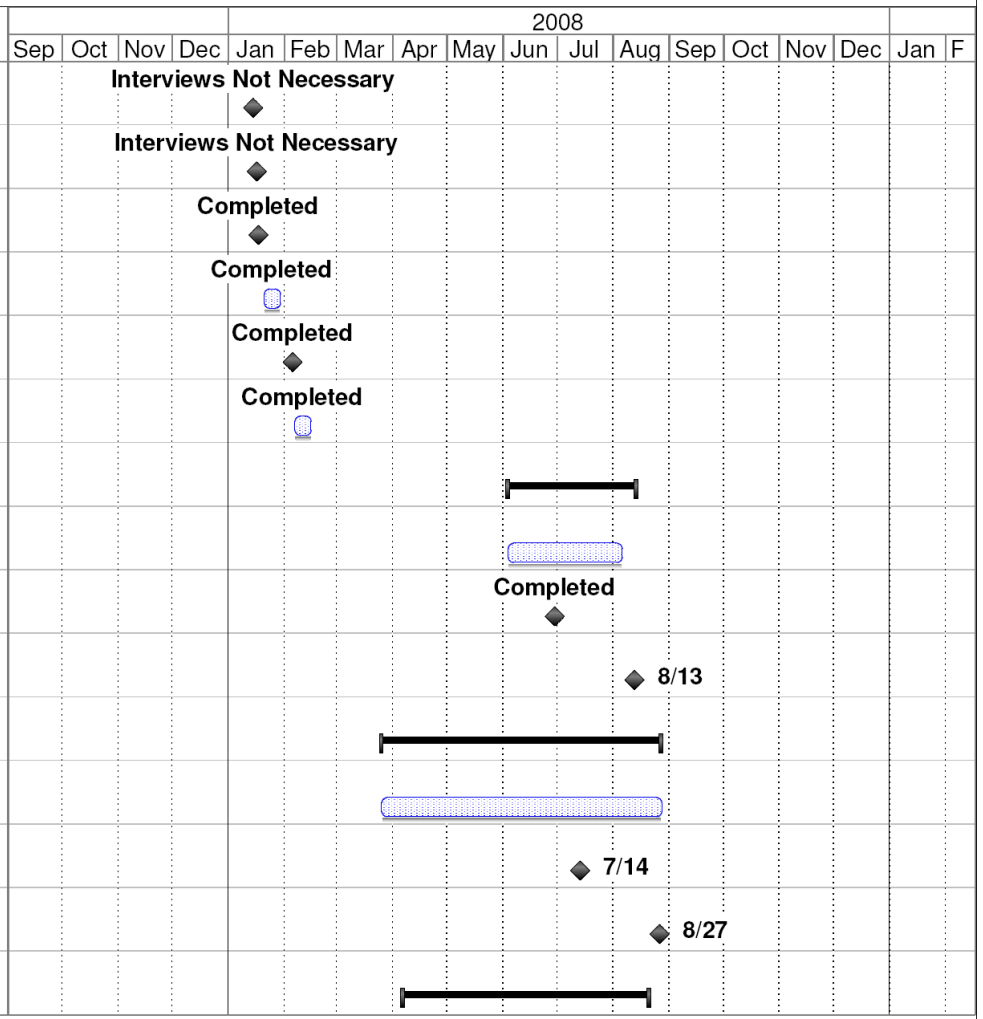
Seaside Basin WaterMaster
Monitoring and Management Program
2008 Work Schedule

ID	Task Name
61	Annual Water Quality & Water Level Summary Report (MPWMD Prepares Report; MCWRA Provides Review Comments)
62	**I.3 BASIN MANAGEMENT**
63	**I.3.a Enhanced Seaside Groundwater Basin Model (No Action Required in 2008)**
64	**I.3.b Prepare Basin Management and Action Plan**
65	Watermaster Staff Prepares Draft Request for Proposals (RFP), and List of Potential Consultants from Whom Proposals will be Solicited, for Consultant Services for Preparation of Basin Management Action Plan and Sea Water Intrusion Contingency Plan
66	TAC Reviews Draft RFP and List of Potential Consultants from Whom Proposals will be Solicited for Consultant Services for Preparation of Basin Management Action Plan and Sea Water Intrusion Contingency Plan
67	TAC Approves RFP and Consultant List
68	Watermaster Staff Sends Out RFPs (Revised with TAC Input)
69	Pre-Proposal Telephone Conference
70	Proposals Due & Distributed to TAC Review Subcommittee Members (Subcommittee appointed at 1/9/08 TAC meeting)
71	TAC Subcommittee Reviews Proposals
72	TAC Review Subcommittee Decides if Interviews are Necessary



