

Monterey Regional Water Supply Reliability Collaboration
Division of Ratepayer Advocates

Draft Meeting Notes, Twelfth Meeting

February 27, 2008

Location: MBEST Center, 3180 Imjin Road, Marina, CA 93933
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Overview of Goals for Meeting # 12

Meeting #12 (February 27, 2008) Proposed Milestones

- Last assignments before disbanding DRA's Study Team
- Perhaps we ought to have a celebration party in honor of our success? (Let us hope it is success indeed!

Special Note: The REPOG process has been successful. An implementable plan is now making the rounds to City Councils, Mayors, board members of agencies, etc. We are generally well received with our plan. Additionally, there has been overwhelming interest in maintaining the REPOG process as it has been. The local agencies along with the DRA have agreed to partner in supporting the REPOG process. Thus, we will be continuing generally monthly (except for rare calendar conflicts), throughout the project planning, outreach, and implementation process.

Materials provided at the meeting included the following:

"Meeting #12 Agenda, 2-27-08"

"Draft Meeting #11 Notes v2"

Review of Notes from Meeting # 11

- In reference to the note regarding the purpose of the dialogues was not to reach consensus, participants discussed their understanding of the meaning of the word. To the facilitator, consensus suggests that everyone seems satisfied. While this is a

preferred state, for the REPOG to function the purpose was to find some commonality that people would agree to move ahead with. The bar was not set too high in order to find common ground that is a basis for moving forward. Several participants noted that the less strict definition of consensus seemed appropriate for their understanding of the term as it is used in processes like this one. One participant commented that consensus means, I can live with it, not, I will vote for it.

- The regional governance point about precluding water supply implies that there was a discussion about how the lack of a governance structure prevents things from going forward.

Update on Regional Project Public Involvement and Information Discussion of the plans and process

Catherine Borrowman, UCSC Center for Integrated Water Research

Ms. Borrowman shared several points raised in the Public Information and Involvement Work Group (PIWG) meetings about plans for public participation and the process of conducting this work. In the past, PIWG meetings have covered items such as media outlets and developing Articles of Participation, this was used to state the premise upon which people are collaborating in the REPOG. In the last two PIWG meetings, ideas surfaced which enabled the participants to start planning an enhanced communication program that would extend farther than city council presentations and REPOG meetings. The time seems ripe for developing a communication plan that will guide the actions of this work group in its relationship with the REPOG's participants who have access to different communities, its preparation of informational materials to make the regional project more accessible to members of different communities (i.e. residents of areas included in the plan, non-profit advocacy organizations, government agencies, business groups, etc.) The goals of the communication effort include explaining the regional project concept, collecting feedback, involving more potential stakeholders in the REPOG process, and engaging in a transparent public outreach effort on behalf of the water districts that are supporting the regional planning process.

Ms. Borrowman stated the following points:

- The REPOG can oversee the work of the Public Information and Involvement Work Group, and:
 - Offer insight with explaining the issues and proposed solutions to community members,
 - Invite community feedback on the regional water supply strategy.
- Public Information and Involvement Work Group members will:
 - Vet ideas for communication with the public in regular meetings, using a strategic communications plan to guide and plan activities.
 - Rely on a communications professional to conduct public meetings.
 - Ensure that public comments are recorded and shared with the REPOG, the Study Team, and other interested parties.
 - Provide strategic direction for the Center for Integrated Water Research in managing the public participation program.
- Because it would be helpful to have a statement of objectives and a name for the regional project to use in public informational materials, the Public Information and Involvement Work Group (PIWG) will present drafts for each of these work products for the REPOG's consideration and comment at the next meeting.
- The PIWG is developing milestones for each month, which will be shared with the REPOG when finished.

Ms. Borrowman opened up the conversation to talk about the opportunity to reach people and inform them of what the REPOG has overseen for the past year: the development of a water supply program that involves multiple beneficiaries.

- A participant noted that the groups of thousands of working people in organized labor should be reached in a public involvement effort.

