MEETING NOTICE AND AGENDA

TECHNICAL ADVISORY COMMITTEE OF THE SEASIDE BASIN WATER MASTER

DATE: Wednesday, August 11, 2010
MEETING TIME: 1:30 p.m.
NOTE NEW MEETING LOCATION:
Monterey Regional Water Pollution Control Agency Offices
5 Harris Court, Building D (Ryan Ranch)
Monterey, CA 93940

If you wish to participate in the meeting from a remote location, please call in on the Watermaster Conference Line by dialing (877)810-9415. Use the Access Code of 4560043. Please note that if no telephone attendees have joined the meeting by 10 minutes after its start, the conference call will be ended.

OFFICERS
Chairperson: Diana Ingersoll, City of Seaside
1st Vice-Chairperson: Eric Sabolsice, California American Water Company
2nd Vice-Chairperson: Rob Johnson, MCWRA

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 11, 2010
AGENDA ITEM:	1.A
AGENDA TITLE:	Approve Minutes from June 9, 2010
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

Draft Minutes from this meeting were emailed to all TAC members. Proposed changes have been included in the attached version.

ATTACHMENTS:	Minutes from this meeting
RECOMMENDED ACTION:	Approve the minutes

D-R-A-F-T
MINUTES

Seaside Groundwater Basin Watermaster
Technical Advisory Committee Meeting
June 9, 2010

Attendees: **TAC Members**
City of Seaside – Rick Riedl
California American Water – Eric Sabolsice
City of Monterey – Norm Green
Laguna Seca Property Owners – No Representative
MPWMD – Joe Oliver
Public Member – No Representative
MCWRA – Rob 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 & Georgina King (via telephone)

Others:
MPWMD – Jonathan Lear

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

1. **Administrative Matters:**

A. Approve Minutes from April 14, 2010 Meeting

On a motion by Mr. Johnson, second by Mr. Oliver, the minutes were unanimously approved as presented.

B. Future TAC Meeting Locations

Following a brief discussion there was consensus to hold the July 14, 2010 TAC meeting at the Seaside City Hall Main Conference Room at 1:30 PM. While there was a general preference to use the MRWPCA Boardroom because it was better equipped for TAC meetings, there was concern that it did not have telephone conference call capabilities. However, Mr. Johnson said that MCWRA has wireless conference phone equipment and offered to bring it to the MRWPCA Boardroom to see if it could be used at that location. If so, the TAC may be elect to hold meetings at future dates at the MRWPCA Boardroom. It was agreed that at the July meeting the location for the August meeting would be selected.

C. Public Member of the TAC

Mr. Jaques summarized the agenda packet materials on this item. He reported that Mr. Fischer is getting infusion treatments on certain Wednesdays, and he would not be able to attend TAC meetings on those Wednesdays. However, he said that he hopes to resume attending TAC meetings on dates when he is not receiving treatments. There was brief discussion on this item, and no action was taken or necessary, as this item was provided for information only.

2. **HydroMetrics Groundwater Modeling**

Mr. Jaques introduced this item and Mr. Williams then continued the discussion. Mr. Williams said that the Scenario 1 modeling work will look at Alternative Producers pumping at current levels, as well as at levels increased by 10 percent and 20 percent. Standard Producers would remain at current production levels without any changes. Ms. King pointed out that the tables on page 12 of the agenda packet include the proposed production quantities to be used in the modeling and represent current production data. The shaded data for October 30 through December of 2009 was not yet available, so data from Water Year 2008 was used. This data is plotted on pages 10 and 11 of the agenda packet. She noted that there would be an increase in production of about 150 to 170 acre-feet per year with the 20 percent pumping increase mentioned above.

Mr. Jaques asked why the October through December 2009 data was still not available. Mr. Oliver said that MPWMD does not get all of the production data reported on a monthly basis, and some is only reported on a quarterly basis. The data has not yet been processed for purposes of the modeling. However, Mr. Oliver said he expected to be able to provide the missing data to Ms. King by the end of this week.

