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# CMSA Monthly Report

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Central Marin Sanitation Agency

September 2003

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## GENERAL

### MMWD Desalination

**Developments** MMWD receives about 25% of their water from a contractual arrangement with the Sonoma County Water Agency (SCWA). The water is supplied through the North Marin Water District's (NMWD) pipeline which provides 80% of Novato's water needs. The North Marin pipeline is nearing its design capacity which will prevent MMWD from acquiring additional water, and they forecast that the future volume available will decrease over time due to increasing water demands in Novato. MMWD has presented a case to support their continued investigation of desalination based on the above NMWD pipeline situation, and the inability of the SCWA to supply more water due to limitations in their transmission system, an over extension of their water contract obligations beyond their water rights, and the complex environmental issues surrounding the Eel River lawsuit.

Recently, developments occurred that do not support the "pipeline project" that was approved by MMWD constituents in the 1992 Bond measure. The SCWA reported to their water contractors that there is a limited supply and they have

reached their limit. The contractors include cities, counties, and water/irrigation districts who in their General Plans counted on 101,000 acre-feet of available water. As it stands, SCWA can only supply 75,000 acre-feet and has therefore requested increased diversions from the State Water Board. The Board's consideration is on hold until the Friends of the Eel River lawsuit is settled and an EIR is completed. Once the lawsuit is settled, provisions from the settlement will need to be included in an EIR along with provisions from the National Marine Fisheries Section 7 mitigation which is due out in 2006. The EIR is estimated to take two years to prepare and will likely be ready in 2008/9. SCWA expects the Board to consider their diversion request in 10-15 years.

### JPA Exploratory Committee

The Committee has met twice and has nearly finalized a spreadsheet document showing each organizations sources of revenue, expenses, sanitary sewer charges, reserves, debt level, asset types and numbers, staffing levels, and information about their pump stations and pipelines. The Committee was charged with identifying opportunities to share resources and assets in such a way to potentially save the rate payers some dollars.

The Committee reviewed the spreadsheet information, and

began brainstorming short and long term initiatives that could be explored further to determine if there are savings possibilities. It was decided that over the next few months the JPA managers would meet to develop a list of discussion topics for further review and share these with their respective Boards in January 2004. Then over the next year, each topic will be thoroughly reviewed to determine the practicality and feasibility of its implementation. The managers will provide monthly updates to their Boards on the status of each topic explored and will meet with the full Committee quarterly.

### Susan Halpin's Departure

Susan Halpin resigned from the Agency on September 18, 2003 and accepted an operations position for the City of Lompoc. She was an operations employee for 16 years at CMSA and had contributed many positive ideas and initiatives to the organization. We wish her well in her new endeavors.

**CMMS** After review of the vendor proposals for a new Computerized Maintenance Management System (CMMS), we have narrowed the choices to (2) vendors. We will have a demonstration of their software packages on September 30<sup>th</sup>. Then, we will rate the demonstrations, check references, compile our

findings, and make a choice of which software to pursue purchasing.

**Security** Our Management Team has given direction to proceed with installing a new vehicle gate, and to purchase and install a keyless access system. The new gate will be installed near the entrance to CMSA prior to the parking areas. It will be kept open during Agency normal business hours, and remain locked most other times. The keyless access system will initially be used on the main Administration building door, the employee entrance gate, and the automatic vehicle gate (original gate beyond the parking lots). The system is expandable to accommodate more doors as we have the need. This keyless system will be installed by CMSA staff.

Re-keying of all facility doors has been completed. The new keying system is much simpler than the old system. Most of the employees need to carry only (1) key. Some individuals with private offices have (2) keys. A total of around 200 doors and locks were re-keyed.

**Propane Tank** Advertising to sell the propane tank brought in (1) bid of \$2,500.00. The prospective buyer is scheduled to remove the tank from our premises in mid October. CMSA staff will remove the fence surrounding the tank and blend in the landscaping to the

surrounding area. We are discussing possible uses for the concrete slab that will remain. It could potentially be the foundation for a landscape equipment storage building.