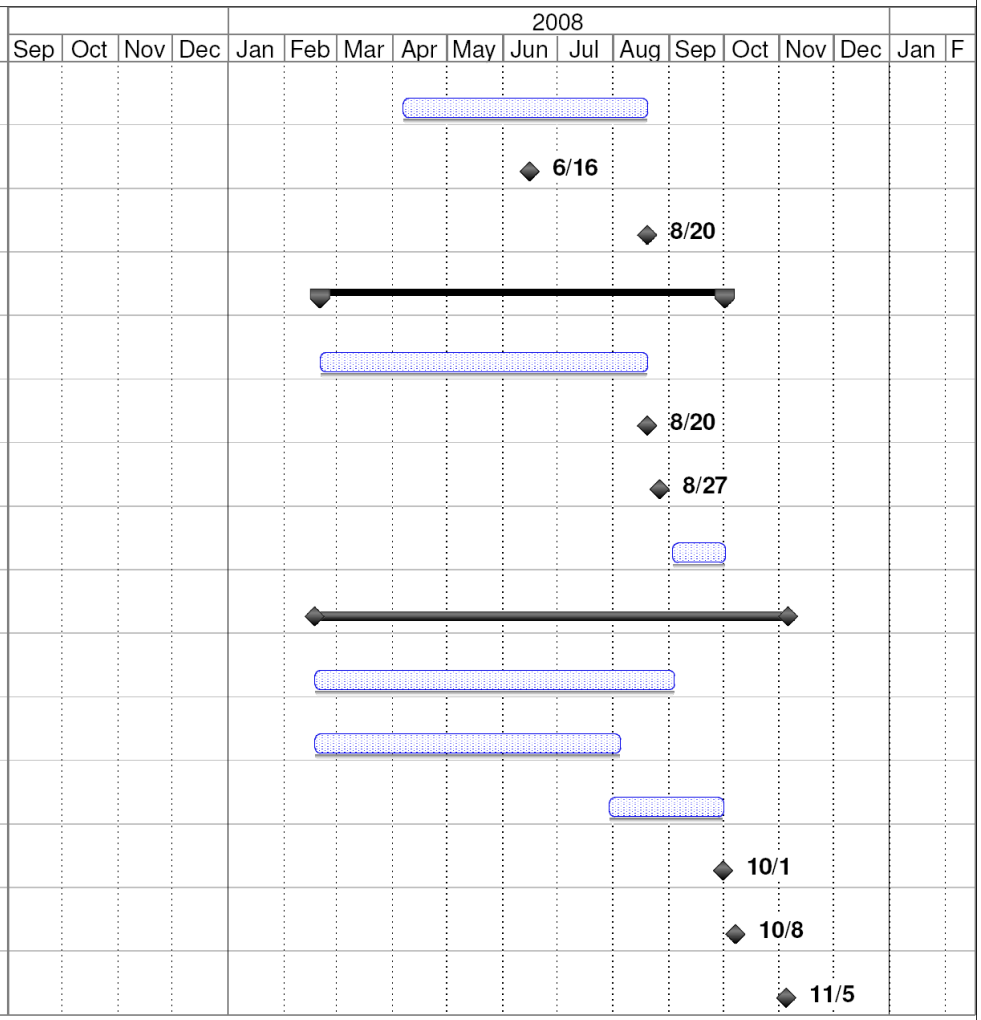
Seaside Basin WaterMaster
Monitoring and Management Program
2008 Work Schedule

ID	Task Name
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.3.b.1 Supplemental Water Supplies*
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.3.b.2 Pumping Redistribution Strategies*
84	Consultant Prepares Pumping Redistribution Strategies Report
85	Consultant Provides Draft Report to Watermaster
86	TAC Approves Pumping Redistribution Strategies Report
87	*I.3.b.3 Basin Storage Capacity & Natural Safe Yield*



