

**SEASIDE GROUNDWATER BASIN WATERMASTER
NOTICE
BUDGET AND FINANCE COMMITTEE MEETING
AUGUST 28, 2013 at 2:00 PM
CITY OF SEASIDE—CITY HALL CONFERENCE ROOM**

AGENDA

Committee Members

City of Seaside

Daphne Hodgson - Chair

California American Water

Eric Sabolsice

City of Sand City

Steve Matarazzo

Coastal Subarea Landowners

Paul Bruno

The next Watermaster Budget and Finance Committee meeting will be held on Wednesday, August 28, 2013 at 2:00PM and will be held in City of Seaside's City Hall Conference Room

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

Action Item:

1. Discussion/Consider making a Recommendation to the Board of Director regarding Establishing the Replenishment Assessment Unit Cost for Water Year 2014 (October 1, 2013 through September 30, 2014)

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

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

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

MEETING DATE:	AUGUST 28, 2013
AGENDA ITEM:	NO. 1
AGENDA TITLE:	Information for Use in Establishing the Replenishment Assessment Unit Cost for Water Year 2014 (October 1, 2013-September 30, 2014)
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

This Unit Cost is used to calculate the Replenishment Assessments that are charged to any Standard Producer that exceeds its allocation during the Water Year.

Several years ago in conjunction with developing the Replenishment Assessment Unit Cost at that time, the TAC recommended, and the Board approved, using the following procedures:

1. All potential replenishment water supply projects that could bring water to the Seaside Basin any time within the next 10 years will be included in the calculations, assuming sufficient information on those projects can be obtained.
2. Costs for each project will be inflated to the first year in which it could potentially begin supplying water, to reflect the increase in costs that will be occurring before the projects actually come on-line.
3. Contingency allowances will be included in these costs based on the level of project development for each project. This allowance is intended to provide for unforeseen cost impacts to the projects, particularly for projects that are only at the conceptual level of development. The footnotes in Table 1 describe the contingency allowances.

Each of the projects that the TAC determined at its June 19, 2013 meeting, and which were presented to the Board at its August 7, 2013 meeting, to be potentially able to supply water for replenishment of the Seaside Basin, and which are sufficiently developed to have all of the necessary data to enable them to be evaluated, is discussed in Attachment 1, and is included in Table 1 in Attachment 2.

Attachment 2 (Table 1) is a spreadsheet showing the unit costs of the four projects described in Attachment 1 which the TAC considers to be viable potential sources of replenishment water within the next ten years. This information is provided for the Budget and Finance Committee's use in establishing the Replenishment Assessment Unit Cost for the upcoming Water Year October 1, 2013-September 30, 2014. The Unit Cost used for the Water Year that is just ending was \$2,780. As can be seen from Table 1, two of the four projects have projected unit costs considerably higher than this. The higher costs results primarily from using the more complete and comprehensive cost estimates now available for the projects that were evaluated.

There was considerable TAC discussion at the TAC's August 14, 2013 meeting on what Unit Cost should be recommended for approval. Some members felt a straight average of the unit costs of the four projects should be used, some felt a weighted approach taking into account the potential amount of water that each project would be able to produce should be used, some felt a weighted approach taking into account the likely potential of a given project to be able to provide replenishment water should be used, and some felt that the highest potential unit cost should be used in order to be conservative. In the end the TAC concluded that this was not a technical issue, and that it was a policy issue that should be determined by the Budget and Finance Committee and subsequently the Board.

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

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

AGENDA ITEM:	NO. 1 (Continued)
ATTACHMENTS:	<ol style="list-style-type: none">1. Status of and Comments Regarding the Projects Included in the Water Year 2014 Replenishment Assessment Unit Cost Calculations Contained in Table 12. Table 1: Replenishment Project Information for Use in Establishing the Replenishment Assessment Unit Cost
RECOMMENDED ACTION:	Determine a Proposed Replenishment Assessment Unit Cost for Water Year 2014 (October 1, 2013-September 30, 2014), and recommend this to the Board for approval as the Replenishment Assessment Unit Cost to be used for WY 2014

Attachment 1:
Status and Comments Regarding the Projects Considered
in the
Water Year 2014 Replenishment Assessment Unit Cost Calculations
in Table 1

1. Possible Initially Unused Capacity of Cal Am’s Regional Desalination Plant in the Monterey Peninsula Water Supply Project (Regional Desalination): This project would involve using initially unused capacity in Cal Am’s regional desalination plant as a source of replenishment water for the Seaside Basin.

