



# Montara Water and Sanitary District

*Serving the Community of Montara and Moss Beach*

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*To sensitively manage the natural resources entrusted to our care, to provide the people of Montara - Moss Beach with reliable, high – quality water, wastewater, and trash disposal at an equitable price, and to ensure the fiscal and environmental vitality of the district for future generations. Be open to providing other services desired by our community.*

# AGENDA

MWSD Finance and Water Connection Work Study

## **District Board of Directors**

Farallone View Elementary School

Multipurpose Room

1100 Le Conte Avenue

Montara, California 94037

**March 16, 2017 at 7:30 p.m.**

**CALL TO ORDER**

**ROLL CALL**

**PRESIDENT'S STATEMENT**

**ORAL COMMENTS** (Items other than those on the agenda)

**PUBLIC HEARING**

**CONSENT AGENDA**

1. [Approve Minutes for Meeting on January 19, 2017.](#)
2. [Approve Financial Statements for December 2016, and January 2017.](#)
3. Approve Warrants for March 1, 2017.
4. [SAM Flow Report for January 2017.](#)
5. [Monthly Review of Current Investment Portfolio.](#)
6. [Connection Permit Applications Received.](#)
7. [Monthly Water Production Report for January 2017.](#)

8. [Rain Report.](#)
9. [Solar Energy Report.](#)
10. [Monthly Public Agency Retirement Service Report for December 2016](#)

## **OLD BUSINESS**

## **NEW BUSINESS**

1. [Review and Possible Action Concerning Amendment to District Code Providing for Well Conversions.](#)
2. [Review and Possible Action Concerning 2017 District Water Master Plan Update and 2017 Connection Fee Study Update.](#)
3. [Review and Possible Action Concerning Fiscal Year End Budget and Actual Review.](#)
4. [Review and Possible Action Concerning Mid-Year Budget Review.](#)
5. [Review and Possible Action Concerning Nomination of Representative on the CSDA Board of Directors.](#)
6. [Review and Possible Action Concerning Cancellation of Next Regular Scheduled Meeting April 6, 2017.](#)

## **REPORTS**

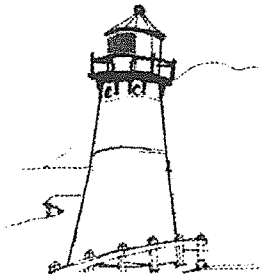
1. Sewer Authority Mid-Coastside Meetings (Boyd)
2. MidCoast Community Council Meeting (Slater-Carter)
3. CSDA Report (Slater-Carter)
4. CCWD, NCCWD Committee Report (Harvey, Huber)
5. Attorney's Report (Schricker)
6. Directors' Reports
7. General Manager's Report (Heldmaier)

## **FUTURE AGENDAS**

## **ADJOURNMENT**

The District has a curfew of 11:00 p.m. for all meetings. The meeting may be extended for one hour by vote of the Board.

NOTE: In accordance with the Government Code, members of the public may address the Board on specific agenda items when that matter is discussed by the Board. Any other items of interest that is within the subject matter jurisdiction of the District may be addressed during the Oral Comments portion of the meeting. Upon request, this agenda will be made available in appropriate alternative formats to persons with a disability. Request for a disability-related modification or an accommodation in order to participate in the public meeting should be made at (650) 728-3545. Materials related to an item on this Agenda submitted to the Board after distribution of the agenda packet are available in the District Clerk's office during normal business hours. Such documents may also be available on the District's web site ([www.mwsd.montara.org](http://www.mwsd.montara.org)) subject to staff's ability to post the documents before the meeting.



**MONTARA WATER & SANITARY**  
**DISTRICT**

**BOARD OF DIRECTORS MEETING**  
**January 19, 2017**

**MINUTES**

**REGULAR SESSION BEGAN AT 7:30 p.m.**

**CALL TO ORDER**

**ROLL CALL**

Directors Present: Slater-Carter, Harvey, Boyd and Wilson  
Director Huber by teleconference

Directors Absent: None

Staff Present: General Manager, Clemens Heldmaier,

Others Present: District Counsel, Dave Schricker  
District Water Engineer, Tanya Yurovsky  
District Financial Consultant, Alex Handlers

**PRESIDENT'S STATEMENT** – President Wilson welcomed all present this evening. We appreciate your coming tonight and welcome your comments as I know you have concerns you will be raising tonight. I am requesting of all who want to speak, please fill out the bluish-green speaker slips. This is important so we can properly acknowledge you and call you in the proper order.

We will be having a 30 minute presentation by our General Manager that will hopefully explain some of the questions that have been raised by many of you on the various venues that you have used. Once Mr. Heldmaier and staff have finished their presentations, I would like to bring it back to the Board to set the procedure for comment. We wish all of you who participate to do so in an orderly process so everyone can be heard.

Director Harvey requested to have anyone who wished to do so, leave their name, phone number and contact information so staff can contact you individually later on.

**ORAL COMMENTS - None**

## **PUBLIC HEARING -**

### **1. Review and Possible Action Concerning Multi-Year Water Connection Fee Payment Program.**

General Manager Heldmaier thanked the Pillar Ridge Community for hosting the meeting this evening. Mr. Heldmaier noted the District's Financial Consultant Alexander Handlers of Bartle Wells will also be giving a brief presentation on the Multi-Year Water Connection Fee Payment Program his firm helped to develop.

First of all, let's go over a brief history of how we ended up here. The Public Utilities Commission regulates private utility companies. They came down on Citizens Utilities and mandated a moratorium on new connections and that is really the beginning of the story. Nothing changed over many, many years. Citizens eventually was sold to Cal American. Cal American was sold to American Water and American Water was sold to RWE – so there were many changes in ownerships over decades until the District acquired the system in 2003.

In 2003, of course, the situation was the same. Nothing had changed. The system was in dire need of repairs. Banks were still rising, not enough water was in this community, so the moratorium was continued until such time the community was able to secure new sources – was able to resolve the water crisis. That is really what this district focused on in the years 2003 to 2010. In 2011, we actually produced a master plan update that really showed that we could start thinking about a repeal of the moratorium. Before that, in 2009, the California Coastal Commission really regulated our ability to make connections to the water system. In 2009, we went to California Coastal Commission with what is called the Public Works Plan that allowed us and still allows us to make the necessary infrastructures improvements to the water system. It is essentially a large permit or a plan in the sense of development plan. So, in 2009, in this Public Works Plan, there was language introduced to maintain the moratorium

At this time, we are under the Coastal Commission jurisdiction and the Coastal Commission tells us to keep the moratorium on new service connections.

In 2011, we understood our water situation and it took two years to negotiate with the Commission how connections to the District are made and how this water is divvied up.

In this document is the Public Works Plan, the Coastal Commission document, together with the Local Coastal Program, also a Coastal Commission document but not negotiated between the District and the Coastal Commission. The Local Coastal Program is a document that is negotiated between the County and the Coastal Commission.



The Public Works Plan is the main document for the district. So here are the two basic conditions that are telling us how we can issue connections and this of course is focused on well conversions.

The Public Works Plan tells us that existing homes served by wells or new homes within the urban/rural boundaries are eligible for domestic and private fire protection connections to the Montara Water and Sanitary District. There is another provision that tells us that existing homes served by wells and new homes outside the urban/rural boundaries are eligible for fire protection connections as long as the District's mainline does not need to be extended.

This is very important and valuable information that protects, for example, the areas on Sunshine Valley Road, Alamo, Grant Street, and Alta Vista. There are a number of homes that are able to connect for fire protection services but not for domestic connection services.

The next slide is a picture of the urban/rural boundary. So – by definition – this is all defined in the LCP. The LCP and Public Works Plan work together. The LCP, of course, was established much earlier and the Public Works Plan was designed to dovetail right into the LCP.

We have that picture also up as a poster here so anyone who is in doubt of where they are located can look it up or we can help you and later have a discussion about this if you wish.

Many of you are asking why are we going out and designing, and asking the board to adopt a multi-year water fee connection program. What is our objective?

We would like to assist well owners in connecting to the Montara Water and Sanitary District, if they are interested to do so. Now a bit more on the regulation. What Resolution 1498 really does is tell the administration that applications for well conversions are coming from San Mateo County Planning and Building. We are processing and issuing connections only in conjunction with county building permits. I think this is something very important because there is this question about voluntary or mandatory. This is a policy that tells the administration only connections that are asked in conjunction with county building permits can we process applications.

So, one more time – it is not our objective to collect fees and associated orders to require the capping of wells. Again, we are looking now at the document LCP – the LCP is regulating on the County level how permits are issued – not on District level. LCP states that only remodels greater than 50% are required to connect to the public water system.

This is a policy that the district administers but it is a County policy not a District policy. Mr. Heldmaier was asked to clarify his statement. Mr. Heldmaier reported the LCP states if someone remodels their home and the value of the home – not the square footage – but the actual value of the home – increases by 50% and that property is served by a private well and is inside the urban rule boundary, then that property has to connect at the time of that renewal to the public water. So that is the only case where someone is required to connect. Again, this is at the County level not the District level.

Let's get back to why we are doing this. We are doing this because well owners have told us that they are interested in connecting but it is prohibitively expensive. There are very clear reasons for the draw-down of underground aquifers that underlie the District's service area. That is a very general statement and I think there is a lot more to say about the area in which we live. This is the only town in California – only town that we know of in the United States – that has a high density of private wells within the urban area. We understand that the underground is generally little understood and that wells actually can pose a danger to the underlying aquifer even though the water quality may be extremely good, and there are no draw down issues whatsoever. There are some very good reasons why there is an effort to reduce the number of wells. For example, one thing that is never really considered is that a well is a pathway into the aquifer so it takes one accident and you actually have a contamination not only in your well, but a neighboring well can be affected. These are things we have seen in the Water District. We have seen water quality issues. We have seen contamination issues and we have seen wells run dry. For the District, it was great relief that we were able to issue connections in 2013 because there were some well owners who were in absolute dire need of having to connect immediately.

So this is pretty much what this second sentence says – well conversions improve the District's ability to monitor and manage the overall water supply for its customers.

This is a very complex subject and you have heard me talk about the California Coastal Commission policy about the Local Coastal Program and County policies. We are working closely together with those agencies and they are strong proponents of conversion of private wells as we are suggesting here.

So let's dive into this Multi-Year Water Fee Connection program a little bit. Alex Handlers of Bartle Wells will be going into this a little more in depth. I will outline the general provisions here. Financing is available to existing homes that currently rely on wells within the District service area. It is pretty clear anyone on a well in the District service area actually can utilize the financing if conditions apply to them. The eligible costs for the financing to be paid to the District as part of the financing through the

District are the connection fees to the meter. I have been asked questions regarding the financing for the cost of the well abandonment. We will go a little more into that in a short time. What we are suggesting is that fees that are to be paid to the District as part of this program. The other associated fees need to be paid to other agencies. So it might be an idea to ask other agencies if they would be able to provide a similar program. We are suggesting to allow homeowners to pay the connection fee and other associated costs over a maximum of ten years and that is through their property tax bill.

I just want to say that you will have to talk to your tax advisor on what this may do for you and if this is a financial advantage but I am certain for most folks, this turns into a real financial advantage collection through the property tax roll.

What is a connection fee? Very briefly this is the cost to buy into the District's existing system and invest in the future supply reliability. Alex will be going to go a little more into detail on this. It is important to understand that new customers create additional demand and must buy into the reliability of the system. So that really is the new demand – meaning new capacity in-tanks, new capacity in pipe lines to transport the water and so on. It is also important to understand that connection services are restricted funds and we can only use those for capital improvements so we have to account for them separately. What are the fees that we are actually talking about that can be rolled into this program? Administrative fees are simply the processing of the water service application and that is based on work hours and the salary of our staff. Engineering deposit – that fee is to cover cost for our water engineer to review the plan. We review essentially the situation, review plans and assist in other ways. Now this is a deposit so any unused funds can be returned. So keep in mind – numbers can change. Inspection fee. Essentially our operation staff going out and taking a look at the installation and signing off on it. Also based on work hours.

Service Charges. We have added a service charge – \$4,000. I saw a lot of questions come in about this. This is really the construction cost. It is an estimate. This is us essentially saying we see service lines going in and – but it depends on the location of the main, the location of the house. How long is the lateral installation? It also includes the actual meter installation. So this is us tapping into the main line, running a service line to a house and placing a meter at the property line. So this cost varies significantly from case to case and what is important is we are allowing the financing of this cost because, ultimately, the district is going to own and maintain that section of the service line.

The section from the meter to the house is owned and maintained by the property owner and that is why we ask that this be financed separately. Now, in our experience, that is not a significant additional cost. We are probably talking about \$1,000 plus – somewhat relevant for sure but a lot of

folks simply use the contractors who are out there and ask them to extend the trench and ask a plumber to essentially connect to the house – so there is some cost savings through this. We ask for quotes from three local contractors and we choose essentially the lowest quote. In some cases a developer asks for a specific contractor. Again, it has to be a District-certified contractor. It is not difficult to get certified with us. It means we have to have insurance on file and that the contractor has to have experience working on water lines. So this is something where we think if you're smart, you can actually get some cheap – fairly cheap installation.

Here we dive into cost estimates. I cannot emphasize enough that the costs really vary from situation to situation. But we have here – cost estimates – a fairly good cost estimate and the associated costs really start with the connection fee. The connection fee for 5/8 – 3/4 meter – that is a meter that serves a two bathroom home – standard home in the district – costs currently \$15,729. So the other fees we just went through: administration fees, engineering, deposit, inspection runs up to a total of \$3,584. The largest sum – almost \$3,000 is a deposit and can be returned. It really depends on how much we need to utilize the district engineer to review and coordinate. There is this estimate that I just described. Installation meter cost – so we estimate right now \$4,000. This can go up and can go down. This would be for domestic service connection – a total of \$23,313. That would be a cost estimate and would be eligible to be finalized through the program. Now there are homes that are in need for domestic and fire protection service. That is marginally more expensive. There is some significant cost savings for first-time installations so whenever it is possible, we actually did put a larger size lateral service line in that allows to tap in to both domestic and PFP demands and so that is the increase in cost really is the increase in the amount of copper being used. It is really minimal. There is an additional fee – an additional connection fee – for the fire protection service and that is for a 3/4 inch meter – also a good sized meter that services most homes. That cost is \$4939.00.

I want to point out that there are some wells that already have a fire sprinkler connection and could connect and convert to the system. We are going to assess each situation individually with the help of our engineer. But I want to essentially put a caveat out that in most cases, we would not be able to use the fire sprinkler line to tap into the domestic service simply because the sprinkler line is designed exclusively for fire flow and any additional demand could interfere with the fire flow so it wouldn't pass a fire flow test required from the fire department.

Here, we now have a cost estimate for the combination of a domestic and private fire protection system and now show a total cost that is eligible for financing is \$30,000. Another interesting aspect is that the program as it is designed allows owners who apply for a fire sprinkler service outside the urban rule boundary we will be able to as well. There are other programs

that well owners can benefit from that are outside the urban rural boundary and cannot connect to the system for domestic water. The program we have in place is actually a water quality program and what that does is essentially allow you to contact us for an open discussion about your concerns. You can do the same thing with the San Mateo County Health Department but we offer this as well. What we additionally offer is water sampling. We would go out, take samples on your well and inside your house and then we would use our lab to have the water quality analyzed. We are getting a discount so we would pass that discount on to you along with the expertise that we can provide. You own the results so we would hand those over to you.

Here we have an estimate of only a fire protection service to a house. So that would be one of the scenarios on Sunshine Valley Road where a mainline is existing and a fire protection system can be added to a house that is served by a well so that cost is also eligible through our financing program. And that cost is \$12,000.

The financing provisions will be explained by Alex Handlers in a second. For agreements executed by the owners on or after January 19, 2017 – from today – if it is adopted – through December 31, 2017, there will be no interest charged. The Board has indicated that they would consider a 2% interest rate at January 1, 2018. There is of course another complication in this and that is some wells have to be abandoned. I think there is a lot of clarity needed on what the rules are in our area. There is a provision in the LCP – the Local Coastal Program – again this is a San Mateo County document – not a Montara Water and Sanitary District document that says wells that were permitted before September 12, 1989 – are grandfathered in and are not required to be capped. We have to adhere to the state water code and the state water code tells us that for this case we have to ask for a back flow preventer to be added to the domestic service line. That adds about \$600 to the project. Wells permitted after the date of September 12 1989, must be abandoned upon connection to a public water system. Again, this is a San Mateo County requirement. I have to explain that we are trying to offer a financing program for the cost we control. The well abandonment is a cost that some of the fees are going to the County, and other fees are going to contractors that are doing the abandonment and pouring the concrete into the well. County staff tells us that these costs can be significant. They say they can be in the \$3000 range. We know there is a fee that is almost \$1,000 that goes to the County and I have heard from well owners that the actual abandonment costs are higher or can be higher than \$3000 – so I have heard \$3000 - \$4000 -- \$5000 numbers.

There has been a big debate going on in the past weeks about what is actually happening here. And we want to make it clear that this is really a first step on how to help well owners to connect to the public water system and we are asking ourselves and you the residents as well, how can the

District increase the voluntary transitions? There are two points that we see here, a fee structure assessment and the LCP and Public Works Plan. The policies can be reviewed and we can work through County and the Coastal Commission. Mr. Heldmaier then introduced Mr. Alex Handlers and asked him to continue with his portion of the presentation.

A copy of the General Managers presentation is attached to the minutes.

Mr. Handlers noted his presentation was going to be a bit shorter – more of highlighting what is up to be discussed by the board and to consider the actual finance program itself. So it shouldn't take too long and then a lot of folks will have questions.

I am going to talk about the fee program. What it entails, what the specifics are and to use some examples of what the payments would look like. Because I know during this process it has raised other issues regarding connection fees I will give a quick explanation of the District's connection fees and how they were derived.

Really, the whole point of this program was the desire by the District to be responsive to folks in the community who wanted to connect to the District's water system with private wells but found the financial burden a little bit too high and they recommended if there were some kind of fee payment program they could spread over a number of years that might facilitate the process. That is the whole point of this. That the District wants to be responsive to folks that brought that up and make a program available to folks who might make it a little more affordable by spreading the fees over time.

As Clemens mentioned, it is a financing program that the District essentially is going to give free or extremely low-cost financing to well owners who allow them to fund the District's cost of connecting to the District for full service or just for private fire service. All the costs that have to be paid to the District – are eligible for inclusion in this program. The only things that are not covered is if there has to be a separate main line extension or someone has to pay a well abandonment cost. That is outside the District's purview. That is not covered by this. The District is really trying to make it easier for folks to pay the costs for connecting, abandoning, switching their well service over to District service.

Going back awhile, we looked at a bunch of different options. The District agreed that they would allow a term for payment up to ten years. Individuals could pick terms less than that if they wish. It is very flexible. The interest rate is 2% which folks thought was a low interest rate. They are not looking to gouge anyone. On this point, the District is lending funds and somewhat at cost. To encourage people to do this, the District is waiving any interest for the full ten year period if someone decides – for folks who wish to use this program and get it initiated by the end of this year. You don't have to

finance everything. Some folks if you want to put some money down – up front – and finance the rest of the project – you are welcome to do that. And the program is flexible that you can pay it off any time without penalty so it is really meant to be user-friendly to give people the opportunity to use if it helps.

The way the program's financing works – as Clemens already mentioned – fees would be collected on the County tax rolls. So if you had \$20,000-30,000 to fund, instead of paying it up front, you can make a series of payments over ten years. You pay with your property taxes and for some people, that is a financial benefit. I think, technically, you are not supposed to write it off on taxes, but I know it is a pretty common practice that people do that so that might make it seem a little less expensive. However, if you sell your property or there is a title transfer to finance or re-financing, the balance would be due in full. For example, from the proceeds of a sale.

In order to do this, it had to be researched. According to California's Health & Safety Code, the Board has to adopt an ordinance approving a program for this to go forth and each year, there are some regulatory things that have to happen with the District filing a written report with the Clerk noting who is participating and how much is due in the upcoming year. Also the District is going to require a signed agreement with any person who wants to participate in this program. And the whole purpose of this is to get it on paper detailing what the terms are for the benefit of all parties acknowledging what the payment terms and that there is no pre-payment penalty, etc. And again, this is to be structured on the property tax rolls and the lien on the property so that even if someone was to pass away, it goes on to their successors. The commitment would stay with the property. So it has to be paid back over the longer term. There are some legal things to that. The purpose of the meeting tonight is there is an ordinance that would need to be adopted by the District to allow this to happen legally. This is the whole purpose of the ordinance that the District has put out here for consideration. And we want to just give some examples of what the dollar amounts could look like.

In the prior presentation Clemens highlighted a few different types of typical connections. One is someone connecting for a basic service connection without prior service connection. Again, these are cost estimates. Some of these costs are just deposits. The final amounts are determined by the actual time – materials – needed to make the connections, do the inspections, but for typical connection, the total fee works out to be about \$23,000. So instead of paying that up front, if someone was to opt for a five year program, they would be looking at a cost of about \$4,600 per year if they took advantage of it now.

Before there is any financing or it could be a little more if there was 2% interest. If it was spread over ten years, it would be \$2300 per year for the next ten years for the property tax rolls and a little bit more if it was done

with the 2% interest if someone didn't take advantage of the no-interest payments being offered at the end of this calendar year.

The next slide shows payments for a customer who also has a fire service connection. So it's kind of a double connection both for the basic service and private fire service as well. There, the total costs are estimated at about \$30,000 so instead of paying that up front, you spread it over ten years. Obviously, it would be about \$3,000 per year on the property tax rolls. Again, a little more. The interest would be added.

And the next slide just highlights a private fire service connection like – if someone outside the urban rural area just gets private fire service connections, cost for doing that estimated at about \$12,000. Instead of paying that up front, you could spread it over ten years at about \$1200 per year. This is just to give you a range of what the costs could look like.

The last thing Mr. Handlers wanted to cover are connection fees. Because I know this is an issue that has come out. Folks have asked about GO Bonds. How come they would also pay a connection fee to the District and the situation is the GO Bonds funded the acquisition of the District as well as some initial essential improvements that had to be made for the District to be able to provide service. But that didn't fund all the improvements the District needed to make so the purpose of this connection fee is really just to recover costs for the additional water supply reliability and infrastructure that is needed to serve the growth within the District, needed to pay for new development with the goal that new development pays its own way and doesn't put any burden on the ratepayers.