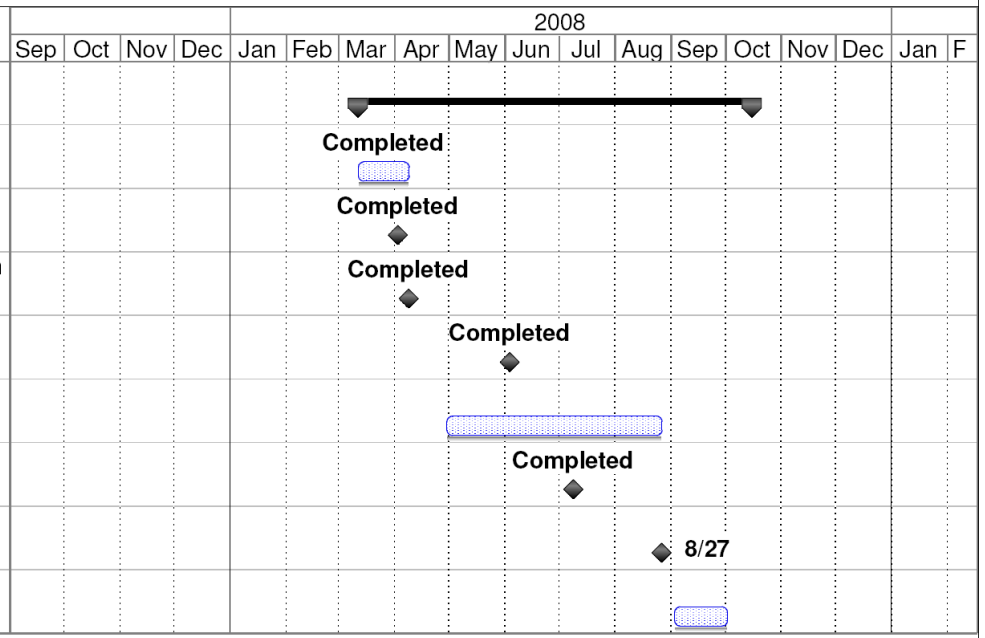
Seaside Basin WaterMaster
Monitoring and Management Program
2008 Work Schedule

ID	Task Name
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 Draft 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 (Over two meetings)
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
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 Long-term Seawater Intrusion Response Plan
109	Consultant Provides Draft Plan to Watermaster
110	TAC Approves Long-term Response Plan
111	Board Approves Long-term Response Plan (Over two meetings)



Seaside Basin WaterMaster
Monitoring and Management Program
2008 Work Schedule

ID	Task Name	2009											2010						
		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	J
36	**I.1 CONSTRUCT MONITORING WELLS (CAW ASR MONITORING WELLS)**																		
37	Resolve ASR Monitoring Well Permitting/Approval Issues																		
38	ASR MW Construction (by CWP)																		
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.2.b.1 Site Representation & Selection (MPWMD)*																		
43	*I.2.b.2 Collect Monthly Water Levels for Water Year 2008 (MPWMD)*																		
44	*I.2.b.3 Collect and Analyze Quarterly Water Quality Samples for Water Year 2008 (MPWMD)*																		
49	*I.2.b.4 Update Program Schedule and Standard Operating Procedures (MPWMD & MCWRA)*																		
52	TAC Provides Input on Updating Schedule and SOPs		**2/11**																
55	**I.2.c Reports**																		
56	Water Quality & Water Level Quarterly Reports for 2008 (MPWMD Prepares Reports; MCWRA Provides Review Comments)																		

SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	August 13, 2008
AGENDA ITEM:	6
AGENDA TITLE:	Well Survey Data from Central Coast Surveyors
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

Several months ago the Watermaster hired Central Coast Surveyors to performing surveying work so that horizontal location coordinates, and vertical elevations, would be known for all of the wells being used in the Watermaster's monitoring well network.

This work has now been completed and has been provided to HydroMetrics and MPWMD for their use in preparing reports and performing calculations.

Attached is a copy of that data for the TAC's information.