**United Way** United Way of the Bay Area (UWBA) is encouraging fund-raising to take place as usual in the month of October. Of course, their usual mechanism for coordinating donations is the payroll deduction. Last year several staff gave donations of items that could be raffled off as a way to encourage other staff to purchase raffle "tickets" in the form of payroll deductions. We also had a kick-off barbeque which was well-received. We are soliciting staff for raffle items again this year. Anyone interested in getting an early start is encouraged to contact Tom Rose (extension 144 or [trose@marin.org](mailto:trose@marin.org)) for the payroll deduction program forms. Others who may be looking for a way to make a donation may do so through CMSA as a lump sum donation. If there is a preference for coordinating such donations strictly through Finance they may do so by contacting Kurt Obermeyer at the Agency extension 129 or [kobermeyer@centralmarinsa.org](mailto:kobermeyer@centralmarinsa.org)

## CAPITAL PROJECTS

**Cogeneration Engine Procurement** Our cogeneration engine replacement project was approved under the PG&E Self-Generation Incentive Program

and about \$560,000 has been reserved for CMSA. The money is paid after the project has been completed. Our completion deadline is March 24, 2004 which is one year after the application was approved. The recently awarded construction contract stipulates that the contractor be substantially finished by early February and fully complete in early March 2004.

To expedite the projects advancement and minimize the construction period, design was nearly completed and we had prepurchased the major cogeneration project equipment prior to the submitting the PG&E application. We have received the new compressors, siloxane removal equipment, and the refrigerated dryer is scheduled for delivery in early October. Delivery of the Waukesha engine-generator system, which is being supplied by Stewart & Stevenson, was expected on October 24, 2003. We recently received notification that the engine will not be shipped until late November and the control and electrical panel shipped early in January 2004.

These delivery delays impact the construction schedule. We have notified the contractor of the delays and requested they provide an adjusted schedule so we can determine the impact to the project schedule. PG&E has informed us that their

completion date may be extended up to 180 days. Staff has prepared a letter to PG&E requesting the extension based on the engine suppliers late delivery of the equipment.

### **Marine Outfall Inspections**

Our marine outfall retrofit project was completed in November 2002 and involved three work elements. The contractor cleaned out the solids from the interior of the 1000' diffuser section, 50 of the risers were extended in height to an elevation above the encroaching Bay floor, and the 176 riser diffusers were replaced with 6" diameter diffuser check valves. The project's goal was to minimize the amount of Bay water and sediments that enter the outfall.

It has been nearly a year since the project was completed and now we will assess the projects results. Parker Diving will be inspecting the 176 riser for damage and measuring sediment depths along the length of the diffuser section.

### **Cogeneration Engine**

**Replacement Project** We are approximately 22 working days into our schedule and the contractor has been focusing on technical product submittals and in constructing the siloxane-removal filtration equipment pad. They've also provided a schedule for completing the project by the

dates required by the bid contract documents.

There are always requests for information or 'RFI's on any project. We are able to answer some of these and are referring the rest to the design engineer. If the question involves a qualitative choice - CMSA responds. If the question revolves around a conflict in the contract drawings or specifications we invite the design engineer to clarify matters. In matters of choice it makes no sense to turn it over to the consultant and then have them turn around and ask us our preference.

Similarly, on the submittals we are handling some of the reviews in-house and referring other parts to the designer for review. We are also performing construction management duties of supervising testing, samples, and inspection along with coordinating submittals and RFIs.

**Web Page** We are getting down to the beginning of the last month for completing what we refer to as 'phase I' of the new CMSA web site. However, in reality whatever we don't complete by the end of the month is by definition a part of 'phase II.' All kidding aside, much progress has been made. The management team will be pouring over the site in the next two weeks and our webmaster will set himself to making final adjustments before we publicly go on line at the end of October (tentative).

One feature will involve downloading videos. CMSA produced an educational video

(starring our now-retired Lab Director Nancy Evans in a cameo appearance) called "Where Does It Go." We've gotten a lot of mileage out of that film. Other Agencies who helped finance the production (managed by our Lab/IW staffer Jenny Bender) recently gave recognition of it by heaping praise on Nancy at her retirement lunch.

Another video called "Kids By The Bay" has been released to us by the copywrite owners (in this case Oakland Museum) so that we may offer a digital version. We had previously given out both films as part of our educational CD, but such CDs have become somewhat passe in favor of direct downloads from web sites so we are going to follow the trend.