- Recent press coverage was discussed regarding the information presented in city council meetings by Lyndel Melton, RMC Water and Environment.
- Several participants stated that disseminating good information is very important to reinforce the brief reports already being delivered to the groups whom members of the REPOG represent.
- The presentation is an excellent tool, however so far, the Study Team is “preaching to the choir”. In order to get this presentation televised and broadcast on community channels, there should be some advertising about when the program will be shown to maximize exposure.
- In the unincorporated area of Monterey County, some in North County are represented by the Pajaro Valley Water Management Agency, whose acting director was present at the REPOG meeting. The participant requested that in the water supply strategy attention is paid to the water issues in unincorporated areas.
- Paul Miller, Publisher of the Carmel Pine Cone expressed interest in the regional water supply story, requesting that Kelly Nix be contacted with an “angle”. The Pine Cone would like to carry out a “media crusade” about water supply issues.

Report and Comments from City Council Meetings and Board Meetings

- A presentation on the regional project was given at a Monterey County Water Resources Agency meeting on 2-25-08.
- At a city council meeting, it seemed as if no one knew about the regional project plan prior to the presentation. People expressed enthusiasm. There’s a burgeoning requirement for public outreach.
- The Monterey City Council meeting was televised and re-broadcasted. Several citizens saw the presentation of the regional plan and then shared their comments with a member of the REPOG.
- At the Monterey City Council meeting the decision made was to support the Planning MOU established between MCWD, MCWRA and Cal Am. The second motion made was to state that the regional planning team and MRWPCA should be coordinating with the waste management district to help them become players in this activity. The response made to this second motion was that the Study Team and MRWPCA has been in contact with Mr. William M. Merry, P.E., DEE, General Manager, Monterey Regional Waste Management District.
- It is important to assume that people **don’t** know about the regional water supply strategy so that there is a vigorous involvement by REPOG members in outreach.

Presentation of the Latest Presentation

Lyndel Melton, RMC Water and Environment

Introduction

- The REPOG dialogues are the result of many things: the PUC reviewing the proposal for the Coastal Water Project. The Division of Ratepayer Advocates (DRA) brought stakeholders and citizens to the table to engage in discussions about water supply. The technical and public outreach work groups were formed. The result is a project that is based on criteria developed in this open public dialogue process in which anyone can participate. DRA and CIWR lead this dialogue. Last summer, the local political agencies, cities, and the water district put funds together to put the regional water supply conceptual plan together. RMC’s contract was with MCWRA although funds came from multiple entities in the area.

Regional Managers Have Been Meeting with the Following Results. . . .

- A regional plan that is implementable, sustainable, publicly and politically acceptable.
- Less expensive than a desalination plant at Moss Landing.
- Solves many issues with the same investment.

Regional Water Supply Plan Addresses Gaps in Northern Monterey County Water Supplies

- Gaps are the difference between available supply, contractual or legal, and what is needed to meet future demands.

- Gap identified in the MPWMD area that is 17,000 AFY is made up of two numbers: 12,500 for meeting SWRCB Order 95-10 and some for Seaside Basin adjudication, and 4,500 AFY has been identified by cities and the county to meet their future needs.
- The study team has been working with MCWRA on identified water needs in northern areas of the county. The numbers aren't quite right but they are not duplicative. There is a separate need for Pajaro-Sunny Mesa. Moss Landing, Castroville and the US Army have discussed their needs.
- Cal Water Service Company and RMC have discussed existing and future water supply needs in the Salinas area. While Cal Water staff has identified groundwater as the next increment of supply, RMC is committed to have continuing dialogue to work with them, and continue to address those needs in our documents.

Recommended Program Builds Upon Previous and On-Going Efforts

- Seaside ASR, City of Sand City Desal, Marina Coast Desal, Seaside ASR/ILR, Recycled Water, Salinas Basin Groundwater, Seaside Replenishment, Salinas River Diversion, Regional Desalination.
- Of all the work accomplished by local entities looking at supply projects, none of it has gone to waste. RMC looked at the projects in September and categorized them.