So where does the fee come from? There was an analysis done back in 2011. A water system master plan – they did an engineering evaluation of the water system and its capacities and what improvements would be needed to serve growth. And that is why the capital program was subsequently developed coming out of that by the District's engineering consultant and they identified a little over \$9 million of capital improvements that were needed to serve what was seen as the next chunk of growth. It would be about 600+ connections here within the District.

So the existing system, again, is not as adequate to serve it. The GO bonds didn't fund or fully complete an improved system. The capital improvement program identifies \$8.8 million to serve 621 connections. There is no funding of the projects from the GO bonds. The projects are essentially needed entirely to serve new development; existing ratepayers are paying their own improvements that need to happen separately from this.

The connection fee was calculated as pretty straight forward math taking the cost of the projects needed to serve growth -- \$8.8 million dividing by the 621 meters that those projects were designed to serve and it equaled



\$14,187.00 for new base size meter connections. And the way it works in the District is cost of construction, going up over time. The District's connection fees also adjusted annually to be responsive to construction cost inflation. There is an index out there called the Engineering News Record Construction Cost Index. There is one specifically developed for the Bay Area. The District's fees are adjusted annually to make sure the fees are keeping up with the cost of construction. It is really just construction inflation adjustment. And as an aside, all the other District's fees are also adjusted annually to make sure they are keeping up with CPI. Where the money for this connection fee goes – Clemens mentioned – This is not money that just goes to the District's pocket for whatever it wishes. It goes into a separate segregated fund that can only be used for eligible projects to help fund these projects. Some of these projects have costs which can be reimbursed to the District – ones that have yet to be constructed.

So that is the connection fee. It is a separate issue kind of related to the connection fee program.

To conclude the District's goal was not to force anyone to connect who didn't want to connect. It was solely the desire of the District to try to help folks who found the cost burden high who wanted to connect. You know – transition from their own private wells to District service to enable them to do that by making the financing a little easy – by offering no cost financing or low cost financing so they could spread it over ten years.

A copy of Mr. Handler's presentation is attached to the minutes.

General Manager Heldmaier then noted that was the conclusion of our staff presentation, a recommendation to the Board is to open the public hearing to consider relevant public testimony, close the public hearing and adopt an ordinance of the Montara Water and Sanitary District adding Section 5-3.104 to the Montara Water and Sanitary District Code to the conversion of private well water sources to the District's water system.

Director Wilson thanked the General Manager and Mr. Handlers for their presentations and then noted, before we open it up for public comment, I would like to bring it to the Board for discussion. My recommendation to the board is that we listen to public comment. We have a number of you that have given me green slips. If some of you wish to comment, please make sure you fill one out and hand in to us. Director Wilson again recommended the Board listen to everyone first, give each speaker 3 – 4 minutes, write down the questions that come up then answer after all public comments are completed. Director Wilson then asked for any other suggestions from the members of the Board.

Director Harvey thanked everyone for attending. It is really valuable and it is important for the Board to hear your comments. This is our District – yours, mine – all of our District. So it is really important that we hear you

and that is crucial. That is why we have the large site for everyone to be here to be able to give us your comments. We really appreciate your coming and our future direction could be affected by your comments. We are anxious to hear what you have to say.

Director Slater-Carter thanked everyone for coming. This community took a water system that did not meet the needs of its existing customers. It did not meet the needs of the people living in the community because of the fire system. The bond -- as Clemens noted -- was instrumental in bringing us up to a 2016 fire protection system with a new 500,000 gallon tank and pumps and pipes -- we no longer have streams in the street from the leaking water pipes that some of us remember. This is our effort to include everyone in the community that needs water. We had a very wet year this year but we had five years of drought. We have had wells that come up with oil in them and have not been serviceable. We have had wells that have gone dry and have not been serviceable. This was the reason that it was so important that we bought the water system because all the people who were living in houses on wells that the county permitted with no backup water system were at risk. Their equity was at risk. And their home ownership was at risk. And so as Clemens mentioned -- I started doing a hand count. The county did not keep records on who had wells or where they were located. Some of them are as close as ten feet apart. The county did not do any studies on how close wells should be to each other across property lines. So there are a lot of problems that are there on the part of the county to allow wells and this is a way to start remediating that and making this a full community with good public health and good public water system. Thank you for coming and I hope -- we probably won't be able to get all your questions tonight. But we can have lots more meetings.

Director Boyd thanked everyone for coming. I have talked with a number of you on Nextdoor, at Here Comes the Sun Coffee Shop and additionally on the phone. If we have been talking, please come meet me when we get a chance so we can put some faces to the names. Again, thanks for coming. It is great to see the interest. Hope we can clear up some of the concerns tonight and we are looking forward to hearing your comments.

At this time, there were technical difficulties getting Director Huber over the phone. General Manager Heldmaier would continue to work on the issue.

Director Wilson then called the first public speaker:

Glen Eastman, Moss Beach resident first thanked the Board and staff for a very comprehensive presentation. Most of my concerns have been taken care of in the presentation but I do have some specific questions. And I will be happy to bring them to you.

My first question is -- you mentioned Sunshine Valley Road. I live on Sunshine Valley Road. I know there is a line there for fire and hydrants and so forth. So the first question is why is that not available for domestic use?

Director Wilson reminded the public the board would like to collect all questions and will have a session on trying to answer as many of them as we can at the end of the public forum. Director Wilson then asked Mr. Eastman to proceed.

Mr. Eastman then continued, explaining he is zoned agriculture. It has been very difficult to determine whether I am inside or outside the urban rural valley via the maps. My assumption is agricultural is outside the urban boundary but I may not be right in my assumption.

Third, is – I am unclear about the connection from the meter to the house. It sounds – and – is that included in the \$23,000 quote?

And the fourth question is – are new wells prohibited now in – for new construction where there is District water available? OK.

The public in the back of the room are expressing their difficulty in hearing. They are requesting the volume to be turned up.

Director Wilson explained they would do their best with the volume. We are going to push the volume up and then if you can't hear, raise your hand and I'll try to monitor as best I can. So thank you very much and I apologize for this. Our second speaker will be our guinea pig and the person that is going to come up – we want you to speak into the microphone and I am going to recommend that you take the microphone off of the stand and hold it up to your mouth like I am doing and let's see if that works.

Larry DeYoung, Montara resident noted he guessed he could add guinea pig to the list of names that he had been called. He did want to say that the District has to recalculate your fees. I think you based them on total well owners in the District not the ones in the urban area so, right there, you ought to be charging less because of it. You shouldn't be charging anything - but your numbers are off. The second thing I want to point out – about the presentations – is that there is a lot of County-blaming here. The fact of the matter is that the end of MWSD code says once there is water, people shall connect. So to blame the County LCP is disingenuous at best. Now I am going to read just a short statement here.

This morning I started thinking of some analogy that would adequately illustrate the tremendous inequity of charging people who already are paying off the cost of the end of the bonds – a fee to convert to their wells. To say that we haven't bought in is also disingenuous. We have been buying in for ten – twelve years. Then I read the article in the Half Moon Bay Review and there was the perfect analogy and I quote: "but to MWSD General Manager Clemens Heldmaier, the bond payments and costs of the new connection are distinct. He likened the general obligation bond to a school bond which is paid by everyone in the District regardless of whether they have children enrolled in school. Nice analogy. But it leaves out the real important part. When these childless couples who have been paying

off the school bond have children and send them to school, they do not pay a cent. The school district does not say that hey nice of you to pay for the school but Johnny is using school capacity and you have to pay for that too. Charging a capacity connection fee is directly analogous to the school district charging you a fee to send your kid to school. There should be no charge. Also, the Board keeps saying they do not plan on forcing the shall connect clause in their code. I think you guys are both protesting too much. Here is what I would like to see happen.

One: the capacity charge for well conversion is waived – and new well conversion fee schedule is enacted. Total is reduced by at least \$15,000. We already paid for your infrastructure. We already paid for this capacity we are not even using right now and you want to charge us for it. Just the capacity plus the rates.

People who are already connected to the MWSD for fire protection should receive a major discount on engineering and related costs. It is really wrong to charge these people the entire fees all over again.

Three – this gets back to you guys keep saying this is voluntary when the code says it's not. The MWSD code should be changed from "shall connect" to "may connect" to reflect the Board's stated policy of not forcing connection charge.

My fourth thing is– the only action the Board takes in this issue tonight is to appoint a committee of well owners and board members to come back with a fair and equitable solution to this issue. Thank you.

Sabin Eastman, a resident of Montara and cousin of Glen Eastman, is concerned that numbers grew and grew. It was a great presentation but it is unaffordable costs that I can't do. I have two homes built in around 2000. Went through that procedure of trying to get the wells drilled. Also trying to get – finding out that we had to have sprinkler systems and then the added costs. I am into those two homes. Now for \$30,000 each was what I have invested already. I am looking at the numbers right now for water and for fire protection. I see about \$45,000 here and that doesn't include a cost – because most wells in back of people's houses. My tanks are in the back. You've got to add another \$10,000 – for us on my costs just to get the pipes to those locations. I am looking at a minimum of \$50-55,000 if I were to try to convert on to the system. The numbers are unrealistic.

My second item I would like to say is that the well – I would like to keep my well for fire protection because it doesn't use any water – I wouldn't have to abandon my well. Put that money cost in there and I still could use it to connect it to my fire protection and save – I'm looking at probably at least \$15,000. That doesn't hurt the aquifer. It doesn't do anything else but it allows me to bring the cost down that maybe I could afford this. Right now, it is totally unaffordable for me. So the costs are too high. Way too high and

needs to be looked at. If you have wells, can't they be kept for fire protection instead of having – a larger pipe brought into the area – because we have driveways, pavers, things we have to get to. I built the two houses from the ground up and I know what it costs to get to those connections. So the numbers here are kind of unrealistic. And in some cases they will be doubled. So it is really going to be an unaffordable thing for me even though I would like to hook up to the water system – I cannot afford it.

Mary Hawkins, Moss Beach resident noted the kind of money I'm talking about right now may not be relevant to most people at this moment when you have the fire or the water, you have a back flow fee. I used to pay a total of \$63 a year that once a year fee to a handicapped gentleman. Now that you have taken over the fee is I think \$103. What I had asked – I'm not sure which the person it is now – but can you bring down that cost like if you started doing – several houses on one or two blocks and bring the fee down to at least \$75, plus if you have the fire and the water, you guys charge \$103 for each back flow test. Most of the fee is man power. The one man comes out and checks the two things that are maybe six inches apart. Why pay \$103 times two? Why not make it maybe 75 percent off each fee of something like that. Because I know this pays for time. Thank you very much.

Thomas Sheffield, Moss Beach resident stated first of all, pretty much everything that was said here tonight isn't new and made sense. I don't agree with it but there is one thing I kept hearing and reading over and over that this is not mandatory. That is why I don't like the idea of being able to just put an ordinance up in the post office for a week and that it is a law and then I get someone knocking on my door saying "you have to" and I have been assured in writing that is not going to be the case. Having said that, as a well owner, I would love to come to city water just for re-sell-ability of the property at some point in time. My well works great. We have been through a really huge drought. I have only been on that well for five years here. It went worked swimmingly but it didn't get it done by using water as we wished. We took fewer showers. Shorter showers. We didn't flush toilets. We changed our landscaping, we checked leaks. We did all the things that a good water-conserving person would do. So I am not afraid of my well. So I guess I had – I think paying any kind of a fee at all whatsoever to come on line to pay you more money to buy water from you guys that is chlorinated and will then need to be purified at home for drinking in my personal opinion is kind of crazy. If you want our revenue over the course of several years and for the rest of the life of that home then you should bring those connections to us and let us deal with the cost to get them to our home and do the other things that need to be done. I did my own checking on this and just to do my home – I figured two meters because I knew you were going to have a fire meter. I figured two meters. I figured the cost of the well abandonment fee. The well abandonment work, all of the things that you have discussed. And in my home alone – and the loan that any "oops". I'm at \$45,000. That is absolutely insane. I'm going

to stay on my well until you come and I guess make me do it someday and probably sell the property I let that happen – the point being is that – get rid of this fee. Get rid of this fee completely. Charge a fairer rate for the cost of the meter installation and ask us to please do the rest to get on your system. I think that is a really fair offer but the fee really kind of makes me nuts.

The last thing I'll say – is it possible to come up to a fee agreement for you to bring a box to our home, bury it, cap it and lock it. Now that part of the re-sell of our home is taken care of, but insures that the next owner will have it half-way there so I've paid for half of it and I'll live happily ever after when the house sells, the new people already have it there. They won't have to be here fighting for that. They just call you up and say please bring me my meter for granted and they are done. They can do the plumbing on their own. That's sort of my take on it. But I also want to thank you guys for being here tonight and Scott for taking the time that he did to meet with some of us and help us come here tonight already understanding. But I will leave by saying "please clarify" for certain. Is this "shall connect" or "must connect". That's all I want – to know that before I leave here tonight.

Jeff Baker, Montara resident, has just one simple question. Does the offer, series of offers that we've heard tonight remain open for the foreseeable future or does this program lapse?

Director Wilson reported he thought this one we can answer right now. This is meant to be in perpetuity until the Board changes its' mind. So there is not a time limit.

Les Bowman, a Montara resident thanked the Board. He wrote a letter to the Board members – some of you may have seen it - today. Perhaps you didn't have a chance to read it. I echo the comments of many of the previous speakers but there is one point I'd like to focus on. And that is – you are doing this because you want well owners to connect to the system and I can see why you want that. And that is – it makes the Montara Sanitary District a stronger system. You are in a difficult place right now. You have the full cost of a comprehensive water storage treatment and distribution system and relatively few ratepayers. And if you can bring new ratepayers into the system, that helps everyone but I think you are going about it the wrong way. I just – heard tonight – the cost for my home to get on the system would be approximately \$35,000. That is just too much. I don't think people are going to go for that price. And I think that what you need to take another look at is what if you put the connections on sale – had a great big filings-basement sale – and you brought a large group of people into the system that are now paying monthly rates. What does that look like in financial terms? Because that is new revenue to the system that you can bond to build against capital improvements and do other things with and, frankly, at the current price of connecting, I don't think you are going to get a lot of takers. And I think there is another way to do it. But the cost has to

come down substantially. Thank you very much.

Director Wilson announced to everyone that has sent us written communication either by email or otherwise, it will be part of the minutes and will go on our website.

Austin Harkin a Montara resident reported he is on a well and when he got this piece of paper from the District on how he could hook up for \$19,000, because he had looked into this last year and had come up with figures a lot closer to what we are talking about like about \$35-40,000. I believe that this is misrepresented to us and I do think that because of the amount of money that I have put into the infrastructure already in my well that the District should definitely not be charging us \$15,000 hook up fee. Thank you.

John McKeon wished the Board a good evening and thanked them for your comments – for your rather extensive description of what you are attempting to put over on all of us here. Mr. McKeon went on to say he finds it rather disingenuous for you to say we haven't bought into the system. All of you have paid since 2003 and 2004 if you check your tax bills. I myself have paid \$17,000. And I am unique and I will tell you why a little bit later. But to say we haven't bought into the system is totally off base. The other thing that you mentioned is that – the aquifer – does it belong to the Montara Water and Sanitary District or do the property owners have the right to the water beneath their property which they pay taxes on? Is it okay for you to draw it down and deprive us of our well water? I don't think that is a really strong argument to use – to put forth your system here.

You have another flaw in your quote – you say you take the lowest of the three quotes. That's great because it is a low quote. The only problem is that you do not take time into consideration. I know a gentleman that had to wait four months for the contractor that you selected. His house was already done and he couldn't hook up. Doesn't make a whole lot of sense if you operate strictly on the cost of the hook up. I might also add that it's now a two year interval when you vote for the gentlemen that are up here and are going to vote on this. It used to be just one year. So take a good look at them and find out how they vote because your bill and what you are going to pay is strictly related to their vote.

One other item – that I would like to just point out – I am not in – even though I am in the service area for the Montara Water and Sanitary District – I'm in the Coastside Water District due to a gerrymandering of about twenty two years ago to make a park in Moss Beach. So even though I paid the \$17,000 -- I cannot hook up to the system. I can also not get sewer system here. Nor can I get fire protection. So I have the whole trifecta -- I get to pay and I don't get any service. Many of you may be in the same boat. Thank you.

Sandra Perkins a Moss Beach resident has a short question regarding the last slide. I'm just wondering where you got that 800 connections number. When we talked about only 300 or something less. I may be confused but that doesn't seem right.

Dan Page, a Montara resident noted there had been a lot of good research done by my neighbors tonight and I appreciate the presentation tonight. Will the slide presentation be available on line? Director Wilson confirmed they would be on line

Mr. Page continued – there was a question earlier on whether there is a sunset on this offer beyond the 2% interest rate for free. And the answer was – not until the Board changes its mind – essentially – which seems really arbitrary. And I think that the sunset should be considered within the context of the ordinance as far as how long this offer is going to be on the table or what this continuation of that offer might look like. And what kind of notice folks in the community might receive.

Paul McGregor, a Montara resident since 1980 who is now living in Half Moon Bay. Number One – Actually the water in Half Moon Bay tastes a lot better than it does in Montara. I prefer not to drink your water. It's never been good. So first of all, I'd like to say I do concur with Larry DeYoung and a lot of his comments and a lot of the other speakers but I'm going to give you a rundown of what I feel – and I know as a builder – of what it's actually going to cost to abandon, replace, and put in all this other stuff. I am going to start out with the abandonment of the well costs anywhere from \$5 to 7,000 with a permit. Remove tanks and equipment and plumbing to the house could be another \$5,000 or it could be more. Pipe to the house from the water meter –without tearing up concrete or anything else – at least \$3 grand right there. Your 5/8 connection is \$15,259. Your SRT fee is \$3490. You have another \$4000 probably in plans in order to give them to SRT or to get the water line in the first place. And now you have another \$4000 meter connection and supervision of this. My son's building his first house in Moss Beach. You state that it costs \$4000 to hook up. Well his fee was \$9000, not \$4000 and I have the check to prove it. I'm sure you guys probably do too. So with all this being said \$25,000 really turn out to be \$65,000 very easily. So please take that into consideration. That is a lot of money for these people to abandon their wells and hook with these guys. You need to give more incentive. Thank you

Carlisle Ann Young, a Moss Beach resident reported she did not have a well, but is a realtor and lives in Moss Beach. I agree I am in favor of changing the language from "shall" to "may" for clarity because even if you are selling a house, you need to have disclosure and when it's shall– it's a nuance but it leads to lack of clarity. So I would like to see that although it kind of sounded like you are leaving yourself plenty of wiggle room to change your minds later down the road. I can understand all the well owners being upset but I am a neighbor of someone who was probably – and



Clemens could correct me – I think it was Hawkins was your first in line customer and I don't believe there was any kind of voluntary program financing at that time. So she ponied up the full amount to get her well capped and put on MWSD. So I imagine there may be other well owners who have problematic wells and just want to have the surety of water coming, flowing into their house. The other thing is I know that the connection fee and the rest of the engineering fees and the county fees and the whole total package seems very expensive. But just keep in mind that things don't get cheaper over time. I've experienced many times when I postponed doing something and later found – oh – I should have done it back then because woulda-shoulda-coulda has gotten a lot more expensive now. So as long as it is still a voluntarily program I can understand people just choosing to opt out. It's not like you are forcing them to spend \$20-to \$65,000 at this meeting. Regarding new development, these are all existing well owners and I can understand their concerns since they did have to pay to help the District to buy the water system from the old CalAm, but by the same token, there is a lot of new developments scheduled. I personally know about the Wellness Center and the Big Wave office park or Business Park. There is also a huge subsidized housing complex in Moss Beach Heights being proposed and I don't know but I have the feeling that that is going to tax the water usage over time too. So as probably as those things go on line, and then being subsidized, my question to Clemens or the rest of you is – are they going to get a discount when they start connecting to everything because they are low income and subsidized by the county. And I guess government programs -- because I think I am not in favor of well owners having to bear that burden because they are connecting to an existing house. I don't want them to pay for a new development who is subsidized. I just would like to reiterate that I am in favor of you offering voluntary connections at a financing option. I think that is really laudable because in the past people had to pony up the money. Thank you very much.

Chris Thollaug, a Montara resident thanked the Board for the opportunity to talk to them. When I got this letter, it touched off kind of a firestorm with folks that I know and I went at it as I usually do trying to be thorough and reduce documents to writing so that we can make sense of what is a very complicated and controversial topic. So I have written a letter and I'll just read through it.

I appreciate the opportunity to comment on this and while the material I received deals solely with the financing plan – the conversation is broader than that. It is really about the policies that underlie the need for financing a connection and I think it is really in the best interest of the community to have a really robust dialogue. Not just tonight. Concerning the policies that underlie this proposal for financing before you implement it. Because I don't think it is an adequate policy and if there are small number of people that accept it and you later determine that you need to do more, you are going to have to deal with that discrepancy. So I have provided two documents to

you guys that are in your packet. I have copies that I am going to leave on the front counter here. There are two – the documents are – first an extract of language from the LCP and the District Code that clears up some of the confusion about what is an urban zone. What is an urban area? What is a rural zone? What is a rural area? They are all real terms and they have very specific legal meanings that need to be understood. The second document is my attempt at a set of recommendations for what should happen here. The most significant one – is I think that connection fee should be waived. And the reason why I think it should be waived is that these well owners have been paying into this system for years and they have received some benefit -- but not a tremendous amount of benefit. For me personally, I can't be served by water, by sewer or by fire hydrant. Because the location where I am in the rural residential and I know other people are in the rural residential and in the rural area that has the same point. Also I would like to say that the benefit for these connections occurring is not just to the well owner. We are talking about – as Clemens pointed out – that wells are a source of possible contamination. The number of straws that we remove out of that aquifer is reducing the risk that there will be contamination. So we need to acknowledge that there is value there and not put the entire cost for something that is mutually beneficial on the well owners. I also wanted to make a comment that – the GO bonds – I believe Alex said he had a slide that there were no GO bonds that were being utilized for a list of improvements. However, there are funds that are available for capital improvements that were raised after that initial purchase. I was on the Board when those bonds were refinanced and rather than reduce the debt service which would have reduced your bills, the District opted to increase the principal so – increased principal, lower interest rate – same bill out to you folks. But those improvements – we are paying for – just as we did with the acquisition. So I'm not saying that there isn't an argument to be made on both sides. I am saying this is so important and so emotional for a lot of people that we really need to take the time to understand it and get everybody's opinion heard. So I would really urge you to delay, table this initiative. And let that process of more full and open discussion occur. And I would also like to have the County very much involved in that because while there are things that we can point to and say – the County is the one that is responsible for this – the reality is the County IS responsible for it. Because they are the land use planning entity and I know the District has taken heat for over-stepping that boundary. So I don't believe that on its own – the District could remove that "shall" word. I object strenuously to "shall." But I think that we need to work with the County and understand why that is there. What strikes me is that we've got an ordinance that isn't being enforced. And there are good reasons for that. There are good reasons why the County isn't being proactive at this. I think it constitutes – if you were to force someone to cap a well like that under the current plan and the current fees, I think constitutes "taking". I think you are as a private individual entitled to that property and to be compensated when it is being "removed" for the benefit of the whole community. And I'm not arguing that it isn't a benefit. It is actually is. Bottom line, I would really like

to participate and engage with the Board in a dialogue on these policies before you make a decision about how you want to finance this. Thank you.