## MAINTENANCE

### Dewatering Project (New Centrifuges)

There are just two remaining punch list items that staff is working with Centrisys technicians to resolve. It involves a controller that is sending a false alarm and inspection of the main and needle valve bearings for the two of the units. After these are completed we will authorize final payment for the withheld contract funds.

### Disinfection Project Update

Maintenance staff have completed the mechanical installations of the vault improvements. Now the Electrical and Instrumentation (E&I) staff can finish electrical work. The projected completion date for Phase II of the project is the end of October, 2003.

### Chlorine Contact Tank (CCT) Bar Screen Repairs

The CCT Bar Screen removes small plastic debris from the reclaimed secondary effluent that is used in plant for irrigation, wash down and packing water for many of the plant pumps. Approximately, 1200 rakes in the unit were replaced and the bearings were realigned. A faulty guard mechanism caused the failure. It was modified by Maintenance staff in order to prevent a similar failure in the future. The unit was put back in service on September 24, 2003.

### Sodium Hypochlorite Tank

**Replacement** One of the five hypochlorite (bleach) tanks developed a leak last year and was budgeted for replacement this fiscal year. The replacement tank is made with a newer technology laminating process that has a longer life expectancy. The failed tank, made with the best technology at the time (1995), delaminated resulting in a very slow leak. According to one of the manufacturing technicians involved in installing the new tank, this is a very unusual failure. Staff will inspect the remaining four tanks during the next several months to insure the integrity of the remaining tanks. The five year CIP budget is funded for one tank replacement a year if needed.

### Paradise Pump Station

**Transfer Switch Replacement** Occasionally during a power failure, this station would transfer to the standby generator but frequently failed to automatically transfer back when the utility power was restored. The problem was a faulty transfer control module that is connected to the main power source and has a large number of wires attached to it. The power to the station had to be isolated before the faulty control module could be removed and replaced with a new unit. This necessitated a quick repair, so the station would not surcharge the sewer system and result in a sewage overflow. CMSA staff started the repair at midnight (low flows) and completed the repairs and successfully tested

the new controller within two hours.

### Secondary Clarifier No. 1 and DAF No.2

At first it looked like we may go over our contract deadline (and had told the contractor that we would not likely pursue liquidated damages for small delays in that case), then the contractor, Redwood Painting, mobilized more coatings specialists and finished the job on-time and with zero claims. Our on-site inspector, Bill Walker, has stated that Redwood is the "best" coatings contractor he's seen in his years of doing inspection work for CMSA. Their work ethic sets a high standard. They went beyond the minimum in ensuring a job well done. They had to overcome such hindrances as a sudden rain that occurred several weeks ago causing much of the recently applied epoxy coating to sag. All of that had to be machined off and re-coated. The contractor understood all of this without our intervention and took the initiative in repairing the work and doing an excellent job. They also suggested modifications to the contract specifications on the Dissolved Air Flotation unit which helped all parties to complete the work in a thorough manner, on-time, and within budget.

Maintenance staff completed reassembly of the secondary clarifier on 9/26/03 and it is ready to put back in service. Maintenance will start reassembly work on the DAF the week of September 29,

after the paint has cured the required 7-10 days.

## OPERATIONS

### Polymer Optimization Test

The lead staff member for this project was Susan Halpin, who left the agency in September. The Treatment Plant Manager will be the interim lead for the project. Staff is looking at conducting the first test of an emulsion polymer in October or early November. Timing depends on availability of polymer mixing equipment from the vendor (at no cost from the manufacturer).

### Process Control Spread

Sheets Operations staff developed two spread sheets during the past two months that monitor and track chemical, energy and natural gas costs.

## BUSINESS SERVICES

FY03 Audit The Business Services Department is currently closing out the financials for the fiscal year 2002-2003. Expected date of closing should be in late September. Our auditors, Vavrinek, Trine, Day & Co., LLC, will be out during the week of November 17 to finish the fieldwork of the 02-03 financial audit. They will have a report due to the agency on December 2, 2003 with a full report and presentation for the

December 9, 2003 commission meeting.