Mr. Oliver said that the MPWMD uses Water Years, not calendar years, for all water data, and recommended using Water Year data, as it is easier to track and obtain from the databases. Mr. Johnson said he concurred with this recommendation.

Mr. Riedl asked if there was more historical pumping data that could be used, rather than using just the most recent year's data. Ms. King responded in the affirmative. Mr. Riedl asked if the pumping pattern in the table in the agenda packet appeared to be representative of prior years. Mr. Oliver said he did not feel the actual month-to-month production pattern was critical to the modeling, because the modeling period will span a number of years. He noted that the Alternative Producers include golf courses which have large seasonal variations in pumping, whereas CAW's demands are mostly residential and commercial in nature, and those do not have the same type of seasonal variations.

Mr. Oliver said that there had been a trend showing an increase in production each year due to land development up to the point in time when the Court Decision was issued adjudicating the Seaside Basin. Thereafter, the increases largely ended.

Mr. Sabolsice summarized the intent of Scenario 1 as being to see the impact on the Basin if Alternative Producers in the Laguna Seca subarea increased their pumping rates. He said he could check within CAW to see if last year's production was a representative year, or whether there were some unusual circumstances affecting production during the last year.

Mr. Jaques noted that when the Board gave its approval for this work, it requested that current pumping levels be used.

Mr. Oliver and Mr. Riedl said that a quick analysis of the last three years' production pattern could be performed to make sure that the data to be used for the modeling are representative. Mr. Williams said he could do this, but that it will take some time and effort to do so. He commented that he did not feel that there would be much benefit to do this, due to the multi-year duration of the modeling period.

Following discussion and there was consensus to have HydroMetrics examine the last three Water Years' production data, and if it appears consistent with the pattern shown in the agenda packet materials, HydroMetrics would then proceed with the Scenario 1 modeling. However, if significant anomalies are found, HydroMetrics would report this information to the TAC and await direction from the TAC meeting before proceeding with the modeling. Mr. Sabolsice requested that HydroMetrics provide an email to TAC members describing the findings of their analysis.

Mr. Oliver said this modeling will also include several non-Watermaster producers as well, and noted that the prior modeling had included those producers within the Laguna Seca subarea. Each of these produce less than five acre-feet per year, which is the deminimis amount defined in the Decision. These do not report production quantities to the Watermaster, but do report them to MPWMD.

3. Update on Sentinel Well Induction Logging

Mr. Jaques summarized the agenda packet materials on this item. Mr. Oliver said that the data did not indicate any appreciable change from prior years.

Mr. Riedl asked if conductivity was found to be increasing, what would that mean. Mr. Lear said that this would represent an increase in salinity, and that increases in salinity would likely be indications of seawater intrusion. Mr. Lear explained that induction logging measures the conductivity in the soil outside of the well casing. There were several questions and answers on issues pertaining to the data and its significance.

Mr. Lear and Mr. Oliver reported that the dune sands have been intruded for some years.

Mr. Sabolsice asked Mr. Oliver what depths were of greatest concern, and Mr. Oliver responded that typically they were in the 1,000 to 1,500 foot depth range. Mr. Lear said he could plot the aquifers on the graphs for the TAC's information and send that out via email. Mr. Oliver pointed out the Seaside Basin Watermaster well locations on a map that was available in the meeting room.

4. Discuss Issues to be Addressed in Updating the BMAP

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

Mr. Oliver said he concurred that the items listed on page 15 of the agenda packet would be beneficial to update, but wondered if updating would be better done at a future date when more definitive data on the Coastal Water Project was available following PUC approval of the project. Mr. Johnson and Mr. Lear also felt it would be beneficial to update the BMAP, but concurred with Mr. Oliver's feeling that updating the document should be postponed.