A copy of Mr. Thollaug's hand out is attached to the minutes.

My name is Dante Pelligrini. I am a Montara resident. My family has been here for a few decades. A couple of issues I'm just learning about this recently. This all started just to understand it with the moratorium to most of these property owners that didn't allow connections and charged us anywhere from \$15 to \$30,000 to create a well to begin with. Now we are in a position to connect to this. So my first comment is that – to go back to the "shall" and "may" – what would be the process for us as a resident of Montara to reverse the language in that proposal from "shall" to "may"? Could you illustrate or explain it to us? How do we do that? How do we organize to do that? Second, it seems like you are using the Coastal Commission and the County as the hammer and to the previous speaker's point, I think that is true. I think the County, the planning department is backing your efforts. I think to me and our family it really comes down to private property rights. The sun that drops on that property and the water under our feet is the ownership of the property owner. So I don't see how you guys have the right to the aquifer and we don't have the right to the aquifer. I would just – there is a very analogous situation with PG&E right now with solar energy and it's called net-metering. I don't know if any of you guys are interested in doing floatable tanks or solar power on your private property. But PG&E is making it such that you have to connect to a grid and they are using kind of the same excuse that you guys are using. I don't mean to be disrespectful. I know it's not an excuse. But the same justification I guess. I'd just like to get a little more clarity on how you guys came up with this and what is the process for us as owners, as property owners, to have an impact on the language between "shall" and "may" because I think whether you are saying it public or not, that being indoctrinated or placed into that document – you guys will be in or out of office in an elected position – that is going to stand for years and decades on. So what is your plan to help us to reverse that language as our District representatives? Thank you.

My name is Gary Riddell. I have lived on the coast for 55 years. I was in the fire department and have been on the fire board. As far as the large projects go, usually fire protection on large projects – they are required to put that fire protection in before they start so it's not a burden on the system and the protection is already there. In fact when Jack Foster wanted to put condos up at the old school site, the fire department required an additional 120,000 gallon water storage tank just for fire protection. But it was also a benefit for the community because they had to buy – they had to put it in and turn it over to the water company but it was fire protection actually for the entire community but just that one project required fire protection. As far as the aquifer goes, I would like to see any documentation you have where you know wells have contaminated other wells in the District and -- as far as

being the same aquifer, I find that hard to believe. The neighbors across the street only get two gallons a minute, I get 17 and in the canyon beyond where the flowers are, there even much more than that. I remember years ago, they were you know close to 100. And down the street they are 100. So how do you explain all these discrepancies. If it's the same aquifer, why do you have all these discrepancies? In fact I get moving water. I get an underground stream. So -- I agree with the other people speaking here that "shall" and "may" – that is a huge definition. You know the definition between those two words is enormous. And there again, that is why talking to some of my neighbors were, number one, we have been paying for this on our property tax. I have lived here for 55 years. Ok. And so I have been helping this water system. In fact I was hooked up to the water system for 20 years. I got tired of running out of water. I'm not saying it was your fault but you guys bought a pig in a poke. The fire district sewed that water company and their maps were lousy. They said they had things in the ground that didn't exist. So we have been paying for that system and I went to my well and I have it as an ag-well and I had it converted over. And I pumped it for ten years and then when I converted it over to a domestic, the gallons per minute never changed. And I had it drilled on the third year of a four year drought. So my gallons per minute hasn't changed. When I had it converted, I had to have it tested and go through County and everything was exactly the way it was ten years ago. So I would like to see you guys work with us because we have been paying into the system and the other thing is I hope you do provide fire protection for other people because when I was on the fire board, this board denied fire protection and I've got the letters so don't tell me it didn't happen. I saved the letters where you guys denied fire protection. So I hope you don't go down that road. Because health and safety are your primary concern. Thank you.

Bob Ptacek, a Montara resident noted he would like to do a minority report. Question on aquifer – A lot of wells are in fractured granite. The citizens or community wells are going much deeper. I'm not saying that wells aren't also in the aquifer but that is why they sometimes dry out when the neighbor next door doesn't because they are in the fractured part that ran out.

What we purchased before was a rusty Rambler with flat tires. That is what we have been paying for. The customers that are paying for services have been paying to make that Rambler shiny un-rusty and run. Under Citizens, this meeting would not be necessary. Absolutely would not have been necessary at all under Citizens because we never would never have had the capacity to argue over it in the first place. And we would pay twice the funds that we are paying now. This is contentious. I understand it is difficult and if I had to pay for something that I don't think I want to pay for I would take the same position. But as a person that has been on the system for years, I have been paying to make that Nash Rambler run so if someone who now gets to ride in it with me doesn't have to pay for the upkeep, I would like a refund for the things I've done to fix the rust bucket. I also have some experience with finance and as is possible I would also like to be

involved in the discussion. I don't think this is the end of it. I think we need to do this as a community. I think the well owners have a point. I think the current customers have a point and demanding one-sided gifts to the other will not get it done. We have to be united on this and we have to get along. We have to make compromises so that everyone will benefit and the pain is felt equally by all and the benefits are received equally by all. Thank you for your time.

General Manager Heldmaier will now answer some of the questions that came up. First, there was a gentleman who lives on Sunshine Valley Road. He asked, why is it not available for domestic use? It really depends on where on Sunshine Valley Road. The map is very helpful. You just have to see if you are inside that area . . . that is the dotted line . . . or outside. We can help you at the office as well with this. So if you can approach us we can figure it out. But a portion of Sunshine Valley road is outside the urban area and a portion is inside. You are saying that is differently zoned. Sounds like it is outside and that means we wouldn't be able to provide domestic service but we would be able to provide fire protection service. You also asked if that cost – I am assuming the cost estimate that we provided is for the connection from the meter to the house – that is a clear no. It is the cost from the main to the meter. So what is not included is the cost from the meter to the house. You also asked a very good question – are new wells inside the urban area where water can be provided prohibited. Yes. That is also an LCP requirement that – as soon as public water becomes available and is available – all new development is served by Montara Water and Sanitary District. There are essentially no new well permits are issued.

Larry DeYoung had a statement about the fees would be based on well owner numbers. Let's say this is misleading. They are not based on well owner numbers. These are connections – this is available connections have nothing to do with the number of wells inside the District. Then we had a question – can wells be kept for fire protection. And the answer to that is – it really depends – it is that situation of wells before '89 and that were permitted before '89 can be grandfathered in. Wells after '89 have to be abandoned upon connection to the system. Again, this is the local cost program that says that.

Mary had a question about the backflow fee. I think this was also a very good one. Mary is no longer here, but she asked why did the fee go up? The fee went up ten years ago. For a simple reason. Because what is involved in this backflow prevention program is the maintenance of the program. It's administrative work – somebody has to keep track of the back flow provision devices and essentially make sure that they are all tested once per year. It is a state code requirement. We have to oblige to it. Actually our regulator, the State, is looking at the program every year. At the time that program was outsourced to San Mateo County, the State

approached us and essentially strongly suggested that we take the program in-house. So instead of now paying \$10,000 to the County, we brought the program in-house, administered the program in-house and test all the devices ourselves. With this switch . . . we realized that we have about 100 devices in the system. That \$10,000 was paid by the community to maintain about 100 devices. This was changed at that time and that cost was relayed to the people who are –actually are in need of that device serviced. So instead of the community paying about \$100 per device and the owner paying an additional \$70 per test, we combined the two – made it much cheaper, much more efficient and are now charging the people that are directly benefitting from this and we are charging them a reasonable \$100, \$103 now.

Thomas Scheffeld had a question or comment that I thought was very good —can go ahead services be installed under one owner and the next owner can then connect. I think the idea of go-ahead services is a good one and I think we will bring this up to the Board in some form and discuss this further.

Jeff Baker asked if this offer will remain open. Dwight already answered that. We don't have any intention to remove that program.

Director Wilson noted the rest of the questions were more of a discussion as to how to go forward in the comments that came to us.

Someone in the audience questioned the subsidizing of connection fees.

General Manager Heldmaier reported this was asked earlier. Yes, they are paying fees according to our fee schedule. Nothing is being subsidized.

Someone in the audience asked the Board before you close, can you clarify about moving the verbiage from will to may?

Director Wilson explained this is something we need to talk about on how to proceed on that issue at another time. I just need to alert everyone that we are not actually agendized to take action on something like that so there needs to be a discussion with the Board and how to proceed.

Director Wilson took one more question.

On the ordinance, the way it was written, says that after tonight you are going to post them in two places can you delay that process and come back and have more discussion.

Director Wilson explained that now the Board will discuss how we are going to proceed. So I am going to bring the discussion back to the Board. And those issues and everything we are talking about is part of a process up here.

One more person from the audience requested questions be answered as they are asked next time.

Director Wilson noted we certainly can take that under consideration.

Director Boyd noted he wrote down the bulk of the questions. Not sure I got them all but I will go through what I've got. One thing, I am just going to reiterate. I told everyone on Nextdoor, probably 70 or 80 times, what is on the agenda tonight is a voluntary program. People who want, if we pass this tonight or at a subsequent meeting, will be able to finance if they wish to connect. Nothing in the way the ordinance is written, drafted for us to consider tonight – nothing changes anything – about “shall” or “may” – that has been the case for decades now. That is not new language. I appreciate that many of you are learning about it not. And as many of you know I have engaged with you on conversation on this – the thing that is on the agenda tonight is – do we make it possible for the people who want to – to come in and get the financing. The things in the ordinance if you look through our other ordinances that we have passed in the past – and they are on line as well – you will see at the start of these things, there is a recitation of things to know – that are the conditions and the reasons – and the things that support or authorize us to do certain things. The recitation of items at the start of the ordinance are just – these are things we should all know, and be aware of and writing them all down then and then here is the action that we propose to take. It is the action that we propose to take that creates the language of what the District can or cannot do. And what the language does – is it authorizes the General Manager just to go set up these contracts for the financing. That's it.

Now people say it is all complicated. And it certainly raises a lot of concerns, but when people try to scare you into thinking that we are coming to take your wells away, I have to tell you – cut it out. That is not what this is! We aren't contemplating anything other than – after all this work – to lift the moratorium – to take the water system and put it into the hands of the community to get to the point where we can take the homes and looking at being forced out of their homes and they couldn't get water and we couldn't give it to them. And now we have the water, the ability, and we have the support of the coastal commission, the safe water department and we got the support of the county after all these years. We are able to do this. And some people are saying hey it's kind of expensive. Can we pay it off over time? That is what we are talking about tonight. So for the people who want to put the fear and doubt into your mind to try to complicate that issue with all the other – I am not saying the other isn't worth talking about – don't get me wrong. But let's be really clear. The ordinance that we are talking about tonight, and you know, we say for a long time about this, Thomas. What we are talking about tonight – got started on this ordinance which is only about the financing. And it doesn't bring with it anything that you have to do –unless – you choose -- you want to sign up for this. And then the

County is going to make you do some things. We have some requirements. Engineering, permitting and all that stuff. You have to get a plumber – the plumber has to make that connection. There are things that have to happen, sure. But I think we have been kind of diligent about listing a lot of these things out. Some of these things would be under your control in terms of who you hire to do the various pieces of work, like capping that well. I know some people who don't go out and get bids and then they get socked with a huge bill and then they complain to us about how much that costs. And it's like, you know, you can talk to one contractor or you can talk to several. There are things that you can control. We have had criticism about the things that we control. Well, you know we have to go out and get three bids. I appreciate the comment about the time, but – those are the kinds of things that we all have to think about as we make these decisions.

OK, I am going long on the whole business about fear, uncertainty and doubt. But I have engaged with a lot of people over the past few days and it keeps getting injected back into the conversation. We are all neighbors. None of us on this board have any interest in setting ourselves up in opposition to the people that we live amongst. We are like you. We live in Montara and Moss Beach. I have lived here since '94. Now, I mean, I haven't lived here my whole life so I guess I am a newcomer, but I really appreciate the place that we live and I really appreciate the relationships that we have as neighbors. And this is an extraordinary place and I am so proud in my community that this many people in our community – 70 members of the community showed up tonight -- in my rough count. We have a really engaged community and it is a magnificent thing about where we live. But let's be decent to each other in terms of not trying to keep re-injecting fear, uncertainty and doubt on issues where it is actually not bad. OK.

We should have the conversation of “shall” and “may”. I think that is a fine conversation. When we get to that conversation, I will be talking to you about some of the economics and what's fair for who to pay and what. And what's fair for who to get a free ride and I don't expect to make a lot of friends on some of the conversation but we will have the conversation. That's OK. We have a whole lot of other neighbors who might want to be part of that conversation to. So, you know, keep that in mind. We all live here. We all have a stake in this. So let me try to run through some of these things I wrote down a whole bunch of questions and I want to make sure we get some of these things answered.

There was a question about the 800 connections. I think this was on the slides. It was 600 and something.

Alex Handlers reported it was 621 and that initially was a projection of future demand over certain time period and based on the demand of that number of connections and new capacities to the system, there was an evaluation



done to identify what facilities would be needed for that next increment of growth.

Director Boyd noted that's about half for folks like you. About half for the growth that is anticipated in the Local Coastal Plan.

Will big projects get a discount? No. Connections cost what connections cost. The potential big projects that Cid mentioned, the answer is no, I don't think any of us wants to subsidize anybody else's development whether it is big or little.

Director Harvey noted the fact that 70 people came here and were saying basically the same thing means that the Board is going to be responding to these issues that you have brought up. The fact that 70 people came here and the same thing was being said, we have to respond. We have to – but we can't respond to these issues tonight because they are not agendaized. We will be responding to these questions. One issue though, for future reference, if we change the connection fee – I think it would be fair that the homeowner should pay for the connection fee -- the connection costs. So it may not be the fee we are talking about now. We may change that fee but the cost for a connection should be owed by the homeowner. We should be sure of that. That is an obvious thing. I think that we would have to agree with. So the question for tonight is do we delay this vote, or pass it with the fact in line that the final connection fee may be changed? So, you know, in future discussion which we will be participating in, the connection fee we are talking about may be changed – or may be – decreased significantly. It can't be done away with because the homeowner has to pay for the cost of the connection. So do we pass this with the connection fee – in question? I think that we can probably – since it's on the agenda tonight – I think it would be reasonable to pass this now. Because we spent a lot of time preparing for this. I think it is reasonable to pass this item on the agenda, it's ready to be passed. But with the mind that we will have future discussion about possibly changing the connection fee and the other items that everyone together – all of you – brought up. Thank you.

Director Slater-Carter reported she thought one of the things this District needed to do was to put on our agenda along with Bartle Wells is a finance workshop that we videotaped and put on line so people can get a deeper understanding of our finances. I read all the letters and there is partial information in many of them and I think it is incumbent on this Board and this District to make sure that the ratepayers and the users and the bond payers all understand where your money goes, where the District finances come from, where the money goes and what we have been doing. What we have done to this system in the last since we took it over in 2003 – thirteen years, fourteen years – is a lot. And I think the people don't realize it because a lot of it isn't visible. As I said we have lost a whole lot of springs in the middle of our roads because we have replaced the pipes. And so we have been able to keep our rates. Our rates at this point for some of the

people who have been subject to the fear campaign are lower than any of the surrounding districts. Because we own our own water supply and we need to be able to show you how we have accomplished that. And part of that was accomplished through the bond. And it was to purchase the system and to make some of the critical improvements that were needed. Bob Ptacek said we bought a rusty Rambler. I would call it a leaky bucket. But we were in a lot of danger of – for the public health of this community – and the people of this District came forward to approve the bond. With 83%, 86%, 82% approval. But it didn't cover all the improvements that had to be made, so we have taken loans out and we have to repay those loans. They are very low interest but we will have to repay those and we have made improvements that have been paid for by the rate money and our meter charges which is how our rates are divided between usage and meters. In any event, the loans and the improvements made through the rate money have all been paid by the users. Those are things that we are asking you to contribute back into. They were not covered 100% by the bond money. That said, again, I would like to encourage our President and our economist Bartle Wells to hold a meeting here talking about our finances so people understand what's going on. Because I think a lot of people who are new here and, frankly, a lot of people who just pay their bill every other month really deserve to be informed. It's something you pay for and you pay for the information as well. So thank you.

Director Huber noted in listening to all of this, first of all I appreciate the time and effort that everybody took to address us all and I am sure that the other Board members would agree with me that we listen very closely to what you have had to say. I also thought about this a lot and I am just going to read a statement so that I don't give conflicting information.

A major component of the services that we provide is water. When the district purchased the water system from a private utility it was with the expectation that the district would provide high quality water to those within the district. Although there was a water moratorium in effect at that time the expectation was that once the moratorium was lifted we would be able to supply water to those that were, out of necessity, on wells.

At the present time we have the capability to provide water to all the existing households of the district. .

The district purchased the system with general obligation bonds. All existing property owners whether connected to the system or on wells pay both general obligation bond fees and property taxes.

Domestic wells are regulated by the San Mateo County Health Department. All planning, building, construction, and repairs projects in the unincorporated areas of the county fall under the jurisdiction of the San Mateo County Planning and Building Department. Montara Water and Sanitary District does NOT regulate domestic wells so we are not the

agency that makes regulations or decisions related to them. Therefore we have no say in the question of capping a well. That is made by the County Health Department. For any connection to MWSD system requires a building permit from the County building department with a final inspection and sign off from the county before water can be turned on. MWSD doesn't issue building permits.

From my study of the issues related to the wells conversions I have come to the following conclusions:

- Unless we are willing to enforce the mandatory requirements for domestic well owners with a house on the property to connect to the system we should eliminate them from the MWSD Code 2011.11.17

- The justification for assessing a 15 thousand dollar water capacity fee for those with wells is not justified for domestic well owners with a house on the property. Those on wells at the time of the purchase from the private utility have paid on the bond exactly like those that have been served by the system without any benefit to the well owner. The same is true of property taxes.

It is therefore my position that the fee, as applied to well owners with a house on the property, is that the fee should be eliminated from the master fee schedule.

- Houses with domestic wells should be treated differently from the construction of a house on currently vacant land or commercial property with regard to a water capacity fee.
- Because the County already confirms that the water connection conforms to engineering standards as a function of the building permit plan review it is a duplication to have the district engineer do the same. The requirement to have the district engineer approve the plan and for a fee to be assessed based on the engineer's time should be eliminated.
- Because the county already requires an inspection to insure that the work conforms to the building permit approved, before permission is given to turn on the water, an inspection and the fee associated with it by MWSD should be eliminated.
- To the extent legally possible, and this is where I am at a loss because I did not have the chance to study this all that well, the district should remove the urban/ rural language as it applies to domestic well owners with a house on the property and amend it to say to the effect that the district will permit connections, at the owners expense, if the well is within 250 feet of an existing main.
- I have not studied the issue of connection to the system for fire protection

service but feel that they as a class should be treated in a similar fashion to well owners with a house on the property.

This is the conclusion of my comments at this point. I do think this does require a lot more discussion especially discussion in conjunction with the County and I also feel that it's a premature and I think it should be tabled.

Someone in the audience asked who was on the phone?

Director Wilson reported that was Bill Huber, our Board member.

Director Wilson noted I know there is clarification we are going to need from the attorney here in just a second. It sounds to me we have two issues. I think there is consensus right now that we need to have a work study equitable to raise the issues raised for fees, structures and how to make it easier on wells and also deal with complexities – essentially who bears the burden of the system of both going forward and so forth. We are going to set that up. The agenda tonight only allows us to address the financing issue and that is all we will be voting on. There is a question I think we should ask – if you don't mind – from an attorney stand point The words "shall" and "may" and the question before us is what is the difference and what is within our authority to address that as we go forward.

District Counsel, David Schricker reported the language of course in the district code is mandatory with respect to the code in a general sense – but the Board adopted resolution of that interprets that which actually, yeah, is consistent with the LCP which is to say that the connections are required in conjunction with the issuance of building permits by the County. The County permit calls for 50% or more – the value of remodeling. Then that does trigger the connection.

Director Wilson asked Mr. Schricker, are you saying we have the discretion with the "shall" word up until the 50% increase in value? If we choose to go that route?

Mr. Schricker noted the discussion, the comments are very close in this as far as statutory interpretation is concerned, and the Board can consider amending the code. Consider adopting a policy. The Board has authority under the water code and under the Government code as well to mandate these connections and the connection fee. The amount of the fee and the implementation of the fee is governed very strictly by the government code and – as Mr. Handlers just pointed out – must be -- the fee – revenues must be accounted for very correct and strictly devoted to improvements that address the demand on the system created by the new connections.

Director Harvey asked Mr. Schricker to summarize the "shall" and "may". Can the Board say may?

Mr. Schricker responded, my language says “shall”. If you don’t take into consideration the adoption of the resolution, that is mandatory, the Board has the authority to enact that kind of requirement under the water code which authorizes broadly the enactment of regulations for this system. And that is based on public health, welfare and necessity.

Director Harvey then asked Mr. Schricker, are you are saying the Board can make it voluntary or not.

Mr. Schricker answered, yes, the Board can change that.

Someone from the audience called out “does the Board have the jurisdiction to change that”?

Director Wilson confirmed this with a yes.

Director Boyd questioned Mr. Schricker, perhaps you know off the top of your head – in the Public Works plan, has the Coastal Commission put any restriction on us there?

Mr. Schricker responded with the language in the Code does, in fact, reflect the Public Works plan requirement. In particular, with respect to the reference to the urban area, the Public Works plan does restrict connections to the urban area.