ATTACHMENTS:	Spreadsheets listing well survey data
RECOMMENDED ACTION:	None required – information only

SEASIDE WATER BASIN
Client: Seaside Watermaster
Date of Survey: 5/28/08
Project Location: SEASIDE, CA

Well	Horizontal Location Northing (NAD 83-CAL Z4)	Horizontal Location Easting (NAD 83-CAL Z4)	Ground Level Vertical Elevation Ft. MSL (NAVD 88)	Top of Well Vertical Elevation Ft. MSL (NAVD 88)	Top of Slab Vertical Elevation Ft. MSL (NAVD 88)	Ground Level Vertical Elevation Ft. MSL (NGVD 29)	Top of Well Vertical Elevation Ft. MSL (NGVD 29)	Top of Slab Vertical Elevation Ft. MSL (NAVD 29)
ASR - 1	2120835.48	5734970.21	338.41	340.20	339.24	335.64	337.43	336.47
ASR - 2	2120978.33	5735215.79	356.97	357.63		354.20	354.86	
ASR MW-1	2120884.14	5735046.99	340.09	341.25		337.32	338.48	
Bay Ridge	2098752.56	5752779.02	546.69	548.89	546.69	543.80	546.00	543.80
Bishop No. 1 West	2103208.65	5746821.30	399.25	401.78	399.87	396.38	398.91	397.00
Bishop No. 2 East	2103617.47	5748327.31	419.57	421.31	420.51	416.70	418.44	417.64
Blue Larkspur - East End	2102666.95	5740134.86	254.49	256.26		251.65	253.42	
CAW - Granite Construction	2107023.58	5734460.40	229.28	229.40	229.49	226.48	226.60	226.69
CDM-MW-3	2120754.06	5725212.82	37.41	36.78		34.69	34.06	
CDM-MW-4	2118160.48	5723096.39	22.21	21.66		19.48	18.93	
Coe Ave	2123095.63	5731252.15	112.04	113.12	112.04	109.30	110.38	109.30
Cypress Pacific	2120708.90	5726071.05	53.55	53.20	52.70	50.83	50.48	49.98
Darwin	2119429.40	5730454.94	135.81	137.02	136.84	133.06	134.27	134.09
Del Monte Test	2120295.81	5727252.86	34.99	35.59	35.46	32.26	32.86	32.73
East Valley	2103412.87	5748484.39	426.67	427.52	426.67	423.80	424.65	423.80
FO_01 Deep	2115476.71	5733522.94	366.06	365.54		363.28	362.76	
FO_01 Shallow	2115476.95	5733522.83	366.06	365.58		363.28	362.80	
FO_03 Deep	2109597.74	5753627.68	778.26	777.71		775.37	774.82	
FO_04 East Shallow	2111825.54	5731361.68	171.40	171.20		168.63	168.43	
FO_04 West Deep	2111827.99	5731352.33	170.76	170.41		167.99	167.64	
FO_05 Deep	2103198.05	5755836.16	479.61	482.26		476.71	479.36	
FO_05 Shallow	2103198.11	5755836.42	479.61	481.94		476.71	479.04	
FO_06 Deep	2102686.42	5753167.29	471.43	473.60		468.54	470.71	
FO_06 Shallow	2102686.65	5753167.69	471.43	473.10		468.54	470.21	
FO_07 Deep	2122687.86	5738813.33	476.92	476.41		474.13	473.62	
FO_07 Shallow	2122688.27	5738813.14	476.92	476.41		474.13	473.62	
FO_08 Deep	2126741.12	5739733.42	382.10	381.07		379.32	378.29	
FO_08 Shallow	2126740.80	5739733.27	382.10	381.01		379.32	378.23	
FO_09 Deep	2127577.84	5732198.38	121.58	121.82	122.00	118.84	119.08	119.26