Mr. Sabolsice asked if the BMAP was not updated, what would be the result. Mr. Jaques said that the Board was currently not using the BMAP for any decision-making, but was waiting for more definition of the Coastal Water Project before considering any possible actions on any of the BMAP recommendations.

There was consensus to take no action or to make any recommendations regarding updating the BMAP at this time, but to discuss this matter again at the October TAC meeting. Mr. Johnson asked Mr. Jaques to alert the Board to the TAC's decisions on this matter.

5. Information Regarding Funding for Water Projects

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

Mr. Johnson said he concurred that there would be considerable staff effort to take a proposed project through the Integrated Regional Water Management planning process. He said the focus currently is on the "shovel-ready" projects, and that there are six Integrated Regional Water Management "Regions" along the central coast. He said he did not feel there would be a lot of money made available to each of the potential projects this year. There was discussion that Local Groundwater Assistance grant funds (described on page 25 of the agenda packet) cover many of the Watermaster's activities.

There was TAC consensus to take no action now. However, if the Board wishes an additional monitoring well to be installed in the future, introducing that project into the Integrated Regional Water Management planning process could be considered at that time.

6. **Discussion on HydroMetrics Use of Seaside Modeling Results in a paper for an ASCE Conference**

Mr. Sabolsice introduced this item, and Mr. Williams summarized it. Mr. Lear and Mr. Johnson were noted as co-authors of the paper. On a motion by Mr. Johnson, second by Mr. Oliver, the TAC unanimously gave its approval for HydroMetrics to use the Seaside Basin modeling results in a paper they intend to present at the conference.

7. **Schedule**

Mr. Jaques highlighted several items to be updated within the schedule contained in the agenda packet.

In response to a question, Mr. Williams commented that he did not feel there was any danger in delaying refining the Protective Water Levels, except that any modeling scenarios would likely be using the currently-defined Protective Water Levels as a measure of the impacts of the scenarios being modeled. There was TAC consensus that bringing the matter of refining the Protective Water Levels back to the Board, as listed under ID No. 76, did not need to be undertaken at this time.

Mr. Oliver noted that under ID No. 59, the work duration should be 90 days and that it should be updated to reflect starting work on June 9, 2010.

With regard to ID No.106 pertaining to evaluation of wells, Mr. Lear said that he is about half-way through the evaluation process, and that data from about 260 wells has been compiled within the entire Basin, and about 220 of these wells are in the Coastal Subarea. He said he recommended moving the presentation on this work as listed under ID No. 107 to the August TAC meeting.

Mr. Jaques will make these updates in the schedule.

8. **Other Business**

Mr. Riedl reported that the Main Conference Room, which is proposed as a site for future TAC meetings, is in the City Hall building itself, across the parking lot from the Portable Buildings Conference Room location.

9. **Set next meeting date:**

The next regular meeting was set for Wednesday, July 14, 2010 at 1:30 p.m. at the City of Seaside City Hall – Main Conference Room

The meeting adjourned at 3:00 p.m.

SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

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

MEETING DATE:	August 11, 2010
AGENDA ITEM:	1.B
AGENDA TITLE:	Future TAC Meeting Locations
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY: Following TAC direction from the June 9, 2010 TAC meeting, research was done to determine whether or not suitable telephone conference call-in capabilities could be provided if future TAC meetings were to be held in the MRWPCA Board Room.

MRWPCA now has suitable equipment for this purpose, which is from the same manufacturer as the equipment we have been using at Seaside. The system was tested using a live phone hook up with Georgina King of HydroMetrics to simulate a conference call-in. It was found that the audio is picked up very well from all parts of the Board Room whenever the microphones, which are provided at all seating locations as well as the podium, are used.

A subsequent email with this information was sent to all TAC members, and there were no objections to having our future TAC meetings at the MRWPCA Board Room location, so I have booked our future meetings there.