Director Boyd noted the County had a requirement for a deed restriction on construction. I found some historical stuff from 2002 where written into somebody’s permit requirements was this deed restriction when water is available, you are going to hook up. I mean – and I mentioned this on Nextdoor – look at my face when I say this because in typewritten form – you don’t know anything about what is on the face. But there’s what’s written down – and there’s what we are doing as policy – and now Clemens has no direction from this Board. No ordinance or regulations that say “go make people connect.” And I think the way Dave is talking about it – what I am thinking is that we could probably assert as a Board a policy that says “that is not the policy,” and if there is ever going to be a policy, it is going to have to be agendized and a regulation is going to have to be passed by the Board and the community is going to have an opportunity to weigh in before that policy changed. I think a lot of concern I have heard from a lot of people I’ve talked to has been about just start changing that at any given day. Or – “It could just wake up and already be doing it.” Well – that’s not how an Agency like this actually works. But, we can actually say – here are our steps if we were ever going to do it and we’d be making a commitment.

And I think a lot of people would appreciate having some idea of about what that would look like. I mean – for us – we have been talking about this for thirteen years since we managed to help the community take over the water system. It was – like – what can we do to solve the moratorium? And what

can we do to help people get onto the water system if they want to? And then – you know – people were going to want to – in varying degrees. All the way from “please, please, please” – all the way to “over my cold, dead body.” Right?

I think we heard a fair range of expressions tonight. That’s alright. Because we are not coming here to take away your stuff. Honestly, it’s – it’s – I shouldn’t be surprised – but we thought we were doing a nice thing to help people get some financing and it did stir up a lot of stuff that has been going unspoken and un-discussed for years. So it’s really good we have opened that conversation. But I’d like to double-check – make sure that when we talk about this – we have the discretion to change that wording – that we look hard at the County regulations, the Coastal Commission regulations – to make sure there is no over-arching thing because if we’ve got that latitude – that’s a good thing to have that latitude – so we can talk about it and go through that process.

Mr. Schricker reported if you look at the County’s resolution back in 1989 and the current LCP and resolution to adopt with respect to the interpretation of your Code. They are all consistent.

Someone from the audience asked if anything could be done about the “shall” word.

Director Slater-Carter answered no to this question. The importance of the consistency – between these three documents is required -- or can we have inconsistency?

Mr. Schricker noted the thing about the code and the mandatory language – that can be changed.

Director Slater-Carter questioned Mr. Schricker if the District can be inconsistent with the Public Works Plan and with the LCP?

Mr. Schricker answered, not necessarily. No, I don’t think it would be inconsistent with the Public Works plan. You can’t change that. It’s more a matter of expressing the conditions upon which a connection shall be required. And that’s governed by the LCP and the Public Works plan to a certain extent, too. We will propose a program in the County resolution which is actually now superseded by the LCP speaks in terms of county permits which is the county’s jurisdiction. In that context with respect to mandatory connections, they speak to remodels of valued at 50% or more. The code doesn’t make that distinction. You could if you wanted to change that.

Director Wilson noted it sounds like we have some discretion and that we are all in agreement that we are going into a work-study kind of format in the future and my recommendation for that portion of the discussion is that we

agendize that at the next Board meeting for how we are going to carry that out and that Board meeting will be on February 2<sup>nd</sup>. I think you are hearing a commitment from us that we wish to engage the Committee on this topic and we can answer the questions from a policy standpoint because that is not within what we can do tonight. That now leaves us with the financing that is before us – and I would like – request - us as a Board is to decide how we wish to address that. We need a motion if we wish to proceed on that. So I would recommend that if we wish to proceed on it, that we have a motion and a second then we can discuss the motion.

Director Boyd then responded with the understanding that there is nothing about this that is any way mandatory – and it is a strictly volunteer program – and it has no bearing or consequence on whether or not one does – or does not – choose to sign up – I move that we adopt the ordinance next in order. Ordinance of the Montara Water and Sanitary District adding Section 5-3.104 to Montara Water and Sanitary District Code relating to the conversion of private well water sources to the District's water system. And, again, I state this is about the financing – strictly voluntary – and that's my motion.

Director Slater-Carter seconded the motion.

Director Wilson then asked for any Board comments or discussions.

Director Harvey believes this is important. I want to make the point that if we pass this – this financing – a motion tonight – it doesn't mean that the fee schedule can't be changed. The fee schedule will be discussed and maybe changed, but this is on the agenda tonight. I think that we should pass this tonight.

Director Slater-Carter responded she thinks this is an opportunity for folks – somebody mentioned having a fire sale – lien sale – basement sale – I didn't tell you the value of our infrastructure is going up. I didn't tell you that it will cost more in the future with inflation and everything else. This is the fire sale – sale. We have had our costs calculated according to the law and standard practices. So for those of you who are in the urban area – I would suggest that you look at it seriously. It's a bargain. Right now, in Half Moon Bay, on the black water market, the grey water market, you get a permit from somebody who bought one in 1980. They are about \$50,000. And that is in the City of Half Moon Bay. You have to pay that and then all the additional costs to be able to connect to that water system. Ours is comparatively a bargain because we are going to keep improving the system and we are going to make it a not a shiny Rambler. We are going to make it like a brand new – I don't know – something useful like a Prius.

Director Huber reported he had been having a very hard time hearing what the other Board members have said. I think I sort of get the gist of it. I definitely feel that this should be tabled for tonight simply because of the

fact that until those other issues are properly dealt with, we cannot deal with this issue. I think that they are linked together and I think that taking it on faith – things like the language “shall” and “will” or “shall” and “may”. Also, the issues relating to the water connection fee and so forth. I think those things should really be addressed before we vote on it. I really think we should just table it.

Director Wilson reported he was a little nervous about this only because I think we are at risk if we proceed with financing this – and then we change our rate structure down the line and then there is that issue about paying more now and then less. However, I think we could address that by making adjustments with individual sign-ups beginning at the calendar year – we could retroactively go back. So as long as it is with the understanding that if we do change the rates, those individuals who take advantage of this early and then the rate changes in the next few months – that we take that into consideration. With that, I’m OK with going forward.

Mr. Schricker noted, he should point out on the ordinance – before you – the date on the – on the interest-free loans – June 30<sup>th</sup> – that will be changing to December 31<sup>st</sup> 2017.

Director Wilson then noted the interest rate goes to 2% after the first of the year. This year. My concern is that we make adjustments in the installation fees or however we call it. And individuals who have signed up before that happens this year – then I would suggest folks would be able to work with folks with that. I’ll go on record with that.

A roll call vote was called for and the motion passed with 4 in favor and 1 abstention.

Director Wilson thanked all the residents that attended this evenings meeting.

A two minute break was called for at this time.

**2. Review and Possible Action Concerning Adoption of a Revised Master Fee Schedule to Reduce Solid Waste Rates by 3.56%.**

General Manager Heldmaier reported there is a second public hearing tonight and that is the review and possible action concerning an adoption of the Master Fee Schedule to reduce solid waste rates by 3.56%. This is a reduction of rates and the reduction of rates is, essentially, through a decrease in cost of fuel lease costs and disposal fees for Recology of the Coast. We have an agreed-upon rate formula and that now results in a decrease of 3.56%. Now we have to formally plug those into our Master Fee Schedule. The rates are effective January 1 so, retroactively – and Recology has already charged the lower rates. We now have to do the formal action of getting it into the Master Fee Schedule by opening the



public hearing, considering relevant testimony, closing the public hearing and adopting an Ordinance of the Montara Water and Sanitary District fee changing and amending the Master Fee Schedule.

Director Wilson opened up the public hearing and called on Lisa Ketcham to speak.

Lisa Ketcham is here on behalf of the 227 homeowners in Pillar Ridge. I would like the Board to help us out. You may remember we have a long-standing history of issues with trash service here. Just to refresh your memory, or if you are new on the Board – For over 50 years, we have had trash picked up from the front of our homes. We have addresses. We have parcel numbers. We get property tax bills with Montara Sanitary on it. We get mail delivered to our homes. You can bill us directly but Recology thinks that we should have a dumpster in front of our clubhouse and everybody throws their trash in there. The rate reduction is great – we are really supportive of all your efforts to get people to conserve. To keep garbage out of the landfills, green waste – all that you have done. Size of cans, and we fought to have that here, too. We actually succeeded with Kathryn's help and we met with Recology in 2010. They started billing us directly and giving us all these services. And that went on for six years. Then in the beginning of 2016, we gave up and we said OK. Pillar Ridge will do all the sub-billing and here is the master bill and we will sub-bill for everybody. Can you please still keep our services – and they said "Oh, no – you are commercial." You can't have that. And I said no. Wait a minute – we have a management company in Southern California. They don't know the history. They aren't here. They were easily bold-over. I think you may understand what I am talking about. So we were able to arrange for the green waste pick-up but we lost the curbside bulky item pickup and they wouldn't even pick up our Christmas trees.

So I got the agenda. I read the agenda and I look at all the things that are included. We pay the same rate as everybody else for our service and we provided benefit service of sub-billing for Recology and yet they won't give us the full service. Recology says we are a commercial account. Recology won't even take our calls. The residents have tried and when they give them their addresses, Recology tells them they need to talk to the manager of Pillar Ridge. Can you do something to restore our bulky item curbside pick-up and our Christmas tree pickup? Please.

Director Slater-Carter offered to sit down with Lisa and look this over. Director Huber is on the recycling and solid waste sub-committee as I am. Let's start next week. This is wrong. You pay for it. You deserve it.

Ms. Ketcham noted this has been recurring. We don't fit – we definitely don't fit in the commercial sense.

Director Wilson responded to Lisa, we have heard you. So what we will do – we will sit down with you next week and start the process and try to get that service back to you. That’s our commitment to you and to the community here.

Ms. Ketcham wanted to know if the District could sign a new contract.

Director Slater-Carter noted that was a ways out. But we certainly will look at the contract. I will be talking about it. Maybe we can add an addendum.

Director Wilson recommended to let Director Slater-Carter, Director Huber and the General Manager try to get this service fixed. That is our goal and we will watch it as a Board as well. That’s all we can do tonight. But you have the commitment from us to work with you and we will get back to you.

Ms. Ketcham thanked the Board

Director Slater-Carter stated Lisa Ketcham is one of the heroes of the community. Director Slater-Carter appreciates all Lisa does for the community and will do all she can to help her.

Carlisle Ann Young noted how she was outraged by this. Ms. Young agrees something must be done about this issue. You are getting less for paying the same fee as everyone else in the service area.

General Manager Heldmaier thanked Lisa for bring this to the Board. Mr. Heldmaier is very interested in reducing the work load for the Pillar Ridge Manager. At this time, Mr. Heldmaier introduced Paul Bowman who is currently helping us to run the treatment plant.

Director Wilson asked for any other comments from the public and hearing none, closed the Public Hearing.

Director Slater-Carter moved to adopt the next ordinance in line, an ordinance of the Montara Water and Sanitary District restating and amending the Master Fee schedule. Director Boyd seconded the motion.

A Roll Call vote was called for and the motion passed unanimously 5 – 0.

## **CONSENT AGENDA**

1. Approve Minutes for November 3, 2016.
2. Approve Financial Statements for November 2016.
3. Approve Warrants for January 1, 2017.
4. SAM flow Report for November 2016.
5. Monthly Review of Current Investment Portfolio.
6. Connection Permit Applications Received.

7. Monthly Water Production Report for November 2016.
8. Rain Report.
9. Solar Energy Report.
10. Monthly Public Agency Retirement Service Report for October 2016.

Director Boyd moved to approve the Consent Agenda. Director Harvey seconded the motion.

A Roll Call Vote was called for and the motion passed unanimously 5 – 0.

**OLD BUSINESS - None**

**NEW BUSINESS - None**

## **REPORTS**

### **1. Sewer Authority Mid-Coastside Meeting (Boyd) –**

- Director Boyd reported the Board talked about the proposal for the hydraulic modeling project. We requested the staff to prepare a full presentation on why they feel they believe they need to do this along with an estimate of the cost.
- Director Slater-Carter reported she is the new Chair, Director Woren is the Vice-Chair, Director Boyd is Treasurer, and Director Penrose is the Secretary.
- Director Slater-Carter reported on Saturday, there will be a Strategic Plan meeting at 11:00. The function of this meeting is to put SAM back on plan. The public is invited to attend. The meeting will be held at the plant.

**2. MidCoast Community Council Meeting (Slater-Carter) –** Director Slater-Carter reported the project known as Big Wave was approved by the County and the Coastal Commission with certain restrictions is now requesting to be changed to become a large brewery and they did not want to put the housing in first for the disabled which is one of the requirements in the approval of that project. I would recommend everyone get involved. Send letters, make your voices known. This is a huge change. To have the reason for this project left out in this project deserves comment from this community. Director Slater-Carter suggests the public go to the MCC website for further information on this issue.

**3. CSDA Report (Slater-Carter) – None**

**4. CCWD, NCCWD Committee Report – (Harvey, Huber) None**

**5. Attorney's Report (Schricker) – None**

**6. Directors Report – None**

**7. General Manager's Report (Heldmaier) –** General Manager Heldmaier reported the Kanoff Street storm water issue is being worked on diligently by both the District and the County. He is pleased how both agencies have contributed to the labor, materials and expertise on this project. We are working on both sides to resolve this situation. The District is worried about the water entering and the County is worried about the water that is exiting. We are implementing solutions now and will meet with the County discussing a solution they brought forward which is some sort of a French drain to relieve the pressure. We have been in contact with Supervisor Horsley office and will have

a representative from his office out next week. General Manager Heldmaier suggested to have a Board member out there as well. Director Boyd and Director Slater-Carter have both agreed to meet with the representative.

Director Wilson thanked everyone for their help with putting this meeting together.

**FUTURE AGENDAS-**

**REGULAR MEETING ENDED at 11:00 P.M.**

Respectfully Submitted,

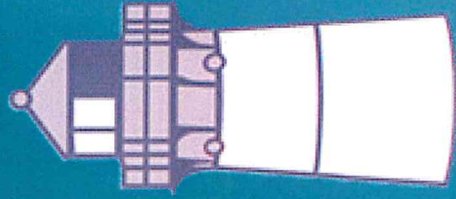
Signed \_\_\_\_\_  
Secretary

Approved on the 16th, March 2017

Signed \_\_\_\_\_  
President

# *Multi-Year Water Connection Fee Payment Program*

MWSD Proposed Ordinance  
January 19, 2017



**Montara Water  
and Sanitary District**



## PRESENTATION OVERVIEW

- Regulatory Background Regarding Service Connections
- GO Bond Background
- Objective of the Proposed Ordinance
- District Motivation of the Proposed Ordinance
- General Provisions of the Proposed Ordinance
- Eligible Costs under the Proposed Ordinance
- Estimated Costs to Connect to the MWSD System
- Financing Provisions
- Well Abandonment Requirements
- Next Steps



## ***Background Regulatory Background Regarding New Services***

- Starting in 1986, moratorium on new service connections to Citizens Utilities, mandated by the California Public Utility Commission (CPUC).
- Due to lack of necessary improvements the CPUC order remained until District acquisition in 2003.
- In 2003 the District acquired the system from private ownership, the moratorium on new service connections remained in place until it could be established that the District had adequate supply.



## ***Background*** ***Regulatory Background Regarding New Services***

- The California Coastal Commission (Commission) has regulated the ability of the District to make connections to the water system since 2009:
- The Public Works Plan (PWP) was developed by MWSD to make necessary infrastructure improvements to the water system.
- In the PWP, approved by the Commission in 2009, language was included to maintain the moratorium on new service connections.
- An amendment to the PWP was passed through the Commission in 2013, allowing the District to add new connections as long as certain conditions are met.



## **Background**

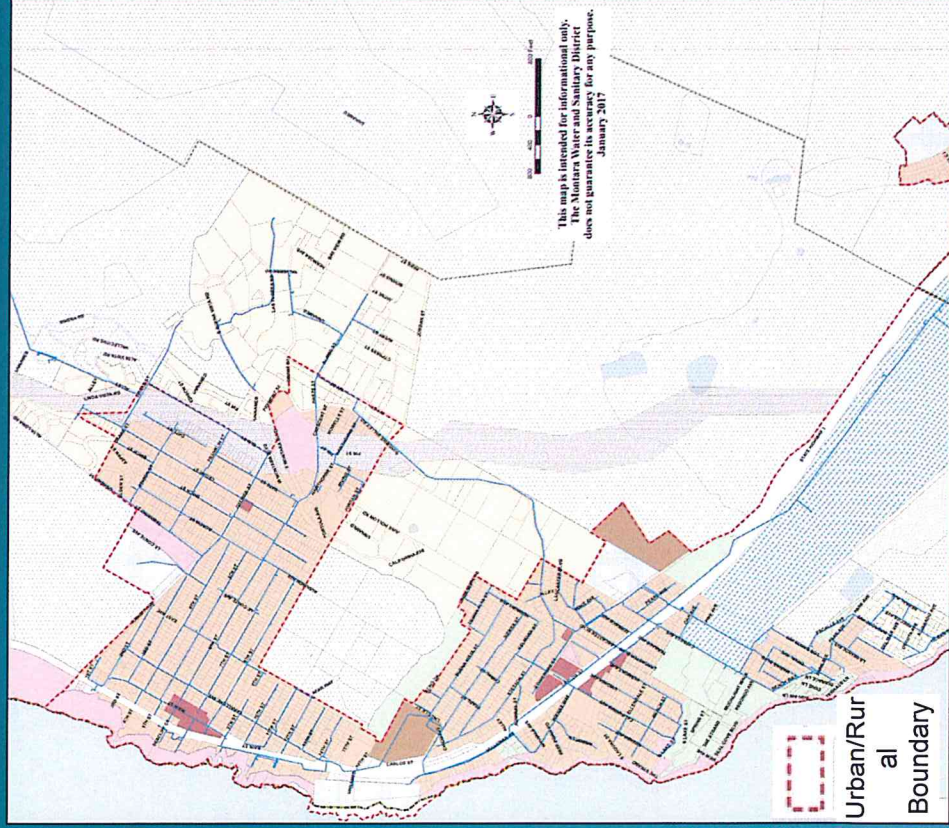
### **Regulatory Background Regarding New Services**

- The PWP, enforced by the Commission, is the guiding document for all connections to the MWSD system and includes the following conditions (paraphrased):
  - Existing homes served by wells and new homes *within the urban/rural boundary are eligible for domestic and private fire protection (PFP) connections to the MWSD system.*
  - Existing homes served by wells and new homes *outside the urban/rural boundary are eligible for PFP connections, as long as the District's mainline does not need to be extended.*



# Background Regulatory Background Regarding New Services

Urban/rural boundary, as defined by the San Mateo County LCP: a stable line separating urban areas from rural areas in the Coastal Zone.





## ***Multi-Year Water Fee Connection Program Objective***

- The objective of the Connection Fee Payment Program and associated Ordinance is to assist well owners in connecting to the MWSD system, if interested.
- MWSD Resolution No. 1498 states that applications for well conversions shall be considered in connection with the issuance of County Building permits.
- It is not the objective of Connection Fee Payment Program and associated Ordinance to require the conversion of wells. Per LCP, only remodels >50% are required to connect to the Public Water System.



## ***Multi-Year Water Fee Connection Program District Motivation***

- Well owners have indicated that they are interested in connecting to the MWSD system, however do not connect because it is prohibitively expensive.
- Well conversions reduce the draw-down of underground aquifers that underlie the District's service area.
- Well conversions improve the District's ability to monitor and manage the overall water supply for its customers.
- The Commission and San Mateo County are strong proponents of the conversion of private wells within the urban/rural boundary for the purposes of watershed and water resource management.



## ***Multi-Year Water Fee Connection Program*** ***General Provisions***

- Financing is available to existing homes that currently rely on wells within the District's service area.
- The costs eligible for financing are *all the fees to be paid to the District* as part of the water service connection process.
- Allows home owners to pay the connection fee and other associated costs over a maximum of ten (10) years through the property tax bill.



## ***Multi-Year Water Fee Connection Program Eligible Costs: Connection Fee***

- **Connection Fee** - The cost to “buy-in” to the District’s existing system and invest in future supply reliability and improvements to the system.
- New customers, both well conversions and new homes, create additional demand and must buy into the reliability of the system.
- Connection Charges are restricted funds that can only be used for Capital Improvements addressing additional demand



## ***Multi-Year Water Fee Connection Program Eligible Costs: Fees and Deposits***

- **Administrative Fee, Engineering Deposit, and Inspection Fee** are the costs associated with the review and processing of a new water service.
- **Administrative Fee:** These fees cover all administrative tasks associated with the processing of the new water service application.
- **Engineering Deposit:** These fees cover the engineering review required for the service connection plans submitted to the District. Unused funds can be returned.
- **Inspection Fee:** These fees cover the inspections required by District staff throughout the process of planning and installing the new service.



## **Multi-Year Water Fee Connection Program**

### **Eligible Costs: Service Charges**

- **Service Charges** - The cost to install the water service(s), including connecting to the mainline and installation of the lateral and meter.
- The portion of the lateral installation that can be financed through the District is *from the mainline to the meter, located at the property line.*
- The portion of the lateral installation from the meter to the house is on the homeowners property and must be financed separately.
- The cost of the meter and meter installation are eligible for financing.



## **Multi-Year Water Fee Connection Program Domestic Service Estimated Costs**

- Each water service connection will have different associated costs due to water demands and the distance to the nearest water main.
- An estimate of anticipated costs for domestic service connection to a single family home is included below.

<b>Eligible Cost</b>	<b>Associated Cost</b>
Connection Fee: for a 5/8" x 3/4" meter	<b>\$15,729</b>
Add. Fees: Admin, Engineering, Inspection	<b>\$3,584</b>
Service Charges: Installation and meter cost	<b>\$4,000</b>
<b>Total Cost Eligible for Financing**</b>	<b>\$23,313</b>

**\*\*** Should a mainline extension be required to connect the home to the District's system, *this cost must be paid in full, up front.*



## ***Multi-Year Water Fee Connection Program Domestic and PFP Service Estimated Costs***

- The costs associated with connecting to the water system for both PFP and domestic service are also eligible.
- **Cost savings** for connecting to both the domestic and PFP services at the same time:
  - Whenever possible, one (1) lateral is constructed to serve both domestic and PFP demands (2 meters), and therefore installation costs only increase minimally.
  - Only one (1) Additional Fees (\$3,584) is required when applying for both domestic and PFP services.
- A domestic service cannot be added to an existing PFP service.



## ***Multi-Year Water Fee Connection Program Domestic and PFP Service Estimated Costs***

- An estimate of anticipated costs for both domestic and PFP service connections to a single family home is included below.