Well	Horizontal Location Northing (NAD 83-CAL Z4)	Horizontal Location Easting (NAD 83-CAL Z4)	Ground Level Vertical Elevation Ft. MSL (NAVD 88)	Top of Well Vertical Elevation Ft. MSL (NAVD 88)	Top of Slab Vertical Elevation Ft. MSL (NAVD 88)	Ground Level Vertical Elevation Ft. MSL (NGVD 29)	Top of Well Vertical Elevation Ft. MSL (NGVD 29)	Top of Slab Vertical Elevation Ft. MSL (NAVD 29)
FO_09 Shallow	2127577.59	5732198.85	121.58	121.86	122.00	118.84	119.12	119.26
FO_10 Deep	2130542.76	5738065.90	203.42	204.00	204.12	200.66	201.24	201.36
FO_10 Shallow	2130542.84	5738065.63	203.42	203.82	204.12	200.66	201.06	201.36
FO_11 Deep	2130659.55	5744859.12	336.17	335.93		333.39	333.15	
FO_11 Shallow	2130659.79	5744859.20	336.17	335.90		333.39	333.12	
Hilby MGT	2114872.62	5730699.57	250.83	251.01	250.83	248.07	248.25	248.07
Justin Ct	2106516.31	5735062.85	241.49	243.25		238.68	240.44	
Kmart	2117361.24	5724054.81	33.82	33.62		31.09	30.89	
Laguna Seca Driving Range	2105251.46	5750769.49	517.97	517.36		515.09	514.48	
LS - Old No. 12	2103287.78	5744129.13	368.79	370.99	369.27	365.93	368.13	366.41
LS CNTY Park #1	2103068.36	5749435.11		395.69			392.81	
LS CNTY Park #2	2103001.31	5749416.46		393.87			390.99	
LS Driving Ranch SCS - Deep	2104523.09	5742662.03	490.55	491.31		487.70	488.46	
LS No. 1 Subdivision	2102477.87	5740955.97	279.68	280.10	279.68	276.83	277.25	276.83
Luxton	2119476.88	5729512.78	91.23	92.09	91.23	88.48	89.34	88.48
Luzern Well #2	2120549.77	5731142.85	158.46	159.96		155.71	157.21	
Military	2121670.30	5731670.78	138.65	138.77	138.65	135.90	136.02	135.90
MMP Old Rusty	2120661.59	5734503.52	318.01	318.39		315.24	315.62	
MSC - Deep	2121884.57	5726380.96	80.22	83.26		77.50	80.54	
MSC - Shallow	2121885.62	5726373.80	80.20	83.07		77.48	80.35	
Mutual	2098716.39	5752720.56	546.00	547.08	546.30	543.11	544.19	543.41
MW-B-22-180	2131192.92	5736797.38	170.37	171.07	170.37	167.62	168.32	167.62
MW-BW-08A	2113916.77	5731787.62	206.24	208.15	206.24	203.47	205.38	203.47
MW-BW-09-180	2113879.98	5731774.68	206.69	209.19	206.69	203.92	206.42	203.92
Ord Grove No. 2	2120214.57	5733486.40		295.36	295.16		292.60	292.40
Ord Grove Test	2120227.02	5733554.52	297.50	296.97		294.74	294.21	
Ord Terrace School Deep	2120611.00	5732707.09	231.71	231.60	231.71	228.95	228.84	228.95
Ord Terrace School Shallow	2120610.73	5732707.30	231.71	231.62	231.71	228.95	228.86	228.95
Paralta	2121498.53	5734882.41	332.56	327.46	336.13	329.79	324.69	333.36
Paralta Test	2121515.88	5734876.29	334.23	333.69		331.46	330.92	
Pasadera Main Gate	2101738.17	5745741.55	347.59	348.39		344.73	345.53	
Pasadera Paddock	2101766.71	5746062.55	354.38	355.66	355.24	351.51	352.79	352.37
PCA - West Deep	2124081.00	5728025.88	66.05	68.15		63.32	65.42	
PCA - West Shallow	2124072.37	5727997.08	65.77	67.19		63.05	64.47	
PCA East - Deep	2123145.71	5729011.81	71.77	71.51		69.04	68.78	
PCA East - Shallow	2123145.87	5729011.71	71.77	71.48		69.04	68.75	