Recommended Program Provides Incremental Implementation, Building on Early Successes

- *Water conservation*: While this area has done an excellent job to conserve water there are still more opportunities that would save 300 AFY.
- *Stormwater*: Cities in the area have objectives in relation to stormwater. The City of Marina is using recharge basin opportunities. Pacific Grove wants to take advantage of stormwater capture. A conservative estimate of the amount of water supply we can develop from stormwater is 500 AFY.
- *Seaside Aquifer Storage and Recovery (ASR)*: Cal Am and MPWMD are working together to inject water from the Carmel River into the aquifer, 1,400 AFY. Phase I will be implemented by 2008, expansion is planned for 2011. In-lieu recharge will be explored for further development.
- *Recycled water*: Could be used for agriculture, up to 10,000 AFY, up to 2,500 AFY for Seaside Augmentation, or up to 3,000 AFY for urban irrigation.
- *Salinas River Diversion*: Up to 7,800 AFY could be added to water supplies from Phase II of the Salinas Valley Water Project. Salinas River water could be blended with recycled water to supply an expanded Castroville Seawater Intrusion Project (CSIP) distribution system. The reduced agricultural pumping of groundwater could be partially utilized to meet domestic water needs.
- *Salinas Basin Groundwater*: Up to 10,000 AFY could be developed from additional wells which would be a function of delivery of new supply to offset existing agricultural groundwater pumping and modification of existing limitations in use of groundwater within the Salinas Basin.
- *Regional Desalination Facility*: 8,300 AFY from desalination could be supplied; the location, supply source and type of well are being analyzed.

Total Program Makes Highest Use of All Available Recycled Water Supplies

- How can the region utilize the 10,000 AFY of additional recycled water? In general, 13,000 to 14,000 AFY is being used in the CSIP project. Up to 10,000 acre feet of blended recycled and Salinas River water could be used for agriculture, with an expansion of the irrigation system. This could be done if we find a way to store that recycled water in the winter season for use in the summer season when demand for water outstrips supply. The plan is to store the winter recycled water in a sandy-bottom shallow aquifer on the Armstrong Ranch for retrieval during the irrigation season. An alternative is to use a portion for urban non-potable landscape irrigation and for use in recharging Seaside Basin for indirect potable reuse or Salinas Basin augmentation for the purposes of establishing a seawater barrier.

Total Program Provides a Sustainable Supply that Meets Regional Needs

- While other opportunities for desalination are focused on using ocean water for desalination, the regional plan includes a project description to pump intruded groundwater from the Salinas Basin. Salinas Basin over pumping has caused greater

intrusion of ocean water than would have occurred naturally over the past 70 years. The concept is to use desalination to improve the water quality in the Salinas Basin using an inverse barrier, yielding the potable water and brine that would approximately match the bay ocean water in salinity. This could be done at a lower cost than pumping ocean water with environmental benefits from enhanced groundwater quality and elimination of most or all nutrients in the sewage outfall by recycling to agricultural irrigation benefits.

- Desalinated water could be sent north, east, or south.

Use of Existing Outfall Saves Ratepayers

- The reason to locate this brackish desalination facility near the existing regional water treatment facility is to put brine into the recycled water outfall since the regional plan includes recycling 100% of the waste flow. To tie-in to the existing MRWPCA outfall would cost around \$2.5 million for the minor modifications. This is in comparison to the other strategy for brine disposal using beach wells. Four brackish source (\$35 million) to ten ocean source (\$70 million) wells could be used.
- The assumption underlying the four brackish source to ten ocean source wells is to dilute the brine and not impact benthic organisms. The brine disposal need would be higher for ocean source wells than brackish, which would come at an increased cost.
- A participant asked how the salty water would be pushed out into the ocean in the beach well case. The response was that the water will buoy up and mix in the saturated sands. This requires energy to pressurize the water.
- One of the issues with this approach is coastal erosion; beach disposal may require an exit strategy in 20 to 25 years due to erosion and damage to the well.
- One of the benefits of removing recycled water that is currently produced in the winter time from the outfall is the removal of nutrients in that water from reaching the bay.

Seawater has Intruded a Significant Portion of Salinas Groundwater Basin

- A significant portion of this aquifer has water quality such that it can't be used for drinking or agricultural irrigation. The point is to pump that and move the contamination back toward the ocean and thus allow a higher quality water to be recharged ultimately restoring the viability of the aquifer as a water supply and storage source. The brackish groundwater that is receding toward the ocean could be pumped along with intruded seawater by a series of parallel wells near the coast. Called an "inverse seawater barrier" such an approach allows us to remediate the groundwater intrusion problem while generating a supply of brackish groundwater to treat and send to potable uses. This would yield not only water at a reduced cost for desalination, but a significant environmental benefit of remediating the Salinas basin groundwater degradation problem. The new project coming online, MCWRA's Salinas Valley Water Project (SVWP) aids in this process but not at the same speed as would the combined impacts of the components that are suggested in this program.