Cal Am has indicated that it will seek (or may already have done so) approval by the CPUC to increase the size of the Regional desalination plant under the Monterey Peninsula Water Supply Project in order to: (1) provide replenishment water to the Seaside Basin, (2) provide service for the build-out of the Pebble Beach Company’s projects, (3) provide water to support the anticipated “bounce back” in local tourism that will result from the improving economy, and (4) to serve legal lots of record that are not currently being served. The anticipated requested increase in desalination plant size is summarized in the table below:

Demand	AFY
Seaside Basin Replenishment	700
PBC Projects Build-out	325
Tourism “bounce back”	500
Lots of Record	1,180
Total	2,705

The report to MPWMD’s Board for its February 12, 2013 meeting commented that MPWMD staff felt some of the demands listed in the table above were overly conservative, at least in the early years, as follows:

1. In the sizing of the desalination plant Cal Am had used a 5-year average to establish its current demand. The 5-year average Cal Am used was 13,291 AFY. MPWMD pointed out that Cal Am’s current actual demand is only approximately 12,500 AFY.
2. As MPWMD understands it, the water demand cited in the EIR for build-out of PBC’s Projects is only 135 AFY, rather than the 325 AFY used by Cal Am.
3. MPWMD’s analysis of commercial water demands in the early-to-mid 2000s, compared to current commercial water demands (during the current economic downturn period) indicates current demand is only about 200 to 400 AFY below pre-economic downturn demand, rather than the 500 AFY used by Cal Am in its plant-sizing analysis.
4. The lots of record demand of 1,180 AFY was reportedly taken from a 2001 MPWMD analysis, but MPWMD does not recommend continued use of this value. MPWMD indicated it planned to examine more recent reports to try to provide an updated figure.

For the reasons stated above, there may be initially unused capacity available in the Regional desalination plant in its early years of operation. If so, that excess capacity could provide a potential additional source of replenishment water for injection.

2. Seaside Basin ASR Expansion: This project would be an expansion of the existing Seaside Basin ASR project. ASR entails diverting excess winter flows from the Carmel River Basin during high flow

periods using existing Cal Am wells in the lower stretches of the river. Diverted water is treated to potable drinking water standards and pumped through the Cal Am distribution system to the Seaside Basin, where the water is injected for later recovery during dry periods. MPWMD has operated a full-scale ASR test well (Santa Margarita Test Injection Well No. 1) since 2002, and a second injection/extraction well was completed in 2008. Maximum extraction capacity of the current ASR facilities is approximately 1,500 AFY.

Expansion of the ASR project would provide for a greater diversion of water from the Carmel River during high flows for transport and injection into the Seaside Basin, and could increase the maximum extraction to approximately 2,400 AFY. The facilities to accomplish this are included in the scope of Cal Am's Monterey Peninsula Water Supply Project, and include:

- Increased capacity in Cal Am's Carmel River Basin well capacity in order to deliver water for injection in the Seaside Basin
- Increasing the capacity of Cal Am's conveyance pipeline from the Carmel River Basin in order to be able to deliver the peak instantaneous flow of injection water to the Seaside Basin
- Making some other improvements in Cal Am's distribution system in order to remedy limitations in getting water to the ASR sites while simultaneously meeting Cal Am's system demands

This project is being pursued jointly by MPWMD and Cal Am. Up until the time that Cal Am reduces its Carmel River diversions in accordance with the SWRCB's Cease and Desist Order No. 95-10, all of the water production of this project has to be used by Cal Am to reduce the amount of water it takes from the Carmel River Basin. Therefore, up until that point in time, which will correspond to the time that Cal Am's Monterey Peninsula Water Supply Project becomes fully operational, this project will not be able to serve as a potential source of supplemental replenishment water for the Seaside Basin. However, once the Cease and Desist Order has been satisfied, in the wet years in which ASR injection water quantities greater than 1,300 AFY are available, it may be permissible to inject and leave in the Seaside Basin at least some portion of any amount over 1,300 AFY, without having to pump it out to reduce Cal Am's Carmel River Basin diversions. This project would be a potential additional source of replenishment water for injection.