Well	Horizontal Location Northing (NAD 83-CAL Z4)	Horizontal Location Easting (NAD 83-CAL Z4)	Ground Level Vertical Elevation Ft. MSL (NAVD 88)	Top of Well Vertical Elevation Ft. MSL (NAVD 88)	Top of Slab Vertical Elevation Ft. MSL (NAVD 88)	Ground Level Vertical Elevation Ft. MSL (NGVD 29)	Top of Well Vertical Elevation Ft. MSL (NGVD 29)	Top of Slab Vertical Elevation Ft. MSL (NAVD 29)
Playa No. 3	2120509.26	5728351.78	54.50	55.99	55.40	51.76	53.25	52.66
Playa No. 4	2120435.18	5728412.30	54.08	55.50	54.38	51.34	52.76	51.64
Plumas #4	2113005.58	5729732.59	163.47	164.45		160.71	161.69	
Plumas '90 Test	2112991.81	5729709.54	160.80	160.80		158.04	158.04	
PRTIW	2120999.09	5734662.01	329.42	331.39	329.42	326.65	328.62	326.65
Public Works Corp. Yard	2119064.20	5725134.83	49.97	50.22		47.25	47.50	
Reservoir	2122247.35	5736108.96	418.31	420.41	418.75	415.54	417.64	415.98
Robinette - Design Ctr.	2118111.61	5725180.74	23.51	24.28	24.27	20.78	21.55	21.54
Robley North	2098855.67	5754305.57	569.89	569.51		566.99	566.61	
Robley South	2098859.72	5754308.76	569.72	569.41		566.82	566.51	
Ryan Ranch No. 11	2104906.36	5737003.46	308.84	310.56	310.11	306.02	307.74	307.29
Ryan Ranch No. 7	2105311.11	5736505.14	296.72	296.97	296.72	293.90	294.15	293.90
Ryan Ranch No. 8	2104957.15	5736932.35	309.42	309.83	309.42	306.60	307.01	306.60
Seaside City No. 3	2118600.88	5733646.26	312.18	310.16	309.75	309.41	307.39	306.98
Seaside City No. 4	2118569.40	5733626.95	311.85	315.09	311.85	309.08	312.32	309.08
Seca Place	2101974.18	5752872.00	430.83	430.55		427.94	427.66	
SPCA 2008	2102312.85	5750881.42	402.16	403.90	402.74	399.28	401.02	399.86
SPCA Old	2102318.12	5750971.43	402.36	404.20	402.36	399.48	401.32	399.48
Standex	2098399.13	5752974.03		571.82			568.92	
Target	2121644.15	5727308.78	48.16	47.39		45.43	44.66	
York Road West	2105314.04	5740102.76	493.64	493.25	493.64	490.80	490.41	490.80
York School	2105190.72	5738657.21	386.10	387.27		383.27	384.44	

Horizontal locations and top of well elevations for all items were located to the top of pipe or the refrence point used for that well.

Ground level elevations for all items were determined at an elevation equivalent to that of the existing grade adjacent to the well.

Top of slab elevations for all applicable sites were determined on a concrete slab adjacent to the well.

NGVD 29 elevations stated hereon were mathematically converted from NAVD 88 collected data.

SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	August 13, 2008
AGENDA ITEM:	7
AGENDA TITLE:	MRWPCA Groundwater Replenishment Project Update
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

MRWPCA has provided a copy of the Project Description document they prepared for use by the PUC in evaluating alternatives to CAW's Coastal Water Project. This describes MRWPCA's proposed Groundwater Replenishment Project for the Seaside Basin. The document provides essentially all of the information describe in the scope of work for MRWPCA's funding Agreement with the Watermaster. A copy of this document was emailed separately to each TAC member for review prior to today's meeting.

MRWPCA has asked to have its consultant on this project, Todd Engineers, make a presentation to the TAC on this material, and also to solicit Watermaster assistance in performing some modeling of the Seaside Basin that will apparently be useful toe MRWPCA in furthering its project.

Due to the heavy workload currently facing the TAC, and the need to develop other essential documents in the near future, e.g. FY 2009 budget, Replenishment Assessments, Annual Report, etc., I have asked MRWPCA to defer making such a presentation until the TAC's agenda has sufficiently cleared to accommodate a presentation.

ATTACHMENTS:	Copy of Project Description (sent as a separate email)
RECOMMENDED ACTION:	None required – information only

SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	August 13, 2008
AGENDA ITEM:	8
AGENDA TITLE:	Budget Items for FY 2009
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

In September I need to begin preparing the proposed FY 2009 Monitoring and Management Program (M&MP) budgets to be presented to the Board for approval at its October meeting. These budgets are the O&M and Capital Improvement Project budgets. I will use the existing Monitoring and Management Program list of tasks as a guide in preparing those budgets, but would appreciate TAC input on whether to also include any or all of the following items:

1. As discussed at previous TAC meetings, HydroMetrics and Joe Oliver have proposed that the Watermaster consider constructing an additional monitoring well, to augment the existing monitoring well network in view of the fact that the Cal Am ASR monitoring well near the Seaside Golf Courses will not be constructed anytime in the near future.