Financial Management Staff has met with representatives from all three financial institutions with which the Agency does business (with the exception of LAIF). Staff has reinvested matured notes in the amount of \$500,000 with California Asset Management Program (CAMP) and has reorganized the Agency's operating accounts at Westamerica Bank to alleviate any service charges. All accounts held through Westamerica Bank, CAMP, UPS Paine Weber, and LAIF will be closely monitored on a monthly basis to make sure that the Agency is maintaining its investment policy in an appropriate fashion. Staff will be meeting again with CAMP officials in February as a note for \$1,000,000 will be maturing.

Website Information Staff is working on finalizing the Website information now that the preliminary information has been put together. Staff will be analyzing the 'simplest method' in applying the way in which the layout of the financials, budget, and benefits sections is shown. The adjustments that are being completed should enable anyone interested to find their way around the site with little hassle.

Purchase Policy Staff has completed the revision of the Agency's Purchasing Policy. We feel the revised policy will help to clarify our internal control policies while making

the procedure for attaining goods more streamlined for those that need to purchase items on a regular basis. The management team is working on a departmental schedule for training of all Agency employees on these amendments in the next month.

## LAB/ INDUSTRIAL WASTE

Bioassay We have been maintaining a 95% survival in our bioassay with the toxic form of ammonia (unionized ammonia) in the top 50% of the range. Installation of the pH adjustment system has been verbally approved by the Regional Board and the written approval should be received by the beginning of October. Installation of the pH adjustment system, which was approved by the Regional Board, has begun and is expected to be in by the first week in October and ready for the November bioassay.

Peacock Lagoon We have provided assistance to the City of San Rafael for the Peacock Lagoon testing program. We ran coliform (bacteria) testing, total suspended solids, ammonia, nitrate, and nitrite testing to assist in determining the problem with fish survival and information to the Regional Board. We have been interfacing with Doris Toy and assisting her in water quality monitoring, testing methods

including outside laboratory contacts, and information regarding water conditions that would cause fish mortality. The elevated pH of the lagoon with the limited circulation of water and the high algae bloom resulted in an un-ionized ammonia reading in the toxicity range. The dissolved oxygen level was also low and at times reported to be extremely low which would also cause fish to die. We calibrated their meters, changed membranes, replaced filling solutions, and ordered a new conductivity/salinity probe. All maintenance to meet manufacturers guidelines was completed and new training to the users was provided.

**NPDES - SEP** Our Supplemental Environmental Project with the Friends of the Corte Madera Creek was approved. It is conditionally acceptable as long as the project is completed by September 1, 2004 and the full \$6,000 is utilized during the project. We have to submit a final report confirming the goals of the project have been completed and include the associated costs by the September 1, 2004 project deadline.

**Lab Testing** We completed our bacteriological certification testing this month and have submitted the results and are currently waiting for our testing limits. The results will be posted sometime in October and assuming all analytical methods are within

the control limits we will not have to repeat the analysis for another year. It was our semi-annual sampling month for the required effluent and biosolids testing. This included metals, organics, bioassay, NPDES permit and section 13267 of the California Water Code.

**IW Presentation** Bob Adamson gave a talk at the CWEA Northern Regional Conference in Lake Tahoe on hazardous waste management for POTWs and what they need to do to comply with current regulations. We have also developed a Mercury Best Management Plan and mailed it out to medical facilities in our service area and all of San Rafael including the LGVSD service area.

**Pollution Prevention** Pollution Prevention Week was Sept. 14-20 and we participated by having a booth at the Thursday Night San Rafael Farmers Market. We handed out environmental quizzes for adults and children and those getting 100% received a free T-shirt, shopping bag, or stuffed crab for the children. We had a juggler do a presentation on wastewater and stormdrains that does classroom presentations for our joint program with MMWD, MCSTOPP, and LGVSD. His presentation was an abbreviated version of his classroom presentation and it was a great success with 50-60 people stopping to watch the show. We were told it was too crowded and we needed to move the show so for the

second half hour show we relocated to reduce the crowds.

**Vector Station** A draft letter has been prepared covering CMSA policies for vector truck loads and other hauled wastes. The purpose of the letter is to ensure that vector loads are received only from our service area and during business hours or by prior arrangement. Our policies for acceptance of hauled waste was also updated with the current business hours and fees. For security concerns and vector station cleaning and maintenance requirements, existing policies needed to be updated and new policies created.