<b>Eligible Cost</b>	<b>Associated Cost</b>
Domestic Service Connection Fee: for a 5/8" x 3/4" meter	<b>\$15,729</b>
PFP Service Connection Fee: for a 5/8" x 3/4" meter	<b>\$4,939</b>
Deposits: Admin, Engineering, Inspection for both domestic and PFP services	<b>\$4,531</b>
Service Charges: Installation and cost of meters	<b>\$5,000</b>
<b>Total Cost Eligible for Financing**</b>	<b>\$30,199</b>

**\*\*** Should a mainline extension be required to connect the home to the District's system, *this cost must be paid in full, up front.*



## ***Multi-Year Water Fee Connection Program PFP Service Estimated Costs***

- Well owners who only apply for PFP service due to being located outside of the urban/rural boundary are also eligible for financing.
- Additionally, well owners outside the urban/rural boundary are eligible for a reduced-cost well sampling program.
- Water quality sampling by certified District personnel
- Water quality analysis at a reduced cost



## **Multi-Year Water Fee Connection Program PFP Service Estimated Cost**

- An estimate of anticipated costs for a PFP service connection to a single family home is included below.

<b>Eligible Cost</b>	<b>Associated Cost</b>
PFP Connection Fee: for a 5/8" x 3/4" meter	<b>\$4,939</b>
Deposits: Admin, Engineering, Inspection	<b>\$3,584</b>
Service Charges: Installation and meter cost	<b>\$4,000</b>
<b>Total Cost Eligible for Financing**</b>	<b>\$12,223</b>

**\*\*** Should a mainline extension be required to connect the home to the District's system, *this cost must be paid in full, up front.*



## ***Multi-Year Water Fee Connection Program Financing Provisions***

- For agreements executed by Owners on or after January 19, 2017 and through December 31, 2017, no interest will be charged.
- For agreements executed by Owners after January 1, 2018, the costs shall be subject to interest at the rate of 2% per annum.



## ***San Mateo County Well Abandonment Process***

- Should a homeowner decide to connect to the District, the abandonment of the existing private well is required by SMC Department of Health and is not under the jurisdiction of the District. SMC regulations regarding well abandonment:
  - Wells permitted before December 1989 are grandfathered in and are not required to be capped, as per the SMC LCP. A backflow preventer must be added to ensure no cross connection to the MWSD system.
  - Wells permitted after December 1989 must be abandoned upon connection to a public water system, as per the SMC LCP.
- The cost for well abandonment is defined by San Mateo County and is not a part of the financing offered by MWSD.



## *Suggested Next Steps*

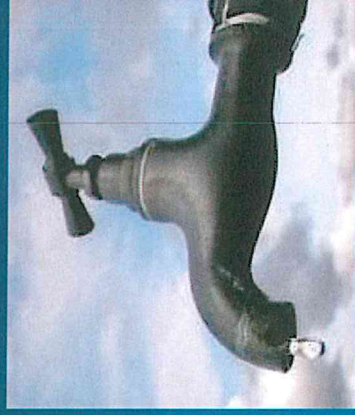
The suggested Multi-Year financing program is a first step to help well owners to connect to the Public Water System.

How can the District increase voluntary transition?

- Fee Structure Assessment
- LCP and PWP Policy Review

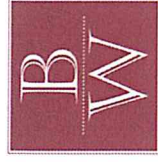


# Montara Water & Sanitary District



## Connection Fee Multi-Year Payment Program

January 19, 2017



**BARTLE WELLS ASSOCIATES**  
INDEPENDENT PUBLIC FINANCE ADVISORS

# Presentation Overview

- Background
- Multi-Year Fee Payment Program
- Legal Authority
- Fee Program Examples
- Connection Fees





# Background

- **District's service area includes a number of properties served by private wells**
  - A number of these properties installed wells during prior moratorium on new connections to the water system
  - Rough estimate: 300 private wells (difference between water & sewer accounts) with roughly 250 within the urban/rural zoned boundary eligible for District water service
- **A number of property-owners with wells have said they would like to connect to the District, but the water connection fees pose too high of a financial hurdle**
  - Some noted they could better afford the transition if fees were spread over time
- **To help facilitate well conversions, District is proposing to adopt a multi-year connection fee payment program**

# Fee Payment Program

- Program applicable to existing development currently served by private wells
- Eligible costs include all fees due to District as part of connection process
  - *Mainline extensions not eligible; must be paid in full, up front*
- Multi-year payment program:
  - Term of repayment: Up to 10 years (customer's choice)
  - Interest rate: 2%
  - Interest waived for conversions initiated by Dec-31, 2017
  - Customer can opt to any amount up to 100% of eligible fees
  - Customer can pay off the balance without penalty anytime
- Fees are collected on the property tax rolls subject to an Agreement between District and each participant
- Balance due upon a) property sale, b) title transfer (excluding transfer for financing)



# Legal Authority

- **California Health & Safety Code Section 5473:**
  - **District Board must adopt an ordinance or resolution authorizing the collection of charges on the tax rolls by a two-thirds vote**
  - **Each year, District must prepare & file with its clerk a written report containing:**
    - a) **a description of each participating parcel, and**
    - b) **the amount of the annual payment.**
  
- **District will require a signed Agreement with each property owner**
  - **Documents the charges and repayment terms that apply to each property**
  - **Indicates property-owner acknowledgment and consent**
  - **Allows for optional prepayment without penalty**
  
- **Fee repayment to be structured as a lien on the property**
  - **Agreement binding upon heirs and successors**
  
- **Ordinance amends District Code to facilitate the payment program**





# Example: Basic Water Connection

- Basic Water Connection Fees & Related Charges, No Private Fire Service

Eligible Cost	Associated Cost
Connection Fee: for a 5/8" x 3/4" meter	\$15,729
Add. Fees: Admin, Engineering, Inspection	\$3,584
Service Charges: Installation and meter cost	\$4,000
<b>Total Cost Eligible for Financing**</b>	<b>\$23,313</b>

- Payment Program Example

Repayment Term	Annual Payment with Interest at:	
	0%	2%
5 Year	\$4,663	\$4,946
10 Year	2,331	2,595

# Example: Water & Fire Connection

- Water Connection Fees & Related Charges with Private Fire Service

Eligible Cost	Associated Cost
Domestic Service Connection Fee: for a 5/8" x 3/4" meter	\$15,729
PFP Service Connection Fee: for a 5/8" x 3/4" meter	\$4,939
Deposits: Admin, Engineering, Inspection for both domestic and PFP services	\$4,531
Service Charges: Installation and cost of meters	\$5,000
<b>Total Cost Eligible for Financing**</b>	<b>\$30,199</b>

- Payment Program Example

Repayment Term	Annual Payment with Interest at:	
	0%	2%
5 Year	\$6,040	\$6,407
10 Year	3,020	3,362



# Example: Fire Connection Only

- Water Connection Fees & Related Charges with Private Fire Service

Eligible Cost	Associated Cost
PFPP Connection Fee: for a 5/8" x 3/4" meter	\$4,939
Deposits: Admin, Engineering, Inspection	\$3,584
Service Charges: Installation and meter cost	\$4,000
<b>Total Cost Eligible for Financing**</b>	<b>\$12,223</b>

- Payment Program Example

Repayment Term	Annual Payment with Interest at:
	0%
5 Year	\$2,445
10 Year	1,222
	2%
	\$2,593
	1,361



# Connection Fees

- **Purpose:** Recover costs for water supply reliability and infrastructure required to serve new development (growth funds its own way)
- **2011 Water System Master Plan** indicated that the water system can serve new development subject to completion of various capital improvements
- **Capital Improvement Program** developed by SRT Consultants in 2011
  - Identified \$8.81 million of improvements needed to serve approximately the next 621 equivalent connections
  - No GO Bond funding used for any of these projects
  - Projects required 100% for new development
- **Connection fee = \$8.81M / 621 = \$14,187 per new meter equivalent**
  - Connection fees adjusted annually based on Engineering News-Record Construction Cost Index (SF Bay Area), currently \$15,729
  - Admin and inspection fees also updated annually based on CPI for Bay Area
- **Revenues deposited into separate fund & used exclusively for eligible projects**



# Questions / Discussion



**Chris Thollaug**  
PO Box 371018, Montara CA 94037  
(650) 400-0482 cthollaug@gmail.com



Board of Directors  
Montara Water and Sanitary District  
8888 Cabrillo Hwy  
Montara, CA 94037

Dear Directors,

Thank you for the opportunity to comment on the well conversion financing plan circulated to me by letter from the district manager dated December 16<sup>th</sup>, 2016.

While the material I received deals solely with a plan to assist with financing of well conversions, it has touched off considerable discussion about the underlying policies concerning private wells in the district. I believe that it is in the best interest of the community to have an open and robust dialogue concerning those policies before implementing the current financing proposal.

I've provided two documents to the district that have been included in your packet on this agenda item. The first is an extract of language from district regulations and the SMC LCP that clarifies applicable definitions and conditions for private wells and water connections in the district. Part of the challenge of communicating on the topic of private wells is to understand the definitions of terms such as urban area, as opposed to urban zone, rural area as opposed to rural zone, etc. I hope this document, which I've also posted on NextDoor.com for local residents, will help us in the communication process.

The second document is a set of recommendations I have developed for how the district might incentivize private well owners to abandon their wells and connect to the district's system. This is intended to stimulate a conversation to review current policies and rules, so that before we implement a financial incentive program, the community better understands the conflicting issues and has an opportunity to be heard.

I have had the opportunity to talk to several residents about my recommendations and those discussions have been thoughtful and constructive. However, rather than getting further into my thoughts tonight, I would urge the Board to table the proposed financing ordinance and focus first on a constructive dialogue with stakeholders. I would like to see meaningful participation from San Mateo County in that process, as their role is central in the establishment and operation of private well policies and practices in the unincorporated areas of the county.

This is an emotional topic for those on wells who live in the urban area, given that the district's ordinance that indicates well abandonment in the urban area is mandatory. I think we all need to be sensitive to the impact this issue is having on these well owners, and take the time to talk this through as a community before taking any action. Thank you for your consideration.

Best regards,

A handwritten signature in black ink, appearing to read "Chris Thollaug". The signature is fluid and cursive, with a large initial "C" and a long, sweeping tail that ends in a small hook.

Chris Thollaug

**Reference Documents**  
**Montara Water & Sanitary District Well Conversion Proposal**

Now that water connections are available, MWSD has circulated a proposal to assist property owners with private wells as their primary water source finance connection to the district water system. However there are significant open issues regarding the district's policies regarding private wells. Is connection mandatory or voluntary? Section 5-3.103 of the MWSD code states connection to the water system is mandatory, within the urban area. A public hearing needs to address underlying policy as well as the financing assistance being proposed.

Part of the difficulty in understanding connection policy is to understand the term definitions:

- urban area
- urban boundary
- urban zone
- urban rural boundary
- rural residential areas
- rural areas
- rural zone

To aid in the discussion of policy, here are extracts from three documents that control connection policy, the MWSD Code, the San Mateo County LCP (including map from LCP of the rural residential area, and the MWSD Public Works Plan (single reference). Italics and highlights have been added for emphasis.

**MWSD Code**

<u>Reference</u>	<u>Language</u>	<u>Comments</u>
Section 5-3.103	Subject to the requirements of any moratorium upon Service Connections, water shortage emergency, drought or other conditions limiting the District's available water supply as determined by the Board, <i>Premises located within the urban area (hereinafter defined), that are capable of being served by the District's water system shall be connected</i> to that system for permanent Domestic Service. Irrespective of location within or outside of the urban area, Premises that are capable of being served by the District's water system shall be connected to that system for Fire Protection Service.	Properties in the "urban area" that are "capable of being served" <b>shall</b> be connected. Implication is that when water capacity permits, connection is mandatory.
	Premises shall be deemed ' <i>capable of being served by the District's water system</i> ' if a District water main is located two hundred fifty (250) feet or less measured at ground level from any point on the property line of the Parcel to be served by the main, <i>taking into consideration that a main extension may be necessary to provide water service to the Premises.</i>	"capable of being served" defined as property within 250ft of the district's system.  However, what does, "taking into consideration that a main extension may be necessary" mean? Within 250' after main extension?
	'Urban area' means the area or areas delineated as such by the <b>Urban/Rural Boundary</b> on land use plan maps adopted by the Board of Supervisors of the County of San Mateo and approved by the California Coastal Commission as a part of the San Mateo County Local Coastal Program pursuant to the California Coastal Act of 1976.	Defines "urban area" as the area delineated by the SMC LCP Urban/Rural boundary.  Reference LCP Section 1.14 for definition of the boundary.

## San Mateo County LCP

<u>Reference</u>	<u>Language</u>	<u>Comments</u>
Section 1.3 a	<p><u>Definition of Urban Areas</u></p> <p>Define <b>urban areas</b> as those lands suitable for urban development because the area is either: (1) developed, (2) subdivided and zoned for development at densities greater than one dwelling unit/5 acres, (3) served by sewer and water utilities, and/or (4) designated as an affordable housing site in the Housing Component.</p>	Per the definition, rural residential is not included.
Section 1.4	<p><u>Designation of Urban Areas</u></p> <p>Designate as <b>urban</b> those lands shown inside the <b>urban/rural boundary</b> on the Land Use Plan Maps. Such areas include Montara, Moss Beach, El Granada, Princeton and Miramar.</p>	Designation of urban areas as those lands inside the urban/rural boundary. Consistent with MWSD's definition of urban area in Code Section 5-3.103
Section 1.13	<p><u>Definition of Rural Residential Area</u></p> <p>Define <b>rural residential areas</b> as rural lands outside the <b>urban/rural boundary</b> which are: (1) subdivided and developed with residential uses at densities less than one dwelling unit/5 acres, (2) adjacent to urban areas, and (3) partially or entirely served with utility lines.</p>	States that rural residential areas are <i>rural</i> lands.
Section 1.14	<p><u>Designation of Rural Residential Areas</u></p> <p>Designate the following recorded subdivisions as <b>rural residential areas</b>: (1) Montara, First Addition; (2) Montara, Second Addition; (3) Montara, Hotel Addition; and (4) Montara, Wienke Addition.</p>	Rural residential properties represent a significant portion of the private wells in the district.
Section 1.16	<p><u>Definition &amp; Establishment of Urban/Rural Boundary</u></p> <p>Define <b>urban/rural boundary</b> as a stable line separating <b>urban areas</b> and rural service centers from <b>rural areas</b> in the Coastal Zone and establish this line on the LCP Land Use Plan Map.</p>	Urban/Rural Boundary divides urban and rural, period.
Section 1.19 f	<p><u>Ensure Adequate Public Services and Infrastructure for New Development in Urban Areas</u></p> <p>If a public water supply is available, major remodels or expansions of existing development, or new development on vacant lots, served by private wells constructed after September 12, 1989, are not permitted unless the project will connect to the public water system and abandon the well. For purposes of this policy, major remodels or expansions include all projects where new construction has a value equal or greater to 50% of the value of the existing structure.</p>	<p>Homes developed or significantly expanded with wells after this date are required to connect. That requirement was an explicit condition of the building permit.</p> <p>In urban areas, future expansions/remodels over 50% trigger the requirement to connect and abandon well.</p>



Section 2.11 a.	<p><u>Establishing Service Area Boundaries</u>  Confine urban level services provided by governmental agencies, special districts and public utilities to <b>urban areas</b>, rural service centers and <b>rural residential areas</b> as designated by the Local Coastal Program on March 25, 1986.</p>	<p>Authorizes provision of “urban level services” beyond urban to include rural residential areas.</p>
b.	<p>Redraft the boundaries of special districts or public utilities providing urban level services to correspond to the boundaries of <b>urban areas</b>, rural service centers and <b>rural residential areas</b> established by the Local Coastal Program.</p>	<p>Addresses MWSD boundaries, however this section does not authorize what services may be provided to the designated areas by MWSD within that overall boundary.</p>
d.	<p>Require, when a special district or public agency maintains rural lands within their boundaries that the special district or public agency divide the districts into <b>rural and urban zones</b>. Make boundaries of the <b>urban zone</b>, where urban level services are provided, correspond to the boundaries of <b>urban areas</b> and rural service centers established by the Local Coastal Program. Include the rest of the district in the <b>rural zone</b>. Restrict the activities in <b>rural zones</b> to those which are consistent with the maintenance of the rural nature of the area and all other policies of the Local Coastal Program. Lower the user costs in the <b>rural zone</b> to reflect the lower level of service and minimize growth inducement.</p>	<p>Requires division of the MWSD service area into rural and urban zones.</p> <p>Urban zone includes urban areas and rural service centers—not rural residential.</p> <p>The remainder of the MWSD district falling outside the urban zone as rural—the rural residential.</p> <p>Lower user costs in the rural zone to reflect lower level of service.</p>
Section 2.17 a.	<p><u>Establishing Service Area Boundaries (sewer)</u>  Require, as a condition of granting a permit for expansion of sewage treatment facilities, that sanitary sewer connections be limited to the <b>urban areas</b> and <b>rural residential areas</b> as shown on the Land Use Plan Map 1.3 and the zoning map. Exclude property located outside the <b>urban boundary</b> and <b>rural residential areas</b> from assessment for sewage treatment facilities by SAM or its member agencies.</p>	<p>Restricts sewer connections to urban and rural residential areas.</p>
c.	<p>Redraw the boundaries of the sewer districts to correspond to all lands inside the <b>urban/rural boundary</b> and the boundary of <b>rural residential areas</b>.</p>	<p>Consistent with Section 2.11b, with respect to MWSD boundaries.</p>
Section 2.31 c.	<p><u>Service Area Boundaries (water)</u>  (1) Make the boundaries of the <b>urban zone</b> correspond to the <b>urban boundary</b> and the boundary of <b>rural residential areas</b> established by the LCP.  (2) Allow water connections for all types of users within <b>urban zone</b>.</p>	<p>Urban zone is a new definition which includes rural residential. Therefore, water connections permitted in rural residential.</p> <p>Mandates that connections are allowed—not that they are required.</p>



# MWSD Public Works Plan

Section 2,  
PWP Objective

Establishing Guidelines for New Connections  
MWSD and the California Coastal Commission (CCC) have cooperatively established the below guidelines for adding new service connections within the LCP-designated urban area of the MWSD water system with regard to MWSD's Public Works Plan (PWP). New domestic service connections, and the extension of water mains for any purpose, are prohibited in LCP-designated rural areas. These guidelines are effective as of December 11, 2013, and will remain effective under the PWP until amended.

Prohibition of main extensions in rural area, as defined in LCP section 1.16, provided above.

As defined, rural area includes the rural residential area.



Rural Residential Area

# Well Conversion Policy Recommendations

Chris Thollaug, PO Box 371018, Montara CA 94037

The Montara Water and Sanitary District has located sufficient water to permit new connections, and is beginning to address the issue of well conversion for property owners located in the district's service area. Despite being unable to connect in the past, well owners without service connections for water have been, nevertheless, obligated to participate fully in repayment of the bonds issued for purchase of the water system by the district. The rationale has been the benefit they receive from the fire hydrant system.

The district has circulated to property owners with wells a proposal to permit payment of connection fees by well owners connecting and abandoning their wells. They offer a 10-year payment period at no interest (first year only). However, the proposal offered no policy recommendations on well conversions. The district manager asserts that the financing proposal is addressing voluntary well conversions, although nothing in the letter received by well owners indicated the program is voluntary, and it requires wells be capped.

Now that connections are available, there is a need to have well conversion policy and practices articulated and publicly commented on, and current district ordinances modified to conform with newly adopted policies in this area. For example, while the district asserts that at this time well conversion is voluntary, the language of Ordinance 5-3.103 states quite the opposite—it states that *properties which are capable of being served by the water system shall connect*. Given this inconsistency and the district's recent communication to well owners, it is important to have a full and public discussion of the related policies—certainly before it proposes financing incentives.

To stimulate public comment and discussion, here is a proposed policy structure for consideration by property owners and the district that addresses the full range of situations under which a well conversion is being considered, either by MWSD or the property owner.

	<u>When Connection Requested by MWSD</u>	<u>When Connection Requested by Property Owner</u>
	Offered to property owners as part of a district initiative to reduce private wells in the service area	To deal with failing well, when connection is personal preference, or when required by San Mateo County for building permit or environmental health reasons.
Water Main Extension	Full cost Paid by district	Cost allocated between district and property owner per current policies
Construction Costs to Connect	Paid by property owner	Paid by property owner
District Fees to Connect	If well capped, waived by district If well maintained, paid by property owner	Paid by property owner
Discussion Points	<ul style="list-style-type: none"> <li>• The district, in taking the initiative to reduce private wells, benefits from increased water connection charges.</li> <li>• Property owners on wells have paid a full share of the general bond indebtedness for purchase of the system, but have benefited only by the improved fire protection, not potable water delivery.</li> <li>• Current bonds include significant capital improvement funds authorized when bonds were refinanced.</li> </ul>	<ul style="list-style-type: none"> <li>• Property owner seeking connection to address a situation where the primary benefit is immediate and to the landowner. This includes new residential construction.</li> <li>• Property owners with wells who were offered the opportunity to connect under the well conversion initiative, but declined that offer, can connect under these terms.</li> <li>• Includes property owners who built or expanded homes after September 12<sup>th</sup>, 1987 and are being required to connect as a condition of their building permit.</li> </ul>



# MONTARA WATER AND SANITARY DISTRICT AGENDA

Prepared For the Meeting Of: **March 02, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager 

**SUBJECT: Unaudited Financial Statements – Executive  
Summary**

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## **Budget vs. Actual – Sewer July thru December, 2016 Variances over \$2,000:**

- 4610 Property Tax Receipts, \$6,280 above Budget – 1<sup>st</sup> property tax assessment received in December.
- 4710 Sewer Service Charges, \$17,640 above Budget – 1<sup>st</sup> sewer service charges remitted by the County in December.
- 4720 – Sewer Service Refunds, \$5,551 below budget – Two refunds issued in the month of December for prior period miscalculations.
- **Overall Total Operating Income for the period ending December 31, 2016 was \$22,083 above budget. Total revenue received to date is \$1,158,446.**
- 5270 Information Systems, \$2,333 below Budget – Minimal activity to date.
- 5400 Legal, \$4,157 above Budget- Increased activity in the current fiscal year.
- 5610 Accounting, \$5,550 below Budget - Difference due to timing in the billing.
- 5630 Consulting, \$4,267 below Budget – District's Strategic Plan is still being developed.
- 5640 Data Services, \$3,000 below Budget – No activity to dated
- 6170 Claims, Property Damage, \$5,000 below Budget –No activity to date.
- 6200 Engineering, \$7,966 below Budget – Majority of costs have been related to capital improvement.
- 6600 Collection/Transmission, \$5,000 below Budget – No activity to date.
- 6940 SAM Maintenance, Collection Sys, \$35,257 above Budget – Payment made for Sewer Maintenance expenses.
- 6950 SAM Maintenance, Pumping, \$25,000 below Budget – No activity to date.
- **Overall Total Operating Expenses for the period ending December 31, 2016 were \$10,716 below Budget.**
- **Total overall Expenses for the period ending December 31, 2016 were \$21,970 below budget. For a net ordinary income of \$44,053, budgeted vs. actual. Actual net ordinary income is \$328,236.**
- 7100 Connection Fees, \$9,743 above Budget – No new construction connections issued and 4 remodel connections issued in December.