Some initial work was started with other agencies that would be involved in permitting and approving the installation of such a well, but this work was put temporarily on-hold while the TAC focused its attention on the BMAP documents being prepared by HydroMetrics.

This additional monitoring well would support the Watermaster's monitor well network, a requirement from the basin court adjudication decision. Installation of an additional monitoring well was included in the proposed 2009 budget when it was adopted by the Board in the fall of 2007.

I recommend that we budget for the installation of an additional monitoring well in FY 2009, with the intent of refining the location and other parameters of the well after getting Board approval for this expenditure.

2. As discussed in conjunction with the TAC's review of the BMAP sections being prepared by HydroMetrics, it may be desirable for the Watermaster to have HydroMetrics develop Protective Levels for the production wells in the Seaside Basin. The cost for this work is estimated to be approximately $46,560, per the attached excerpts for Tasks 1 and 2 of HydroMetrics' proposal dated June 4, 2008.

Since Protective Levels appear to be an important element of the recommendations of the SIRP, I recommend that we include this work in the proposed FY 2009 budget.

If there are other budget items the TAC feels should be included those can be discussed at today's meeting.

ATTACHMENTS:	Excerpts from HydroMetrics June 4, 2008 Proposal
RECOMMENDED ACTION:	Provide direction on items to be included in the FY 2009 budgets

PROTECTIVE WATER LEVELS

Acceptable groundwater levels are those that are protective of the on-shore groundwater resources. These protective groundwater levels must be high enough to prevent seawater intrusion at the coastline. These protective groundwater levels can be estimated through either analytical solutions or numerical modeling. The advantage of analytical solutions is that they are rapid and relatively low cost. The advantage of numerical modeling is that the protective groundwater level estimated by modeling is generally lower than the level estimated by analytical solutions, resulting in less recharge needed to reach the protective water level.

Our approach to developing the target groundwater levels does not rely on knowing the current position of the freshwater/seawater interface. We propose estimating protective groundwater levels with a series of numerical cross sectional model. Each cross sectional model is anchored by an existing or planned monitoring well, and extends offshore. Setting a groundwater level at the simulated monitoring well allows the fresh water/seawater interface to equilibrate at some distance offshore. The groundwater level can then be varied, until the interface is the desired distance offshore. This is similar to work we have done recently for the Soquel Creek Water District. The cross sectional model will be run for each monitoring well, or location where a protective groundwater level is desired.

Proposed Costs

	HydroMetrics LLC				
	Derrik Williams	Cameron Tana	Dave Van Brocklin	Direct Costs	Total Costs
Task 1: Develop Protective Groundwater Level Goals	**$6,600**	**$2,320**	**$3,840**	**$700**	**$13,460**
Task 2: Model Protective Groundwater Levels	**$6,600**	**$14,500**	**$12,000**		**$33,100**
Task 3: Develop Recharge Alternatives	**$6,600**	**$2,900**	**$2,880**	**$700**	**$13,080**
Task 4: Simulate Recharge Alternatives					
Subtask 4.1 Convert Groundwater Model to New Code	**$9,900**	**$5,800**	**$14,400**		
Subtask 4.2 Develop Transient Water Budget	**$13,200**	**$11,600**	**$19,200**	**$700**	
Subtask 4.3 Update and Calibrate Groundwater Model	**$13,200**	**$26,100**	**$21,600**	**$1,000**	
Subtask 4.4 Simulate up to 5 Recharge Scenarios	**$9,900**	**$8,700**	**$19,200**	**$400**	
Task 4 Toal	**$46,200**	**$52,200**	**$74,400**	**$2,100**	**$174,900**
Task 5: Reports	**$6,600**	**$17,400**	**$19,200**	**$6,000**	**$49,200**
Total	**$72,600**	**$89,320**	**$112,320**	**$11,600**	**$285,840**