Use of Landfill Cogeneration Provides Sustainable, Reliable Power Supply

- A significant benefit of locating the treatment facilities next to the Monterey Peninsula Landfill and Landfill Gas Renewable Energy facility would be to rely on a sustainable, reliable power supply from renewable sources. Currently the cogeneration facility sells power to PG&E. The regional program could potentially offer to pay more than the rate PG&E gives the landfill and less than market rate. As a part of the regional program there is the potential to enhance the facility resulting in additional energy production, more efficient use of methane to generate electricity and reduce atmospheric impacts from the methane leaking from the landfill. This long-term source of power could yield multiple benefits for the region, one of which would be to avoid using the grid for energy; another is to have local control. An additional benefit would be trap the methane gas escaping now that is about 23 times more deleterious to our atmosphere than carbon dioxide.
- What percentage of the total energy use could be taken care of with methane? Potentially 100% but it could be only 50%. It would be important to investigate how to generate as much green energy as possible using existing opportunities with augmenting solids.
- Another idea is to turn regional green waste collection and treatment into an income generating opportunity while producing more local power.

The Regional Program Provides Significant Regional Water Benefits

- Meets urban water supply needs
- Improves agricultural water supplies
- Enhances protection of Salinas Groundwater Basin
- Utilizes 100% of available recycled water
- Utilizes available surface water

... While Enhancing Regional Sustainability

- Restores Carmel River flows
- Potential to create Environmental Park
- Reduces nutrient discharge to Monterey Bay National Marine Sanctuary
- Reduces environmental impacts
- Reduces incremental cost of water
- Predictable energy supply from Regional Landfill
- Reduces costs and emissions
- Creates a locally controlled energy supply
- Reduces carbon footprint
- Participants discussed how Cal Am is focused on meeting its responsibilities with regard to SWRCB 95-10, and a mandated reduction in supply from the Seaside basin, whereas this program aims to solve those problems and reduce nutrient load to the MBNMS, a national treasure, restore Carmel River flows, help us efficiently reuse the energy capability inherent in solid waste, look at wastewater as a year-round resource, reduce the footprint of a new water supply project by locating in the north Marina area, avoiding pipeline construction from Moss Landing.
- With reduced incremental costs, all the components could add up to a significant cost saving opportunity.

California PUC and Cal Am Now Have Three Alternatives

- The 12,500 AFY facility at Moss Landing, the 12,500 AFY facility at North Marina, or the regional plan if local entities commit to regional cooperation and developing the proposed regional plan.
- The regional plan has a different focus than the 12,500 AFY facility at Moss Landing, for it would deliver water to many areas within the same project, not just to the Seaside Basin or Carmel River replacement. All three alternatives would deliver water to the Cal Am service area. The PUC has agreed to incorporate the regional plan alternative into the EIR.
- A participant asked if the regional plan could efficiently be compared to the Coastal Water Project using a “dollar for dollar, apples to apples” comparison. The response was that the important aspect of preparing the description of the project components for the EIR is to allow the EIR’s evaluation to impress the Commissioners that the regional plan’s components compare favorably against the two other alternatives.
- Regional entities have signed a planning MOU between MCWD and Cal Am. It is scheduled to be discussed at the March board meeting for MCWRA and will also be scheduled for a MRWPCA Board meeting.

What Are The Next Steps?