3. Regional Urban Water Augmentation Project: This project consists of construction by MCWD of a recycled water distribution system to provide up to 1,727 acre-feet per year (AFY) of recycled water from MRWPCA's existing Salinas Valley Reclamation Plant (SVRP) to urban users within the Ord Community (former Fort Ord) and the Monterey Peninsula. Approximately 300 AFY would be made available to the Monterey Peninsula with the remainder being supplied for redevelopment of Fort Ord. Additional facilities to store recycled water during winter would be needed to meet instantaneous summer-time demands and to increase the project yield to an envisioned 3,000 AFY. The MCWD recycled water system would service existing and new water users within the Fort Ord community and the City of Marina. Existing users' irrigation systems would be disconnected from the potable water system and would tie directly into the new recycled water system.

With the exception of a winter storage reservoir, the project design is essentially complete, and much of the right-of-way for the pipelines has been acquired. Some sections of pipeline have already been installed as components of roadway projects constructed under the Fort Ord Reuse Plan.

The current market for recycled water from this project is approximately 550-700 AFY within the City of Seaside, CSUMB, and the City of Marina. The bulk of this (450 to 500 AFY) is the irrigation demand of the two City of Seaside golf courses.

Development fees from Fort Ord redevelopment projects are needed to help fund the project's capital costs. The project is on hold at this time due to slow progress on redevelopment of the former Fort Ord. In the meantime MCWD and MRWPCA are seeking additional participants to increase the demand for recycled water to make the project economically feasible. It appears that the project is at least 3 to 5 years away from implementation.

The only direct benefit to the Seaside Basin from this project would be the reduction of pumping by the Seaside Golf Courses' two wells that draw from the Seaside Basin. All of the other markets for the recycled water are currently served by water from the Salinas River Basin. Thus, if this project were to be implemented, it would have the potential of providing in-lieu replenishment of the Seaside Basin only by reducing pumping for the Seaside Golf Courses. It would not be a potential additional source of replenishment water for injection.

4. MRWPCA/MCWD Groundwater Replenishment Project (GWRP): This project would produce highly treated recycled water for use in replenishing the Seaside Basin. If it is deemed feasible, and can be completed on a schedule that is acceptable, Cal Am will include it as a part of the Monterey Peninsula Water Supply Project and thereby reduce the size of its desalination plant. Cal Am's Monterey Peninsula Water Supply Project contains two plant size alternatives, one which has a 9,000 AFY seawater desalination plant, and a second one which has a 5,500 AFY desalination plant and a Groundwater Replenishment Project (GWRP) delivering 3,500 AFY of water for replenishment of the Seaside Basin.

With regard to the GWRP component of the second alternative, although there is not yet a formal water purchase agreement in place, institutional agreements are being pursued between MRWPCA, MPWMD, and Cal Am such that:

- MPWMD would enter into a Storage and Recovery Agreement with the Watermaster.
- MPWMD would buy recycled water from MRWPCA when that water is injected into the Seaside Basin. The purchase price for the recycled water would cover O&M, Capital Recovery, and Administrative expenses of MRWPCA and MPWMD.
- 6 months after injection occurs (in order to comply with State Department of Public Health requirements pertaining to groundwater replenishment) Cal-Am would purchase potable water from MPWMD and either withdraw it from the ground or leave it for withdrawal later.

This approach is very similar to the manner in which MPWMD financed the reclamation project at Carmel Area Wastewater District.

Providing additional water beyond the 3,500 AFY is not being considered in the EIR that MRWPCA is currently preparing for the GWRP. However, at the TAC's May 2013 meeting MRWPCA reported that the GWRP might be capable of also providing an additional amount of water (perhaps on the order of 1,000 AFY) for replenishment of the Seaside Basin. In conjunction with this, MRWPCA reportedly is looking for sources of water to augment its decreasing influent flows of wastewater. Potential augmentation flows it is examining include stormwater flows from its member entities and the City of Salinas' industrial wastewater flows currently being treated at that city's industrial wastewater treatment plant.

If this additional water became available, it would be a potential additional source of replenishment water for injection.

**Attachment 2: Table 1. Replenishment Project Information for Use in Establishing
the Replenishment Assessment Unit Costs for Water Year 2014 (October 1, 2013-September 30, 2014)**

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

ANTICIPATED UNIT COSTS OF REPLENISHMENT WATER FOR THE SEASIDE BASIN

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

Total Quantity of Replenishment Water (AFY) the Listed Projects Could Cumulatively Potentially be Able to Produce Within the Next 10 Years ⁽⁸⁾ = 17,252

FOOTNOTES:

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

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

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

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

(6) Project data provided by MCWD.

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

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