# MONTARA WATER AND SANITARY DISTRICT AGENDA

**Prepared For the Meeting Of: March 02, 2017**

**TO: BOARD OF DIRECTORS**

**FROM: Clemens H. Heldmaier, General Manager**

- 7200 Interest Income, LAIF, \$5,000 below budget – 1<sup>st</sup> FY quarter interest income has not yet been booked. The District is having difficulty locating LAIF statement.
- 8000 CIP, \$67,679 below Budget – Sewer Improvement project and spot repairs paid in December
- 9200 I-Bank Loan, \$10,674 below Budget – Variance due to timing.



# MONTARA WATER AND SANITARY DISTRICT AGENDA

Prepared For the Meeting Of: **March 02, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

- **Budget vs. Actual – Water July thru December, 2016 Variances over \$2,000:**
- 4610 Property tax Receipts, \$6,280 above Budget – 1<sup>st</sup> property tax assessment received in December.
- 4740 Testing, Backflow, \$5,666 above Budget – quarterly activity up over the fiscal year.
- 4810 Water Sales Domestic, \$11,975 above Budget – More water sales than anticipated.
- **Overall Total Operating Income for the period ending December 31, 2016 was \$32,131 above budget. Total revenue received to date is \$1,076,606.**
- 5240 CDPH Fees, \$7,750 below Budget – No Activity to date
- 5250 Conference attendance, \$2,000 below budget – No activity to date.
- 5400 Legal, \$13,407 below Budget – Less activity than anticipated to date.
- 5510 Maintenance-Office, \$2,478 above Budget, - Electrical work to District offices performed in December.
- 5530 Memberships, \$13,634 above Budget, - Historically, membership fees paid on a calendar year basis. Variance will decrease as the fiscal year continues.
- 5610 Accounting, \$5,550 below Budget - Difference due to timing in the billing.
- 5620 Audit, \$7,500 below Budget – The District did not have to undergo a single audit. Thus reducing the overall fee.
- 5630 Consulting, \$6,274 above Budget – 24 T-He Age dating expense paid in December.
- 5800 Labor, \$4,506 below Budget – No payment for Workers comp Ins. in December.
- 6170 Claims, Property Damage, \$4,825 below Budget –Minimal activity to date.
- 6185 SCADA Maintenance, \$2,838 above Budget – Large invoice paid in December for SCADA system maintenance.
- 6200 Engineering, \$6,822 below Budget – General Engineering costs have been held in check.
- 6400 Pumping, \$25,682 below Budget – PG&E costs have been less than expected to date. A large catch up bill is typically received near the end of the calendar year.
- 6500 Supply, \$8,175 below Budget – Minimal activity in December.
- 6600 Collection/Transmission, \$9,394 below Budget – Water Main maintenance has been held well below budget.





# MONTARA WATER AND SANITARY DISTRICT AGENDA

Prepared For the Meeting Of: March 02, 2017

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

- 6700 Treatment, \$9,746 below Budget – Costs related to chemicals and filtering have been held below historic levels.
- 6800 Vehicles, \$3,126 below Budget – Indicative of lower fuel costs..
- **Overall Total Operating Expenses for the period ending December 31, 2016 were \$64,934 below Budget.**
- **Total overall Expenses for the period ending December 31, 2016 were \$83,039 below budget. For a net ordinary income of \$115,170, budgeted vs. actual. Actual net ordinary income is \$421,933.**
- 7100 Connection Fees, \$12,386 below Budget – No activity in December
- 7600 Bond Revenues, G.O. \$63,648 above Budget – 1<sup>st</sup> property tax assessment received in December.
- 8000 CIP, \$219,282 above Budget – Projects include Alta Vista well monitoring, conduit installation also at Alta Vista, Pillar Ridge improvements.
- 9100 Interest Expense G.O. Bonds, \$124,713 below Budget – Variance due to timing.
- 9150 SRF Loan, \$26,296 above Budget - Variance due to timing.

## RECOMMENDATION:

This is for Board information only

## Montara Water & Sanitary District Revenue & Expenditures Budget vs. Actual - Sewer July through December 2016

	Jul - Dec 16	Sewer Budget	\$ Over Budget
<b>Ordinary Income/Expense</b>			
<b>Income</b>			
4220 · Cell Tower Lease	17,143.80	16,750.02	393.78
4400 · Fees			
4410 · Administrative Fee (New Constr)	1,461.00	1,500.00	-39.00
4420 · Administrative Fee (Remodel)	1,448.00	750.00	698.00
4430 · Inspection Fee (New Constr)	1,380.00	1,249.98	130.02
4440 · Inspection Fee (Remodel)	2,894.00	1,750.02	1,143.98
4460 · Remodel Fees	3,395.90	3,499.98	-104.08
<b>Total 4400 · Fees</b>	<b>10,578.90</b>	<b>8,749.98</b>	<b>1,828.92</b>
4610 · Property Tax Receipts	123,779.95	117,500.00	6,279.95
4710 · Sewer Service Charges	1,002,502.87	984,863.00	17,639.87
4720 · Sewer Service Refunds, Customer	-7,551.45	-1,999.98	-5,551.47
4760 · Waste Collection Revenues	11,711.86	10,500.00	1,211.86
4990 · Other Revenue	279.82		
<b>Total Income</b>	<b>1,158,445.75</b>	<b>1,136,363.02</b>	<b>22,082.73</b>
<b>Gross Profit</b>	<b>1,158,445.75</b>	<b>1,136,363.02</b>	<b>22,082.73</b>
<b>Expense</b>			
5000 · Administrative			
5190 · Bank Fees	4,352.60	2,749.98	1,602.62
5200 · Board of Directors			
5210 · Board Meetings	1,671.58	1,500.00	171.58
5220 · Director Fees	1,462.50	1,650.00	-187.50
5230 · Election Expenses	819.68	1,999.98	-1,180.30
<b>Total 5200 · Board of Directors</b>	<b>3,953.76</b>	<b>5,149.98</b>	<b>-1,196.22</b>
5250 · Conference Attendance	0.00	1,000.02	-1,000.02
5270 · Information Systems	666.87	3,000.00	-2,333.13
5300 · Insurance			
5310 · Fidelity Bond	0.00	250.02	-250.02
5320 · Property & Liability Insurance	1,918.47	850.02	1,068.45
<b>Total 5300 · Insurance</b>	<b>1,918.47</b>	<b>1,100.04</b>	<b>818.43</b>
5350 · LAFCO Assessment	1,526.00	1,000.02	525.98
5400 · Legal			
5420 · Meeting Attendance, Legal	2,612.50	4,750.02	-2,137.52
5430 · General Legal	16,295.00	10,000.02	6,294.98
<b>Total 5400 · Legal</b>	<b>18,907.50</b>	<b>14,750.04</b>	<b>4,157.46</b>
5510 · Maintenance, Office	4,732.67	4,000.02	732.65
5530 · Memberships	708.00		
5540 · Office Supplies	4,022.99	4,000.02	22.97
5550 · Postage	277.85	1,249.98	-972.13
5560 · Printing & Publishing	181.83	1,500.00	-1,318.17
5600 · Professional Services			
5610 · Accounting	9,450.00	15,000.00	-5,550.00
5620 · Audit	13,000.00	13,000.00	0.00
5630 · Consulting	9,733.14	13,999.98	-4,266.84
5640 · Data Services	0.00	3,000.00	-3,000.00
5650 · Labor & HR Support	1,125.00	1,125.00	0.00
5660 · Payroll Services	450.67	400.02	50.65
<b>Total 5600 · Professional Services</b>	<b>33,758.81</b>	<b>46,525.00</b>	<b>-12,766.19</b>

## Montara Water & Sanitary District Revenue & Expenditures Budget vs. Actual - Sewer July through December 2016

	Jul - Dec 16	Sewer Budget	\$ Over Budget
5710 - San Mateo Co. Tax Roll Charges	119.00	1,249.98	-1,130.98
5720 - Telephone & Internet	7,060.17	5,500.02	1,560.15
5730 - Mileage Reimbursement	536.74	750.00	-213.26
5740 - Reference Materials	0.00	100.02	-100.02
<b>5800 - Labor</b>			
5810 - CalPERS 457 Deferred Plan	7,738.98	7,558.50	180.48
5820 - Employee Benefits	17,190.84	17,191.02	-0.18
5830 - Disability Insurance	566.82	739.50	-172.68
5840 - Payroll Taxes	5,920.29	8,260.50	-2,340.21
5850 - PARS	7,109.95	6,883.98	225.97
<b>5900 - Wages</b>			
5910 - Management	50,543.72	46,686.48	3,857.24
5920 - Staff	58,854.52	59,221.98	-367.46
5930 - Staff Certification	900.00	900.00	0.00
5940 - Staff Overtime	1,403.97	1,169.52	234.45
5950 - Staff Standby	0.00		
<b>Total 5900 - Wages</b>	<b>111,702.21</b>	<b>107,977.98</b>	<b>3,724.23</b>
5960 - Worker's Comp Insurance	604.48	1,824.48	-1,220.00
<b>Total 5800 - Labor</b>	<b>150,833.57</b>	<b>150,435.96</b>	<b>397.61</b>
<b>Total 5000 - Administrative</b>	<b>233,556.83</b>	<b>244,061.08</b>	<b>-10,504.25</b>
<b>6000 - Operations</b>			
6170 - Claims, Property Damage	0.00	4,999.98	-4,999.98
6195 - Education & Training	0.00	499.98	-499.98
<b>6200 - Engineering</b>			
6210 - Meeting Attendance, Engineering	0.00	1,000.02	-1,000.02
6220 - General Engineering	18,033.84	25,000.02	-6,966.18
<b>Total 6200 - Engineering</b>	<b>18,033.84</b>	<b>26,000.04</b>	<b>-7,966.20</b>
6320 - Equipment & Tools, Expensed	0.00	499.98	-499.98
<b>6330 - Facilities</b>			
6335 - Alarm Services	2,709.84	2,670.00	39.84
6337 - Landscaping	950.00	1,200.00	-250.00
<b>Total 6330 - Facilities</b>	<b>3,659.84</b>	<b>3,870.00</b>	<b>-210.16</b>
<b>6400 - Pumping</b>			
6410 - Pumping Fuel & Electricity	12,383.90	13,500.00	-1,116.10
<b>Total 6400 - Pumping</b>	<b>12,383.90</b>	<b>13,500.00</b>	<b>-1,116.10</b>
<b>6600 - Collection/Transmission</b>			
6660 - Maintenance, Collection System	0.00	4,999.98	-4,999.98
<b>Total 6600 - Collection/Transmission</b>	<b>0.00</b>	<b>4,999.98</b>	<b>-4,999.98</b>
<b>6800 - Vehicles</b>			
6810 - Fuel	0.00	400.02	-400.02
6820 - Truck Equipment, Expensed	0.00	79.98	-79.98
6830 - Truck Repairs	0.00	199.98	-199.98
<b>Total 6800 - Vehicles</b>	<b>0.00</b>	<b>679.98</b>	<b>-679.98</b>

**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Sewer**  
 July through December 2016

	Jul - Dec 16	Sewer Budget	\$ Over Budget
<b>6900 - Sewer Authority Midcoastside</b>			
6910 - SAM Collections	160,804.02	160,804.02	0.00
6920 - SAM Operations	347,265.48	347,265.48	0.00
6940 - SAM Maintenance, Collection Sys	55,256.53	19,999.98	35,256.55
6950 - SAM Maintenance, Pumping	0.00	25,000.02	-25,000.02
<b>Total 6900 - Sewer Authority Midcoastside</b>	<b>563,326.03</b>	<b>553,069.50</b>	<b>10,256.53</b>
<b>Total 6000 - Operations</b>	<b>597,403.61</b>	<b>608,119.44</b>	<b>-10,715.83</b>
<b>Total Expense</b>	<b>830,960.44</b>	<b>852,180.52</b>	<b>-21,220.08</b>
<b>Net Ordinary Income</b>	<b>327,485.31</b>	<b>284,182.50</b>	<b>43,302.81</b>
<b>Other Income/Expense</b>			
<b>Other Income</b>			
<b>7000 - Capital Account Revenues</b>			
7100 - Connection Fees			
7110 - Connection Fees (New Constr)	78,394.27	70,128.00	8,266.27
7120 - Connection Fees (Remodel)	26,477.50	25,000.02	1,477.48
<b>Total 7100 - Connection Fees</b>	<b>104,871.77</b>	<b>95,128.02</b>	<b>9,743.75</b>
7200 - Interest Income - LAIF	0.00	5,000.00	-5,000.00
<b>Total 7000 - Capital Account Revenues</b>	<b>104,871.77</b>	<b>100,128.02</b>	<b>4,743.75</b>
<b>Total Other Income</b>	<b>104,871.77</b>	<b>100,128.02</b>	<b>4,743.75</b>
<b>Other Expense</b>			
<b>8000 - Capital Improvement Program</b>			
8075 - Sewer	805,196.46	872,875.02	-67,678.56
<b>Total 8000 - Capital Improvement Program</b>	<b>805,196.46</b>	<b>872,875.02</b>	<b>-67,678.56</b>
<b>9000 - Capital Account Expenses</b>			
9125 - PNC Equipment Lease Interest	9,116.53	9,956.91	-840.38
9175 - Capital Assessment - SAM	76,855.02	76,855.02	0.00
9200 - I-Bank Loan	2,134.81	12,808.84	-10,674.03
<b>Total 9000 - Capital Account Expenses</b>	<b>88,106.36</b>	<b>99,620.77</b>	<b>-11,514.41</b>
<b>Total Other Expense</b>	<b>893,302.82</b>	<b>972,495.79</b>	<b>-79,192.97</b>
<b>Net Other Income</b>	<b>-788,431.05</b>	<b>-872,367.77</b>	<b>83,936.72</b>
<b>Net Income</b>	<b>-460,945.74</b>	<b>-588,185.27</b>	<b>127,239.53</b>

## Montara Water & Sanitary District Revenue & Expenditures Budget vs. Actual - Water July through December 2016

	Jul - Dec 16	Water Budget	\$ Over Budget
<b>Ordinary Income/Expense</b>			
<b>Income</b>			
4220 · Cell Tower Lease	17,143.74	16,750.02	393.72
4400 · Fees			
4410 · Administrative Fee (New Constr)	2,922.00	2,250.00	672.00
4420 · Administrative Fee (Remodel)	0.00	450.00	-450.00
4430 · Inspection Fee (New Constr)	2,760.00	2,125.02	634.98
4440 · Inspection Fee (Remodel)	460.00	400.02	59.98
<b>Total 4400 · Fees</b>	<b>6,142.00</b>	<b>5,225.04</b>	<b>916.96</b>
4610 · Property Tax Receipts	123,779.91	117,500.00	6,279.91
4740 · Testing, Backflow	12,166.00	6,499.98	5,666.02
4810 · Water Sales, Domestic	910,410.56	900,000.00	10,410.56
4850 · Water Sales Refunds, Customer	-499.56	-1,500.00	1,000.44
4990 · Other Revenue	6,507.51		
<b>Total Income</b>	<b>1,075,650.16</b>	<b>1,044,475.04</b>	<b>31,175.12</b>
<b>Gross Profit</b>	<b>1,075,650.16</b>	<b>1,044,475.04</b>	<b>31,175.12</b>
<b>Expense</b>			
5000 · Administrative			
5190 · Bank Fees	3,565.49	4,999.98	-1,434.49
5200 · Board of Directors			
5210 · Board Meetings	1,671.57	1,500.00	171.57
5220 · Director Fees	1,462.50	1,650.00	-187.50
5230 · Election Expenses	819.67	1,999.98	-1,180.31
<b>Total 5200 · Board of Directors</b>	<b>3,953.74</b>	<b>5,149.98</b>	<b>-1,196.24</b>
5240 · CDPH Fees	0.00	7,750.02	-7,750.02
5250 · Conference Attendance	0.00	1,999.98	-1,999.98
5270 · Information Systems	666.87	750.00	-83.13
5300 · Insurance			
5310 · Fidelity Bond	0.00	250.02	-250.02
5320 · Property & Liability Insurance	1,918.46	1,350.00	568.46
<b>Total 5300 · Insurance</b>	<b>1,918.46</b>	<b>1,600.02</b>	<b>318.44</b>
5350 · LAFCO Assessment	2,048.00	1,249.98	798.02
5400 · Legal			
5420 · Meeting Attendance, Legal	2,612.50	4,249.98	-1,637.48
5430 · General Legal	18,230.00	30,000.00	-11,770.00
<b>Total 5400 · Legal</b>	<b>20,842.50</b>	<b>34,249.98</b>	<b>-13,407.48</b>
5510 · Maintenance, Office	6,477.82	4,000.02	2,477.80
5530 · Memberships	22,964.21	9,000.00	13,964.21
5540 · Office Supplies	4,022.94	4,000.02	22.92
5550 · Postage	2,578.46	3,000.00	-421.54
5560 · Printing & Publishing	255.27	1,000.02	-744.75
5600 · Professional Services			
5610 · Accounting	9,450.00	15,000.00	-5,550.00
5620 · Audit	13,000.00	20,500.00	-7,500.00
5630 · Consulting	18,774.25	12,499.98	6,274.27
5650 · Labor & HR Support	1,125.00	1,000.02	124.98
5660 · Payroll Services	450.65	424.98	25.67
<b>Total 5600 · Professional Services</b>	<b>42,799.90</b>	<b>49,424.98</b>	<b>-6,625.08</b>



## Montara Water & Sanitary District Revenue & Expenditures Budget vs. Actual - Water July through December 2016

	Water		
	Jul - Dec 16	Budget	\$ Over Budget
5710 - San Mateo Co. Tax Roll Charges	119.00		
5720 - Telephone & Internet	9,485.05	8,500.02	985.03
5730 - Mileage Reimbursement	915.84	1,000.02	-84.18
5740 - Reference Materials	0.00	400.02	-400.02
5790 - Other Administrative	1,112.00		
5800 - Labor			
5810 - CalPERS 457 Deferred Plan	16,972.00	16,984.98	-12.98
5820 - Employee Benefits	34,684.26	34,684.02	0.24
5830 - Disability Insurance	1,402.50	1,460.52	-58.02
5840 - Payroll Taxes	17,848.57	20,287.02	-2,438.45
5850 - PARS	13,694.28	13,502.52	191.76
5900 - Wages			
5910 - Management	50,545.60	46,686.48	3,859.12
5920 - Staff	177,139.07	175,395.48	1,743.59
5930 - Staff Certification	4,500.00	4,500.00	0.00
5940 - Staff Overtime	23,601.95	26,176.50	-2,574.55
5950 - Staff Standby	11,868.78	12,428.52	-559.74
<b>Total 5900 - Wages</b>	<b>267,655.40</b>	<b>265,186.98</b>	<b>2,468.42</b>
5960 - Worker's Comp Insurance	4,998.73	9,655.98	-4,657.25
<b>Total 5800 - Labor</b>	<b>357,255.74</b>	<b>361,762.02</b>	<b>-4,506.28</b>
<b>Total 5000 - Administrative</b>	<b>480,981.29</b>	<b>499,837.06</b>	<b>-18,855.77</b>
6000 - Operations			
6160 - Backflow Prevention	0.00	499.98	-499.98
6170 - Claims, Property Damage	175.00	4,999.98	-4,824.98
6180 - Communications			
6185 - SCADA Maintenance	9,939.23	7,500.00	2,439.23
6180 - Communications - Other	399.12		
<b>Total 6180 - Communications</b>	<b>10,338.35</b>	<b>7,500.00</b>	<b>2,838.35</b>
6195 - Education & Training	3,661.34	3,000.00	661.34
6200 - Engineering			
6210 - Meeting Attendance, Engineering	0.00	1,000.02	-1,000.02
6220 - General Engineering	2,677.50	10,000.02	-7,322.52
6230 - Water Quality Engineering	34,000.52	32,500.02	1,500.50
<b>Total 6200 - Engineering</b>	<b>36,678.02</b>	<b>43,500.06</b>	<b>-6,822.04</b>
6320 - Equipment & Tools, Expensed	1,311.98	2,500.02	-1,188.04
6330 - Facilities			
6335 - Alarm Services	359.04	375.00	-15.96
6337 - Landscaping	2,183.53	3,000.00	-816.47
<b>Total 6330 - Facilities</b>	<b>2,542.57</b>	<b>3,375.00</b>	<b>-832.43</b>
6370 - Lab Supplies & Equipment	11.96	499.98	-488.02
6400 - Pumping			
6410 - Pumping Fuel & Electricity	25,166.07	49,999.98	-24,833.91
6420 - Pumping Maintenance, Generators	4,934.49	4,000.02	934.47
6430 - Pumping Maintenance, General	466.63	1,249.98	-783.35
6440 - Pumping Equipment, Expensed	0.00	1,000.02	-1,000.02
<b>Total 6400 - Pumping</b>	<b>30,567.19</b>	<b>56,250.00</b>	<b>-25,682.81</b>