- The sense of urgency the community feels from the draft Cease and Desist Order pressure and the pressure to reduce pumping in the Seaside Basin is forcing a quicker pace. The PUC has to get through process to decide what Cal Am should do. RMC, CIWR, and the regional plan technical work group will be meeting to work on the project descriptions. By June Mr. Zigas will be able to conduct the analysis necessary to represent the regional program in the EIR. The PUC’s objective is to have a draft EIR issued in December 2008 and by the 2nd quarter of next year to issue a decision.
- Does this project need a coastal development permit? Yes.
- Is there any additional capacity to generate water numbers?
- Is there a possibility the regional program would rely on Carmel River in emergencies? If something goes wrong with the plan, what happens? The backstop is the brackish water desalination. In the engineering analysis and hydraulic studies the team will look at ultimate capacity of the Salinas Basin and the inverse seawater barrier that is part of the

- work to make the seawater recede. There are implications from this that affect our ability to draw brackish water and treat it.
- It is a decision the community will have to make to back off the Carmel River in part or entirely. There are still agencies relying on diversions from Carmel. We have an opportunity to come to an understanding to see.
 - Is there any plan to rely on the Carmel River in the case of the failure to produce water from alternate sources? Would 3,268 AF be held back to take care of emergencies? The plan is not to do that. The charge of the regional program is to get withdrawals down to the mandated level of diversion.
 - A participant commented that while reducing carbon footprint for desal, it actually increases the overall environmental footprint because of growth.
 - A participant questioned the Salinas groundwater basin assumptions stating that the current Salinas groundwater supply project will not meet future growth of the Salinas valley. Growth projections are 83,000 greater than assumed for the EIR for the SVWP. What will be done to reconcile this difference for future demand? Future urban water demand was estimated about 85,000AF per year in the Salinas groundwater basin. The new population forecast for the urban service area is greater than what was assumed for that project. If one reviews numbers available to update to the numbers that are in the master general plan numbers the main difference is the north County area.
 - Participants then discussed limitations with pumping groundwater from the Salinas Basin. The Marina Coast area is limited by groundwater pumping. The Salinas Basin is overdrafted. There is something in the MCWRA statute that limits the exportation of water from the Salinas Basin. Would this regional program conceptually bring the Salinas Basin into balance? And if it does, does that have to be proven in the EIR? Would the Salinas Basin balance have to be restored first before water can be exported from it?
 - The Salinas Basin is currently hydrologic imbalance. This is being addressed by the SVWP's two phases with the Nacimiento Dam and diversion structure which would together theoretically bring it into balance. There may be additional needs and Phase II would address all or part of those hydraulic needs. SVWP could demonstrate the basin could be in hydrologic balance.
 - One thing the regional program plan would potentially do is to introduce 10,000AF of recycled water of new water supply, reduce pumping with the expanded agricultural system, and then start to reduce pumping northwest of Salinas basin. If the regional program pumps ocean water out of wells near the coast, this would provide supply and provide inverse barrier to make sure enough water is in the trough.
 - For a reduction in overall water use in the Salinas basin wouldn't the region need to change cropping patterns and improve irrigation efficiencies? The water quality used from the CSIP has been so good; growers are using it for higher water crops like strawberries.
 - Analysis shows that project concept allows the Salinas basin could be in balance. Is that all that is necessary for the EIR?
 - In order to meet the MCWRA statute against exportation would the process to change it include showing the analytical case and MCWRA making a legal determination? The regional project would have to demonstrate that balance is there over time.
 - What if it goes back into imbalance? Would that put the Peninsula at risk?
 - If that happens the regional project could take more ocean water than brackish water using wells closer to the coast. It would still be cheaper to take water from the 180 foot aquifer than the ocean.
 - MCWRA has stated their role in the regional program engineering analysis is to oversee and work the team on those technical issues, i.e. to look at the proposed basin extractions. A short-term goal is to get their analytical partnership involved in the work. They have to make that determination.
 - Referring to Phase II of SVWP, is it true that NOAA has precluded phase two because of flow restrictions? No, that is not true. NOAA has established in a biological opinion certain flows for certain times of the year. This restriction would not take all the water from Phase II. The base component established in the EIR, as long as the regional

- program team adheres to the flow prescription for the enhancement of steelhead fish on the Salinas River, there is no problem with the river diversions.
- A participant questioned the water demand number for Pajaro Sunny Mesa stating PSM has the AGCOP system at Moss Landing yielding 70AFY. How exactly would the water need for Moss Landing be separate from this system? The response was that the team recognizes PSM has responsibility for service and are in dialogue with Joe Rosa about the demand and the specific area. They have small supply responsibility for the Granite Ridge area.
 - Regarding the arrow signifying water moved from the regional project into North County, it is helpful to remember the supply can best be met by groundwater. Arrow demonstrates the regional project has the ability to deliver water to North County areas. What the regional project team will do is refine how that can be done that meets the criteria. There may be a pipeline for urban use, but remember that wherever one can use groundwater it will be the most cost effective supply.