ATTACHMENTS:	None
RECOMMENDED ACTION:	None required – information only

SEASIDE BASIN WATER MASTER TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	August 11, 2010
AGENDA ITEM:	2
AGENDA TITLE:	Report from HydroMetrics on Scenario 1 Groundwater Modeling
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY: HydroMetrics has completed the initial work on groundwater modeling of Scenario 1. The initial findings are discussed in the attached Technical Memorandum dated August 3, 2010. HydroMetrics will discuss this work, and respond to TAC questions regarding it, at the TAC's August 11, 2010 meeting.

Figure 3 in the Memorandum has a bold magenta colored line that depicts the "Model Area" for this work. The model area is too large for the full boundary of the model area to be shown in this figure, and still have enough resolution to show the wells and other details on it. In the final report HydroMetrics will include an inset on this figure to show the full extend of the model area.

Also, in the final report HydroMetrics will include a text section discussing the impacts on groundwater levels in the Seaside Basin as a result of the pumping conditions modeled in Scenario 1.

TAC members are invited to raise any questions regarding this work, as well as to offer any suggestions for edits to improve clarity or address related issues, for inclusion in the final version of the report

A presentation of the full report to the Board is currently planned for the Board's September 2010 regular meeting.

ATTACHMENTS:	HydroMetrics Memorandum discussing initial findings of Scenario 1 modeling work
RECOMMENDED ACTION:	None required – informational only at this time

HydroMetrics WRI

519 17th Street, Suite 500
Oakland, CA 94612

TECHNICAL MEMORANDUM

To: Bob Jaques

From: Derrik Williams

Date: August 3, 2010

Subject: Initial Results from Scenario 1 – Increased Laguna Seca Alternative Producer Pumping

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The attached charts show the initial results from Scenario 1 (Figures 1 and 2). Figure 1 shows initial results from increasing pumping from Laguna Seca subarea alternative pumpers by 10%. Figure 2 shows initial results after increasing pumping by Laguna Seca subarea alternative pumpers by 20%.

The top blue line with diamond data markers on each chart represents the amount of additional pumping by the Laguna Seca subarea alternative producers. Increasing the alternative producer's pumping by 10% translates into an annual pumping increase of 54.4 acre-feet. Increasing the alternative producer's pumping by the alternate producers in the Laguna Seca subarea by 20% translates into an annual pumping increase of 108.8 acre-feet.

The other four lines on each graph represent the sources of water that supply the additional pumping. The amount of additional pumping equals the sum of the four sources. In early years, increased pumping is supplied by a lowering of groundwater levels in the Laguna Seca subarea. Lower groundwater levels are shown on the two graphs as water extracted from storage. In later years, groundwater levels do not fall as quickly; and the relative amount of groundwater supplied by storage diminishes. Groundwater pumped in later years is derived from areas outside the Laguna Seca subarea.

The light blue line with round data markers shows that the most significant source of water in later years comes from outside the Seaside Basin. This is water that is captured from the Toro area. The second most significant source of water is water from the Northern Inland subarea. Flow from the Northern Inland subarea is shown on Figures 1 and 2 with the the green lines with triangular data markers. Although the graphs refer to this water as "Flow from Northern Inland", the water is not flowing from the Northern Inland subarea into the Laguna Seca subarea. Rather, this represents a reduction in

groundwater flow that previously flowed from the Laguna Seca subarea, into the Northern Inland subarea.

Figure 3 shows the location of alternative producer wells in the Laguna Seca subarea, and supports the data shown on the two charts. The map shows that the alternative producer wells are located between the Northern Inland subarea and the Toro area; and are relatively distant from the Southern Coastal subarea. The cone of depression from these alternative producer wells will therefore reach into the Northern Inland subarea and Toro area well before they reach into the Southern Coastal subarea. Therefore, we expect most of the water supplying the increased pumping to come from storage, the Toro area, and the Northern Inland subarea.

These results are only preliminary. We are still analyzing groundwater flow directions and sources of water. Furthermore, we suspect the pumping fluctuations in early years result from some wells going dry. We will verify this theory during our continued analyses.