**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Water**  
 July through December 2016

	Water		
	Jul - Dec 16	Budget	\$ Over Budget
<b>6500 - Supply</b>			
6510 - Maintenance, Raw Water Mains	1,350.57		
6520 - Maintenance, Wells	1,391.52	4,999.98	-3,608.46
6530 - Water Purchases	14,082.76	19,999.98	-5,917.22
<b>Total 6500 - Supply</b>	16,824.85	24,999.96	-8,175.11
<b>6600 - Collection/Transmission</b>			
6610 - Hydrants	3,818.95	499.98	3,318.97
6620 - Maintenance, Water Mains	24,049.60	27,499.98	-3,450.38
6630 - Maintenance, Water Svc Lines	176.73	12,499.98	-12,323.25
6640 - Maintenance, Tanks	2.78	499.98	-497.20
6650 - Maint., Distribution General	717.42	4,999.98	-4,282.56
6670 - Meters	9,090.65	1,249.98	7,840.67
<b>Total 6600 - Collection/Transmission</b>	37,856.13	47,249.88	-9,393.75
<b>6700 - Treatment</b>			
6710 - Chemicals & Filtering	7,812.31	15,000.00	-7,187.69
6720 - Maintenance, Treatment Equip.	707.67	1,999.98	-1,292.31
6730 - Treatment Analysis	13,733.80	15,000.00	-1,266.20
<b>Total 6700 - Treatment</b>	22,253.78	31,999.98	-9,746.20
<b>6770 - Uniforms</b>	6,740.11	4,500.00	2,240.11
<b>6800 - Vehicles</b>			
6810 - Fuel	2,747.72	4,000.02	-1,252.30
6820 - Truck Equipment, Expensed	272.49	499.98	-227.49
6830 - Truck Repairs	853.43	2,500.02	-1,646.59
<b>Total 6800 - Vehicles</b>	3,873.64	7,000.02	-3,126.38
<b>6890 - Other Operations</b>	105.94		
<b>Total 6000 - Operations</b>	172,940.86	237,874.86	-64,934.00
<b>Total Expense</b>	653,922.15	737,711.92	-83,789.77
<b>Net Ordinary Income</b>	421,728.01	306,763.12	114,964.89
<b>Other Income/Expense</b>			
<b>Other Income</b>			
<b>7000 - Capital Account Revenues</b>			
7100 - Connection Fees			
7110 - Connection Fees (New Constr)	55,311.04	64,000.02	-8,688.98
7120 - Connection Fees (Remodel)	106.00	1,500.00	-1,394.00
7130 - Conn. Fees, PFP (New Constr)	30,197.00	32,500.02	-2,303.02
<b>Total 7100 - Connection Fees</b>	85,614.04	98,000.04	-12,386.00
<b>7600 - Bond Revenues, G.O.</b>	638,865.74	575,218.02	63,647.72
<b>Total 7000 - Capital Account Revenues</b>	724,479.78	673,218.06	51,261.72
<b>Total Other Income</b>	724,479.78	673,218.06	51,261.72
<b>Other Expense</b>			
<b>8000 - Capital Improvement Program</b>			
8100 - Water	528,781.86	309,499.98	219,281.88
<b>Total 8000 - Capital Improvement Program</b>	528,781.86	309,499.98	219,281.88

**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Water**  
 July through December 2016

	Jul - Dec 16	Water Budget	\$ Over Budget
<b>9000 - Capital Account Expenses</b>			
<b>9100 - Interest Expense - GO Bonds</b>	24,942.50	149,655.02	-124,712.52
<b>9125 - PNC Equipment Lease Interest</b>	9,116.53	9,956.91	-840.38
<b>9150 - SRF Loan</b>	45,287.60	18,991.52	26,296.08
<b>9210 - Conservation Program/Rebates</b>	500.00		
<b>Total 9000 - Capital Account Expenses</b>	<u>79,846.63</u>	<u>178,603.45</u>	<u>-98,756.82</u>
<b>Total Other Expense</b>	<u>608,628.49</u>	<u>488,103.43</u>	<u>120,525.06</u>
<b>Net Other Income</b>	<u>115,851.29</u>	<u>185,114.63</u>	<u>-69,263.34</u>
<b>Net Income</b>	<u><u>537,579.30</u></u>	<u><u>491,877.75</u></u>	<u><u>45,701.55</u></u>



**Montara Water & Sanitary District**  
**Funds Balance Sheet**  
As of December 31, 2016

	Sewer	Water	TOTAL
<b>ASSETS</b>			
<b>Current Assets</b>			
<b>Checking/Savings</b>			
<b>Sewer - Bank Accounts</b>			
Wells Fargo Operating - Sewer	3,023,443.94	0.00	3,023,443.94
<b>LAIF Investment Fund</b>			
Capital Reserve	3,853,967.15	0.00	3,853,967.15
Connection Fees Reserve	152,756.00	0.00	152,756.00
Operating Reserve	281,893.00	0.00	281,893.00
<b>Total LAIF Investment Fund</b>	<u>4,288,616.15</u>	<u>0.00</u>	<u>4,288,616.15</u>
<b>Total Sewer - Bank Accounts</b>	7,312,060.09	0.00	7,312,060.09
<b>Water - Bank Accounts</b>			
Wells Fargo Operating - Water	0.00	665,424.33	665,424.33
Capital Reserve	0.00	398,249.00	398,249.00
Operating Reserve	0.00	190,251.00	190,251.00
<b>Restricted Cash</b>			
Acq & Improv Fund	0.00	436.13	436.13
Connection Fees Reserve	0.00	157,000.00	157,000.00
Cost of Issuance	0.00	122.94	122.94
GO Bonds Fund	0.00	865,964.79	865,964.79
<b>Total Restricted Cash</b>	<u>0.00</u>	<u>1,023,523.86</u>	<u>1,023,523.86</u>
<b>Total Water - Bank Accounts</b>	<u>0.00</u>	<u>2,277,448.19</u>	<u>2,277,448.19</u>
<b>Total Checking/Savings</b>	7,312,060.09	2,277,448.19	9,589,508.28
<b>Accounts Receivable</b>			
<b>Sewer - Accounts Receivable</b>			
Accounts Receivable	17,320.72	0.00	17,320.72
<b>Total Sewer - Accounts Receivable</b>	<u>17,320.72</u>	<u>0.00</u>	<u>17,320.72</u>
<b>Water - Accounts Receivable</b>			
Accounts Receivable	0.00	-2,075.26	-2,075.26
Accounts Rec. - Backflow	0.00	14,732.59	14,732.59
Accounts Rec. - Water Residents	0.00	106,536.89	106,536.89
Unbilled Water Receivables	0.00	222,714.27	222,714.27
<b>Total Water - Accounts Receivable</b>	<u>0.00</u>	<u>341,908.49</u>	<u>341,908.49</u>
<b>Total Accounts Receivable</b>	17,320.72	341,908.49	359,229.21
<b>Other Current Assets</b>			
Due from Kathryn Slater-Carter	232.31	382.31	614.62
Maint/Parts Inventory	0.00	42,656.32	42,656.32
<b>Total Other Current Assets</b>	<u>232.31</u>	<u>43,038.63</u>	<u>43,270.94</u>
<b>Total Current Assets</b>	7,329,613.12	2,662,395.31	9,992,008.43
<b>Fixed Assets</b>			
<b>Sewer - Fixed Assets</b>			
General Plant	2,335,210.98	0.00	2,335,210.98
Land	5,000.00	0.00	5,000.00
<b>Other Capital Improv.</b>			
Sewer-Original Cost	685,599.18	0.00	685,599.18
Other Cap. Improv.	2,564,810.39	0.00	2,564,810.39
<b>Total Other Capital Improv.</b>	<u>3,250,409.57</u>	<u>0.00</u>	<u>3,250,409.57</u>
<b>Seal Cove Collection System</b>	995,505.00	0.00	995,505.00
<b>Sewage Collection Facility</b>			
Collection Facility - Org. Cost	1,349,064.00	0.00	1,349,064.00
Collection Facility - Other	3,991,243.33	0.00	3,991,243.33
<b>Total Sewage Collection Facility</b>	<u>5,340,307.33</u>	<u>0.00</u>	<u>5,340,307.33</u>

**Montara Water & Sanitary District**  
**Funds Balance Sheet**  
**As of December 31, 2016**

Treatment Facility	244,539.84	0.00	244,539.84
Accumulated Depreciation	-7,394,155.00	0.00	-7,394,155.00
<b>Total Sewer - Fixed Assets</b>	<b>4,776,817.72</b>	<b>0.00</b>	<b>4,776,817.72</b>
<b>Water - Fixed Assets</b>			
General Plant	0.00	25,889,935.10	25,889,935.10
Land & Easements	0.00	734,500.00	734,500.00
Surface Water Rights	0.00	300,000.00	300,000.00
Water Meters	0.00	1,058,985.00	1,058,985.00
Fixed Assets - Other	0.00	48,171.78	48,171.78
Accumulated Depreciation	0.00	-8,896,821.00	-8,896,821.00
<b>Total Water - Fixed Assets</b>	<b>0.00</b>	<b>19,134,770.88</b>	<b>19,134,770.88</b>
<b>Total Fixed Assets</b>	<b>4,776,817.72</b>	<b>19,134,770.88</b>	<b>23,911,588.60</b>
<b>Other Assets</b>			
<b>Sewer - Other Assets</b>			
Def'd Amts Related to Pensions	13,495.00	0.00	13,495.00
Joint Power Authority			
SAM - Orig Collection Facility	981,592.00	0.00	981,592.00
SAM - Expansion	1,705,955.08	0.00	1,705,955.08
<b>Total Joint Power Authority</b>	<b>2,687,547.08</b>	<b>0.00</b>	<b>2,687,547.08</b>
<b>Total Sewer - Other Assets</b>	<b>2,701,042.08</b>	<b>0.00</b>	<b>2,701,042.08</b>
<b>Water - Other Assets</b>			
Def'd Amts Related to Pensions	0.00	26,821.00	26,821.00
Due from Sewer	0.00	146,418.50	146,418.50
Bond Acquisition Cost OID	0.00	57,636.40	57,636.40
Bond Issue Cost	0.00	61,691.45	61,691.45
<b>Total Water - Other Assets</b>	<b>0.00</b>	<b>292,567.35</b>	<b>292,567.35</b>
<b>Total Other Assets</b>	<b>2,701,042.08</b>	<b>292,567.35</b>	<b>2,993,609.43</b>
<b>TOTAL ASSETS</b>	<b><u>14,807,472.92</u></b>	<b><u>22,089,733.54</u></b>	<b><u>36,897,206.46</u></b>
<b>LIABILITIES &amp; EQUITY</b>			
<b>Liabilities</b>			
<b>Current Liabilities</b>			
<b>Other Current Liabilities</b>			
<b>Sewer - Current Liabilities</b>			
Accrued Payables - Sewer	-75.00	0.00	-75.00
Accrued Vacations	6,911.83	0.00	6,911.83
Deposits Payable	16,549.00	0.00	16,549.00
PNC Equip. Loan - S/T	21,649.07	0.00	21,649.07
<b>Total Sewer - Current Liabilities</b>	<b>45,034.90</b>	<b>0.00</b>	<b>45,034.90</b>
<b>Water - Current Liabilities</b>			
Accrued Payables - Water	0.00	978.90	978.90
Accrued Vacations	0.00	10,719.62	10,719.62
Deposits Payable	0.00	13,059.93	13,059.93
GO Bonds - S/T	0.00	429,138.70	429,138.70
PFP Water Deposits	0.00	4,302.50	4,302.50
PNC Equip. Loan - S/T	0.00	21,649.05	21,649.05
SRF Loan Payable X102 - Current	0.00	81,026.93	81,026.93
SRF Loan Payable X109 - Current	0.00	158,287.99	158,287.99
<b>Total Water - Current Liabilities</b>	<b>0.00</b>	<b>719,163.62</b>	<b>719,163.62</b>
<b>Payroll Liabilities</b>			
Employee Benefits Payable	2,609.65	7,515.41	10,125.06
<b>Total Payroll Liabilities</b>	<b>2,609.65</b>	<b>7,515.41</b>	<b>10,125.06</b>
<b>Total Other Current Liabilities</b>	<b>47,644.55</b>	<b>726,679.03</b>	<b>774,323.58</b>

**Montara Water & Sanitary District**  
**Funds Balance Sheet**  
As of December 31, 2016

<b>Total Current Liabilities</b>	47,644.55	726,679.03	774,323.58
<b>Long Term Liabilities</b>			
<b>Sewer - Long Term Liabilities</b>			
Due to Water Fund	146,418.50	0.00	146,418.50
Accrued Vacations	9,853.51	0.00	9,853.51
I-Bank Loan	812,574.49	0.00	812,574.49
PNC Equip. Loan - L/T	640,930.10	0.00	640,930.10
<b>Total Sewer - Long Term Liabilities</b>	<u>1,609,776.60</u>	<u>0.00</u>	<u>1,609,776.60</u>
<b>Water - Long Term Liabilities</b>			
Accrued Vacations	0.00	9,969.14	9,969.14
Deferred on Refunding	0.00	-224,756.00	-224,756.00
GO Bonds - L/T	0.00	11,479,503.08	11,479,503.08
PNC Equip. Loan - L/T	0.00	640,930.13	640,930.13
SRF Loan Payable - X102	0.00	91,108.13	91,108.13
SRF Loan Payable - X109	0.00	3,541,174.66	3,541,174.66
<b>Total Water - Long Term Liabilities</b>	<u>0.00</u>	<u>15,537,929.14</u>	<u>15,537,929.14</u>
<b>Total Long Term Liabilities</b>	<u>1,609,776.60</u>	<u>15,537,929.14</u>	<u>17,147,705.74</u>
<b>Total Liabilities</b>	1,657,421.15	16,264,608.17	17,922,029.32
<b>Equity</b>			
<b>Sewer - Equity Accounts</b>			
Capital Assets Net	3,408,252.20	0.00	3,408,252.20
Fund Balance - Unrestricted	8,646,292.87	0.00	8,646,292.87
Retained Earnings	197,366.07	0.00	197,366.07
<b>Total Sewer - Equity Accounts</b>	<u>12,251,911.14</u>	<u>0.00</u>	<u>12,251,911.14</u>
<b>Water - Equity Accounts</b>			
Capital Assets Net	0.00	2,868,858.70	2,868,858.70
Restricted Debt Service	0.00	1,384,997.90	1,384,997.90
Unrestricted	0.00	-1,562,801.59	-1,562,801.59
Retained Earnings	0.00	-197,366.07	-197,366.07
<b>Total Water - Equity Accounts</b>	<u>0.00</u>	<u>2,493,688.94</u>	<u>2,493,688.94</u>
<b>Equity Adjustment Account</b>	1,359,086.37	2,793,857.13	4,152,943.50
<b>Net Income</b>	<u>-460,945.74</u>	<u>537,579.30</u>	<u>76,633.56</u>
<b>Total Equity</b>	<u>13,150,051.77</u>	<u>5,825,125.37</u>	<u>18,975,177.14</u>
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<u><u>14,807,472.92</u></u>	<u><u>22,089,733.54</u></u>	<u><u>36,897,206.46</u></u>





**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Sewer**  
July 2016 through June 2017

	Jul 16	Aug 16	Sep 16	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	TOTAL				
													Jul '16 - Jun 17	Budget	\$ Over Budget	% of Budget	
<b>Ordinary Income/Expense</b>																	
<b>Income</b>																	
4220 · Cell Tower Lease	2,857.30	2,857.30	2,857.30	2,857.30	2,857.30	2,857.30							17,143.80	30,708.33	-13,564.53	55.83%	
4400 · Fees																	
4410 · Administrative Fee (New Constr)		487.00				974.00							1,461.00	2,750.00	-1,289.00	53.13%	
4420 · Administrative Fee (Remodel)	487.00	487.00		474.00									1,448.00	1,375.00	73.00	105.31%	
4430 · Inspection Fee (New Constr)		460.00				920.00							1,380.00	2,291.67	-911.67	60.22%	
4440 · Inspection Fee (Remodel)	566.00	460.00	530.00	908.00		430.00							2,894.00	3,208.33	-314.33	90.2%	
4460 · Remodel Fees	341.00	682.00	106.00	1,942.90		324.00							3,395.90	6,416.67	-3,020.77	52.92%	
<b>Total 4400 · Fees</b>	<b>1,394.00</b>	<b>2,576.00</b>	<b>636.00</b>	<b>3,324.90</b>		<b>2,648.00</b>							<b>10,578.90</b>	<b>16,041.67</b>	<b>-5,462.77</b>	<b>65.95%</b>	
4610 · Property Tax Receipts				521.37	22,366.27	100,892.31							123,779.95	235,000.00	-111,220.05	52.67%	
4710 · Sewer Service Charges						1,002,502.87							1,002,502.87	1,969,726.00	-967,223.13	50.9%	
4720 · Sewer Service Refunds, Customer					-667.68	-6,883.77							-7,551.45	-3,666.67	-3,884.78	205.95%	
4760 · Waste Collection Revenues	1,344.31	2,571.11	1,169.43	2,771.41	1,944.68	1,910.92							11,711.86	19,250.00	-7,538.14	60.84%	
4990 · Other Revenue		4.01			4.48	271.33							279.82				
<b>Total Income</b>	<b>5,595.61</b>	<b>8,008.42</b>	<b>4,662.73</b>	<b>9,474.98</b>	<b>26,505.05</b>	<b>1,104,198.96</b>							<b>1,158,445.75</b>	<b>2,267,059.33</b>	<b>-1,108,613.58</b>	<b>51.1%</b>	
<b>Gross Profit</b>	<b>5,595.61</b>	<b>8,008.42</b>	<b>4,662.73</b>	<b>9,474.98</b>	<b>26,505.05</b>	<b>1,104,198.96</b>							<b>1,158,445.75</b>	<b>2,267,059.33</b>	<b>-1,108,613.58</b>	<b>51.1%</b>	
<b>Expense</b>																	
5000 · Administrative																	
5190 · Bank Fees	2,803.19	350.36	306.87	283.42	307.91	300.85							4,352.60	5,041.67	-689.07	86.33%	
5200 · Board of Directors																	
5210 · Board Meetings		167.00	125.00	1,004.58	125.00	250.00							1,671.58	2,750.00	-1,078.42	60.79%	
5220 · Director Fees		112.50	262.50	450.00		637.50							1,462.50	3,025.00	-1,562.50	48.35%	
5230 · Election Expenses			819.68										819.68	3,666.67	-2,846.99	22.36%	
<b>Total 5200 · Board of Directors</b>		<b>279.50</b>	<b>1,207.18</b>	<b>1,454.58</b>	<b>125.00</b>	<b>887.50</b>							<b>3,953.76</b>	<b>9,441.67</b>	<b>-5,487.91</b>	<b>41.88%</b>	
5250 · Conference Attendance														1,833.33	-1,833.33		
5270 · Information Systems		126.87			390.00	150.00							666.87	5,500.00	-4,833.13	12.13%	
5300 · Insurance																	
5310 · Fidelity Bond														458.33	-458.33		
5320 · Property & Liability Insurance	1,918.47												1,918.47	1,558.33	360.14	123.11%	
<b>Total 5300 · Insurance</b>	<b>1,918.47</b>												<b>1,918.47</b>	<b>2,016.66</b>	<b>-98.19</b>	<b>95.13%</b>	
5350 · LAFCO Assessment					1,526.00								1,526.00	1,833.33	-307.33	83.24%	
5400 · Legal																	
5420 · Meeting Attendance, Legal		500.00	587.50	1,057.50		467.50							2,612.50	8,708.33	-6,095.83	30.0%	
5430 · General Legal		4,457.50	5,162.50	1,487.50	3,587.50	1,600.00							16,295.00	18,333.33	-2,038.33	88.88%	
<b>Total 5400 · Legal</b>		<b>4,957.50</b>	<b>5,750.00</b>	<b>2,545.00</b>	<b>3,587.50</b>	<b>2,067.50</b>							<b>18,907.50</b>	<b>27,041.66</b>	<b>-8,134.16</b>	<b>69.92%</b>	

**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Sewer**  
July 2016 through June 2017

													TOTAL			
	Jul 16	Aug 16	Sep 16	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	Jul '16 - Jun 17	Budget	\$ Over Budget	% of Budget
5510 - Maintenance, Office		391.98	2,136.78	32.63	550.00	1,621.28							4,732.67	7,333.33	-2,600.66	64.54%
5530 - Memberships						708.00							708.00			
5540 - Office Supplies		1,488.07	361.58	1,456.12	206.75	510.47							4,022.99	7,333.33	-3,310.34	54.86%
5550 - Postage		100.00		77.85		100.00							277.85	2,291.67	-2,013.82	12.12%
5560 - Printing & Publishing		37.91	40.35		84.43	19.14							181.83	2,750.00	-2,568.17	6.61%
5600 - Professional Services																
5610 - Accounting			1,900.00	4,200.00	1,550.00	1,800.00							9,450.00	27,500.00	-18,050.00	34.36%
5620 - Audit			2,800.00		7,500.00	2,700.00							13,000.00	13,000.00		100.0%
5630 - Consulting		375.00	3,961.50	1,756.59	3,265.05	375.00							9,733.14	25,666.67	-15,933.53	37.92%
5640 - Data Services														5,500.00	-5,500.00	
5650 - Labor & HR Support	187.50		187.50	375.00		375.00							1,125.00	2,062.50	-937.50	54.55%
5660 - Payroll Services	73.94	74.95	75.94	74.95	74.95	75.94							450.67	733.33	-282.66	61.46%
5690 - Other Professional Services																
<b>Total 5600 - Professional Services</b>	<b>261.44</b>	<b>449.95</b>	<b>8,924.94</b>	<b>6,406.54</b>	<b>12,390.00</b>	<b>5,325.94</b>							<b>33,758.81</b>	<b>74,462.50</b>	<b>-40,703.69</b>	<b>45.34%</b>
5710 - San Mateo Co. Tax Roll Charges					119.00								119.00	2,291.67	-2,172.67	5.19%
5720 - Telephone & Internet	29.98	1,347.12	1,292.60	1,289.46	1,468.08	1,632.93							7,060.17	10,083.33	-3,023.16	70.02%
5730 - Mileage Reimbursement			23.03	513.71									536.74	1,375.00	-838.26	39.04%
5740 - Reference Materials														183.33	-183.33	
5800 - Labor																
5810 - CalPERS 457 Deferred Plan	1,134.69	1,254.27	1,627.78	1,230.60	1,237.00	1,254.64							7,738.98	13,857.25	-6,118.27	55.85%
5820 - Employee Benefits	2,865.14	2,865.14	2,865.14	2,865.14	2,865.14	2,865.14							17,190.84	31,516.83	-14,325.99	54.55%
5830 - Disability Insurance		113.37	113.37	113.36	113.36	113.36							566.82	1,355.75	-788.93	41.81%
5840 - Payroll Taxes	1,327.53	1,101.00	973.67	873.78	881.26	763.05							5,920.29	15,144.25	-9,223.96	39.09%
5850 - PARS	1,087.07	1,144.84	1,498.30	1,107.10	1,136.32	1,136.32							7,109.95	12,620.67	-5,510.72	56.34%
5900 - Wages																
5910 - Management	7,391.78	7,391.78	12,988.30	7,590.62	7,590.62	7,590.62							50,543.72	85,591.92	-35,048.20	59.05%
5920 - Staff	9,332.41	10,221.20	10,076.11	9,441.60	9,892.00	9,891.20							58,854.52	108,573.67	-49,719.15	54.21%
5930 - Staff Certification	150.00	150.00	150.00	150.00	150.00	150.00							900.00	1,650.00	-750.00	54.55%
5940 - Staff Overtime	478.96	155.35	39.81	398.10	39.81	291.94							1,403.97	2,144.08	-740.11	65.48%
5950 - Staff Standby																
<b>Total 5900 - Wages</b>	<b>17,353.15</b>	<b>17,918.33</b>	<b>23,254.22</b>	<b>17,580.32</b>	<b>17,672.43</b>	<b>17,923.76</b>							<b>111,702.21</b>	<b>197,959.67</b>	<b>-86,257.46</b>	<b>56.43%</b>
5960 - Worker's Comp Insurance				604.48									604.48	3,344.92	-2,740.44	18.07%
<b>Total 5800 - Labor</b>	<b>23,767.58</b>	<b>24,396.95</b>	<b>30,332.48</b>	<b>24,374.78</b>	<b>23,905.51</b>	<b>24,056.27</b>							<b>150,833.57</b>	<b>275,799.34</b>	<b>-124,965.77</b>	<b>54.69%</b>
<b>Total 5000 - Administrative</b>	<b>28,780.66</b>	<b>33,926.21</b>	<b>50,375.81</b>	<b>38,434.09</b>	<b>44,660.18</b>	<b>37,379.88</b>							<b>233,556.83</b>	<b>436,611.82</b>	<b>-203,054.99</b>	<b>53.49%</b>
6000 - Operations																
6170 - Claims, Property Damage														9,166.67	-9,166.67	