Discussion of the Next Steps for the REPOG

- The next steps for the REPOG include observing the technical work and public information and involvement work. The next meeting will be in April. In the future the regional program may be on the agenda of a meeting of the PUC Commissioners. This would be an opportunity to brief them about the plan and the process.

New Business/Old Business/Parking Lot Issues/Action Items

A lively discussion about stormwater runoff ensued during the public information and involvement update.

- One participant made the point that people who run programs relating to water need to be informed of the regional project concept and its relationship to their work. In a recent League of Women Voters meeting a person in charge of a stormwater program lacked sufficient information to respond to a question raised about the 500 AF that is projected to be developed as a supply source.
- Other participants discussed how state mandates and permitting issues regarding contaminants in the runoff going through the sewer system make it challenging for the stormwater management group to develop projects. The 500 AF is a realistic number for the REPOG's planning purposes.
- A Bureau of Reclamation project in the San Gabriel Watershed contained investments in bioswales and other low-tech approaches. Mr. Kasower has committed to Dan Cort, the Mayor of Pacific Grove, to help him find funding for implementing a similar type of program there.
- The City of Salinas has just adopted low-impact design standards. The information is readily available for use elsewhere. It would be helpful to quantify the water that could be saved.
- The Regional Water Quality Control Boards have been critical of stormwater runoff and are "coming down hard" on this issue.
- Policy PS4: Stormwater management centers on water quality concerns and runoff into the Areas of Special Biological Significance (ASBS). The Monterey Peninsula is strictly monitoring stormwater to protect the Monterey Bay National Marine Sanctuary. Water quantity from stormwater runoff is not generally seen as a supply source.
- MRWPCA is working with the Seaside Basin Watermaster to find "low hanging fruit" with stormwater projects.
- "Urban slobber" is a term coined by Steve Kasower to describe the issue of stormwater runoff.
- The issue of governance was raised in the context of the REPOG developing a mission statement. The response to this point about lacking institutional authority was to focus on how "personal power" can gain influence. Governance has been a real issue for the REPOG, but the assumption that predicates the forward momentum with the regional project plan is that agencies can get along with an official legal contract. Governance structures may someday be attractive, however contractual relationships have been used

to plan, finance, build, and operate large public and private projects. There is no reason why it cannot work for a regional water supply in Monterey.

Discussion of Next Meeting Date/Agenda

- **Meeting #13 (April 30, 2008)**

Meeting Attendees

Carolyn Anderson, Public
Ryan Alameda, RMC Water and Environment
Mary Bannister, Pajaro Valley Water Management Agency
Andrew Barnsdale, CPUC/Energy Division
Andy Bell, MPWMD
Dave Berger, MPWMD
Catherine Borrowman, UCSC
Catherine Bowie, CalAm
Janet Brennan, Public
Jeff Cattaneo, MCWD
Jerry Cole, CDM
Sarah Corbin, Surfrider Foundation
Manuel Fierro, CPW
John Fischer, Public
Max Gomberg, DRA
Tanya Gulesserian, CURE
Howard Gustafson, MCWD
Jim Heitzman, MCWD
Stephanie Hughes, RMC Water and Environment
Diana Ingersoll, City of Seaside
Keith Israel, MRWPCA
Mike Jones, Cal Water
Steve Kasower, UCSC
Margie Kay, Public
Loren Letendre, CRWC
Steve Matarazzo, City of Sand City
Roger Masuda, Public
Lyndel Melton, RMC Water and Environment
Julie Moore, ESA Water
Ken Nishi, MCWD
Bill E. Reichmuth, City of Monterey
George Riley, CPW
Tom Rowley, Monterey Peninsula Taxpayers Association
Danilo Sanchez, DRA
Clive Sanders, CRWC
Bob Schaffer, MCP
Cynthia Walker, DRA
Eric Zigas, ESA representing the CPUC