**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Sewer**  
July 2016 through June 2017

	Jul 16	Aug 16	Sep 16	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	TOTAL			
													Jul '16 - Jun 17	Budget	\$ Over Budget	% of Budget
6195 · Education & Training													916.67	-916.67		
6200 · Engineering																
6210 · Meeting Attendance, Engineering													1,833.33	-1,833.33		
6220 · General Engineering	1,253.00	5,519.00	0.09		4,101.00	7,160.75							18,033.84	45,833.33	-27,799.49	39.35%
<b>Total 6200 · Engineering</b>	<b>1,253.00</b>	<b>5,519.00</b>	<b>0.09</b>		<b>4,101.00</b>	<b>7,160.75</b>							<b>18,033.84</b>	<b>47,666.66</b>	<b>-29,632.82</b>	<b>37.83%</b>
6320 · Equipment & Tools, Expensed														916.67	-916.67	
6330 · Facilities																
6335 · Alarm Services	444.30	518.82	391.80	444.30	518.82	391.80							2,709.84	4,895.00	-2,185.16	55.36%
6337 · Landscaping		190.00	190.00	190.00	190.00	190.00							950.00	2,200.00	-1,250.00	43.18%
6330 · Facilities - Other																
<b>Total 6330 · Facilities</b>	<b>444.30</b>	<b>708.82</b>	<b>581.80</b>	<b>634.30</b>	<b>708.82</b>	<b>581.80</b>							<b>3,659.84</b>	<b>7,095.00</b>	<b>-3,435.16</b>	<b>51.58%</b>
6400 · Pumping																
6410 · Pumping Fuel & Electricity		2,368.80	2,723.57	2,490.01	2,278.55	2,522.97							12,383.90	24,750.00	-12,366.10	50.04%
<b>Total 6400 · Pumping</b>		<b>2,368.80</b>	<b>2,723.57</b>	<b>2,490.01</b>	<b>2,278.55</b>	<b>2,522.97</b>							<b>12,383.90</b>	<b>24,750.00</b>	<b>-12,366.10</b>	<b>50.04%</b>
6600 · Collection/Transmission																
6660 · Maintenance, Collection System														9,166.67	-9,166.67	
<b>Total 6600 · Collection/Transmission</b>														<b>9,166.67</b>	<b>-9,166.67</b>	
6800 · Vehicles																
6810 · Fuel														733.33	-733.33	
6820 · Truck Equipment, Expensed														146.67	-146.67	
6830 · Truck Repairs														366.67	-366.67	
<b>Total 6800 · Vehicles</b>														<b>1,246.67</b>	<b>-1,246.67</b>	
6900 · Sewer Authority Midcoastside																
6910 · SAM Collections	26,800.67	26,800.67	26,800.67	26,800.67	26,800.67	26,800.67							160,804.02	294,807.33	-134,003.31	54.55%
6920 · SAM Operations	57,877.58	57,877.58	57,877.58	57,877.58	57,877.58	57,877.58							347,265.48	636,653.42	-289,387.94	54.55%
6940 · SAM Maintenance, Collection Sys						55,256.53							55,256.53	36,666.67	18,589.86	150.7%
6950 · SAM Maintenance, Pumping														45,833.33	-45,833.33	
<b>Total 6900 · Sewer Authority Midcoastside</b>	<b>84,678.25</b>	<b>84,678.25</b>	<b>84,678.25</b>	<b>84,678.25</b>	<b>84,678.25</b>	<b>139,934.78</b>							<b>563,326.03</b>	<b>1,013,960.75</b>	<b>-450,634.72</b>	<b>55.56%</b>
<b>Total 6000 · Operations</b>	<b>86,375.55</b>	<b>93,274.87</b>	<b>87,983.71</b>	<b>87,802.56</b>	<b>91,766.62</b>	<b>150,200.30</b>							<b>597,403.61</b>	<b>1,114,885.76</b>	<b>-517,482.15</b>	<b>53.58%</b>
<b>Total Expense</b>	<b>115,156.21</b>	<b>127,201.08</b>	<b>138,359.52</b>	<b>126,236.65</b>	<b>136,426.80</b>	<b>187,580.18</b>							<b>830,960.44</b>	<b>1,551,497.58</b>	<b>-720,537.14</b>	<b>53.56%</b>
<b>Net Ordinary Income</b>	<b>-109,560.60</b>	<b>-119,192.66</b>	<b>-133,696.79</b>	<b>-116,761.67</b>	<b>-109,921.75</b>	<b>916,618.78</b>							<b>327,485.31</b>	<b>715,561.75</b>	<b>-388,076.44</b>	<b>45.77%</b>
<b>Other Income/Expense</b>																

**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Sewer**  
July 2016 through June 2017

	Jul 16	Aug 16	Sep 16	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	TOTAL				
													Jul '16 - Jun 17	Budget	\$ Over Budget	% of Budget	
<b>Other Income</b>																	
7000 · Capital Account Revenues																	
7100 · Connection Fees																	
7110 · Connection Fees (New Constr)		-433.57	79,040.00		-212.16								78,394.27	128,568.00	-50,173.73	60.98%	
7120 · Connection Fees (Remodel)	1,927.60	963.80	8,676.00	6,264.70		8,645.40							26,477.50	45,833.33	-19,355.83	57.77%	
<b>Total 7100 · Connection Fees</b>	<b>1,927.60</b>	<b>530.23</b>	<b>87,716.00</b>	<b>6,264.70</b>	<b>-212.16</b>	<b>8,645.40</b>							<b>104,871.77</b>	<b>174,401.33</b>	<b>-69,529.56</b>	<b>60.13%</b>	
7200 · Interest Income - LAIF														10,000.00	-10,000.00		
7700 · Interest, Employee Loans																	
<b>Total 7000 · Capital Account Revenues</b>	<b>1,927.60</b>	<b>530.23</b>	<b>87,716.00</b>	<b>6,264.70</b>	<b>-212.16</b>	<b>8,645.40</b>							<b>104,871.77</b>	<b>184,401.33</b>	<b>-79,529.56</b>	<b>56.87%</b>	
<b>Total Other Income</b>	<b>1,927.60</b>	<b>530.23</b>	<b>87,716.00</b>	<b>6,264.70</b>	<b>-212.16</b>	<b>8,645.40</b>							<b>104,871.77</b>	<b>184,401.33</b>	<b>-79,529.56</b>	<b>56.87%</b>	
<b>Other Expense</b>																	
8000 · Capital Improvement Program																	
8075 · Sewer	6,845.00	13,941.91	328.00	573,170.68	55,846.75	155,064.12							805,196.46	1,600,270.83	-795,074.37	50.32%	
<b>Total 8000 · Capital Improvement Program</b>	<b>6,845.00</b>	<b>13,941.91</b>	<b>328.00</b>	<b>573,170.68</b>	<b>55,846.75</b>	<b>155,064.12</b>							<b>805,196.46</b>	<b>1,600,270.83</b>	<b>-795,074.37</b>	<b>50.32%</b>	
9000 · Capital Account Expenses																	
9125 · PNC Equipment Lease Interest	840.38	1,672.69	1,663.98	1,655.25	1,646.50	1,637.73							9,116.53	17,969.06	-8,852.53	50.74%	
9175 · Capital Assessment - SAM	12,809.17	12,809.17	12,809.17	12,809.17	12,809.17	12,809.17							76,855.02	140,900.83	-64,045.81	54.55%	
9200 · I-Bank Loan	2,134.81												2,134.81	12,808.84	-10,674.03	16.67%	
<b>Total 9000 · Capital Account Expenses</b>	<b>15,784.36</b>	<b>14,481.86</b>	<b>14,473.15</b>	<b>14,464.42</b>	<b>14,455.67</b>	<b>14,446.90</b>							<b>88,106.36</b>	<b>171,678.73</b>	<b>-83,572.37</b>	<b>51.32%</b>	
<b>Total Other Expense</b>	<b>22,629.36</b>	<b>28,423.77</b>	<b>14,801.15</b>	<b>587,635.10</b>	<b>70,302.42</b>	<b>169,511.02</b>							<b>893,302.82</b>	<b>1,771,949.56</b>	<b>-878,646.74</b>	<b>50.41%</b>	
<b>Net Other Income</b>	<b>-20,701.76</b>	<b>-27,893.54</b>	<b>72,914.85</b>	<b>-581,370.40</b>	<b>-70,514.58</b>	<b>-160,865.62</b>							<b>-788,431.05</b>	<b>-1,587,548.23</b>	<b>799,117.18</b>	<b>49.66%</b>	
<b>Net Income</b>	<b>-130,262.36</b>	<b>-147,086.20</b>	<b>-60,781.94</b>	<b>-698,132.07</b>	<b>-180,436.33</b>	<b>755,753.16</b>							<b>-460,945.74</b>	<b>-871,986.48</b>	<b>411,040.74</b>	<b>52.86%</b>	

**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Water**  
July 2016 through June 2017

	Jul 16	Aug 16	Sep 16	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	TOTAL				
													Jul '16 - Jun 17	Budget	\$ Over Budget	% of Budget	
<b>Ordinary Income/Expense</b>																	
<b>Income</b>																	
4220 · Cell Tower Lease	2,857.29	2,857.29	2,857.29	2,857.29	2,857.29	2,857.29								17,143.74	30,708.33	-13,564.59	55.83%
4400 · Fees																	
4410 · Administrative Fee (New Constr)		974.00			974.00	974.00								2,922.00	4,125.00	-1,203.00	70.84%
4420 · Administrative Fee (Remodel)															825.00	-825.00	
4430 · Inspection Fee (New Constr)		920.00			920.00	920.00								2,760.00	3,895.83	-1,135.83	70.85%
4440 · Inspection Fee (Remodel)				460.00										460.00	733.33	-273.33	62.73%
<b>Total 4400 · Fees</b>		1,894.00		460.00	1,894.00	1,894.00								6,142.00	9,579.16	-3,437.16	64.12%
4610 · Property Tax Receipts				521.35	22,366.26	100,892.30								123,779.91	235,000.00	-111,220.09	52.67%
4740 · Testing, Backflow			6,548.00			5,618.00								12,166.00	11,916.67	249.33	102.09%
4810 · Water Sales, Domestic	148,457.14	150,557.73	181,904.17	163,485.10	151,741.35	114,265.07								910,410.56	1,650,000.00	-739,589.44	55.18%
4850 · Water Sales Refunds, Customer		-499.56												-499.56	-2,750.00	2,250.44	18.17%
4990 · Other Revenue		152.50	1,350.54		5,004.47									6,507.51			
<b>Total Income</b>	151,314.43	154,961.96	192,660.00	167,323.74	183,863.37	225,526.66								1,075,650.16	1,934,454.16	-858,804.00	55.61%
<b>Gross Profit</b>	151,314.43	154,961.96	192,660.00	167,323.74	183,863.37	225,526.66								1,075,650.16	1,934,454.16	-858,804.00	55.61%
<b>Expense</b>																	
5000 · Administrative																	
5190 · Bank Fees	1,256.24	502.91	429.66	452.15	425.60	498.93								3,565.49	9,166.67	-5,601.18	38.9%
5200 · Board of Directors																	
5210 · Board Meetings		166.99	125.00	1,004.58	125.00	250.00								1,671.57	2,750.00	-1,078.43	60.78%
5220 · Director Fees		112.50	262.50	450.00		637.50								1,462.50	3,025.00	-1,562.50	48.35%
5230 · Election Expenses			819.67											819.67	3,666.67	-2,847.00	22.36%
<b>Total 5200 · Board of Directors</b>		279.49	1,207.17	1,454.58	125.00	887.50								3,953.74	9,441.67	-5,487.93	41.88%
5240 · CDPH Fees															14,208.33	-14,208.33	
5250 · Conference Attendance															3,666.67	-3,666.67	
5270 · Information Systems		126.87			390.00	150.00								666.87	1,375.00	-708.13	48.5%
5300 · Insurance																	
5310 · Fidelity Bond															458.33	-458.33	
5320 · Property & Liability Insurance	1,918.46													1,918.46	2,475.00	-556.54	77.51%
<b>Total 5300 · Insurance</b>	1,918.46													1,918.46	2,933.33	-1,014.87	65.4%
5350 · LAFCO Assessment					2,048.00									2,048.00	2,291.67	-243.67	89.37%
5400 · Legal																	
5420 · Meeting Attendance, Legal		500.00	587.50	1,055.00		470.00								2,612.50	7,791.67	-5,179.17	33.53%
5430 · General Legal		4,017.50	4,300.00	3,275.00	3,975.00	2,662.50								18,230.00	55,000.00	-36,770.00	33.15%
<b>Total 5400 · Legal</b>		4,517.50	4,887.50	4,330.00	3,975.00	3,132.50								20,842.50	62,791.67	-41,949.17	33.19%



**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Water**  
July 2016 through June 2017

	Jul 16	Aug 16	Sep 16	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	TOTAL			
													Jul '16 - Jun 17	Budget	\$ Over Budget	% of Budget
5510 - Maintenance, Office		391.98	2,151.45	32.63	1,765.10	2,136.66							6,477.82	7,333.33	-855.51	88.33%
5530 - Memberships		255.00			15,635.21	7,074.00							22,964.21	16,500.00	6,464.21	139.18%
5540 - Office Supplies		1,488.06	361.59	1,456.10	206.74	510.45							4,022.94	7,333.33	-3,310.39	54.86%
5550 - Postage		570.00	318.17	989.77	130.52	570.00							2,578.46	5,500.00	-2,921.54	46.88%
5560 - Printing & Publishing		111.36	40.35		84.43	19.13							255.27	1,833.33	-1,578.06	13.92%
5600 - Professional Services																
5610 - Accounting			1,900.00	4,200.00	1,550.00	1,800.00							9,450.00	27,500.00	-18,050.00	34.36%
5620 - Audit			2,800.00		7,500.00	2,700.00							13,000.00	20,500.00	-7,500.00	63.42%
5630 - Consulting		375.00	3,961.49	1,756.59	2,365.62	10,315.55							18,774.25	22,916.67	-4,142.42	81.92%
5650 - Labor & HR Support	187.50		187.50	375.00		375.00							1,125.00	1,833.33	-708.33	61.36%
5660 - Payroll Services	73.95	74.94	75.94	74.94	74.94	75.94							450.65	779.17	-328.52	57.84%
5690 - Other Professional Services																
<b>Total 5600 - Professional Services</b>	<b>261.45</b>	<b>449.94</b>	<b>8,924.93</b>	<b>6,406.53</b>	<b>11,490.56</b>	<b>15,266.49</b>							<b>42,799.90</b>	<b>73,529.17</b>	<b>-30,729.27</b>	<b>58.21%</b>
5710 - San Mateo Co. Tax Roll Charges					119.00								119.00			
5720 - Telephone & Internet	29.97	1,732.10	2,109.52	1,662.18	1,872.91	2,078.37							9,485.05	15,583.33	-6,098.28	60.87%
5730 - Mileage Reimbursement		45.05	96.74	655.29	57.33	61.43							915.84	1,833.33	-917.49	49.96%
5740 - Reference Materials														733.33	-733.33	
5790 - Other Administrative	1,112.00												1,112.00			
5800 - Labor																
5810 - CalPERS 457 Deferred Plan	2,529.45	2,883.96	3,144.65	2,769.39	2,817.69	2,826.86							16,972.00	31,139.17	-14,167.17	54.5%
5820 - Employee Benefits	5,780.71	5,780.71	5,780.71	5,780.71	5,780.71	5,780.71							34,684.26	63,587.33	-28,903.07	54.55%
5830 - Disability Insurance		280.45	280.52	280.51	280.51	280.51							1,402.50	2,677.58	-1,275.08	52.38%
5840 - Payroll Taxes	3,131.43	3,208.58	2,941.70	2,897.95	2,908.65	2,760.26							17,848.57	37,192.83	-19,344.26	47.99%
5850 - PARS	2,052.14	2,315.19	2,617.77	2,180.06	2,264.56	2,264.56							13,694.28	24,754.58	-11,060.30	55.32%
5900 - Wages																
5910 - Management	7,391.76	7,391.76	12,990.28	7,590.60	7,590.60	7,590.60							50,545.60	85,591.92	-35,046.32	59.05%
5920 - Staff	26,704.42	31,295.80	30,285.26	29,268.13	29,969.76	29,615.70							177,139.07	321,558.42	-144,419.35	55.09%
5930 - Staff Certification	750.00	750.00	750.00	750.00	750.00	750.00							4,500.00	8,250.00	-3,750.00	54.55%
5940 - Staff Overtime	4,082.98	4,020.68	3,049.19	4,480.72	3,875.97	4,092.41							23,601.95	47,990.25	-24,388.30	49.18%
5950 - Staff Standby	2,003.78	2,010.97	1,933.58	1,951.52	1,986.48	1,982.45							11,868.78	22,785.58	-10,916.80	52.09%
<b>Total 5900 - Wages</b>	<b>40,932.94</b>	<b>45,469.21</b>	<b>49,008.31</b>	<b>44,040.97</b>	<b>44,172.81</b>	<b>44,031.16</b>							<b>267,655.40</b>	<b>486,176.17</b>	<b>-218,520.77</b>	<b>55.05%</b>
5960 - Worker's Comp Insurance				4,998.73									4,998.73	17,702.67	-12,703.94	28.24%
<b>Total 5800 - Labor</b>	<b>54,426.67</b>	<b>59,938.10</b>	<b>63,773.66</b>	<b>62,948.32</b>	<b>58,224.93</b>	<b>57,944.06</b>							<b>357,255.74</b>	<b>663,230.33</b>	<b>-305,974.59</b>	<b>53.87%</b>
<b>Total 5000 - Administrative</b>	<b>59,004.79</b>	<b>70,408.36</b>	<b>84,300.74</b>	<b>80,387.55</b>	<b>96,550.33</b>	<b>90,329.52</b>							<b>480,981.29</b>	<b>899,284.49</b>	<b>-418,303.20</b>	<b>53.49%</b>
6000 - Operations																
6160 - Backflow Prevention														916.67	-916.67	

**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Water**  
July 2016 through June 2017

	Jul 16	Aug 16	Sep 16	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	TOTAL			
													Jul '16 - Jun 17	Budget	\$ Over Budget	% of Budget
6170 - Claims, Property Damage				175.00									175.00	9,166.67	-8,991.67	1.91%
6180 - Communications																
6185 - SCADA Maintenance						9,939.23							9,939.23	13,750.00	-3,810.77	72.29%
6180 - Communications - Other		222.12		177.00									399.12			
<b>Total 6180 - Communications</b>		222.12		177.00		9,939.23							10,338.35	13,750.00	-3,411.65	75.19%
6195 - Education & Training		1,184.68	1,330.00	304.23	670.28	172.15							3,661.34	5,500.00	-1,838.66	66.57%
6200 - Engineering																
6210 - Meeting Attendance, Engineering														1,833.33	-1,833.33	
6220 - General Engineering		165.00	797.50	482.50		1,232.50							2,677.50	18,333.33	-15,655.83	14.61%
6230 - Water Quality Engineering		12,442.37	6,952.50	9,500.85		5,104.80							34,000.52	59,583.33	-25,582.81	57.06%
<b>Total 6200 - Engineering</b>		12,607.37	7,750.00	9,983.35		6,337.30							36,678.02	79,749.99	-43,071.97	45.99%
6320 - Equipment & Tools, Expensed		16.99	613.28		65.36	616.35							1,311.98	4,583.33	-3,271.35	28.63%
6330 - Facilities																
6335 - Alarm Services	52.50	127.02		52.50	127.02								359.04	687.50	-328.46	52.22%
6337 - Landscaping		420.00	437.73	420.00	485.80	420.00							2,183.53	5,500.00	-3,316.47	39.7%
6330 - Facilities - Other																
<b>Total 6330 - Facilities</b>	52.50	547.02	437.73	472.50	612.82	420.00							2,542.57	6,187.50	-3,644.93	41.09%
6370 - Lab Supplies & Equipment						11.96							11.96	916.67	-904.71	1.31%
6400 - Pumping																
6410 - Pumping Fuel & Electricity		5,182.01	5,080.12	5,343.54	4,965.79	4,594.61							25,166.07	91,666.67	-66,500.60	27.45%
6420 - Pumping Maintenance, Generators					4,934.49								4,934.49	7,333.33	-2,398.84	67.29%
6430 - Pumping Maintenance, General				466.63									466.63	2,291.67	-1,825.04	20.36%
6440 - Pumping Equipment, Expensed														1,833.33	-1,833.33	
<b>Total 6400 - Pumping</b>		5,182.01	5,080.12	5,810.17	9,900.28	4,594.61							30,567.19	103,125.00	-72,557.81	29.64%
6500 - Supply																
6510 - Maintenance, Raw Water Mains					49.47	1,301.10							1,350.57			
6520 - Maintenance, Wells		89.73	3.49		1,298.30								1,391.52	9,166.67	-7,775.15	15.18%
6530 - Water Purchases				14,082.76									14,082.76	36,666.67	-22,583.91	38.41%
<b>Total 6500 - Supply</b>		89.73	3.49	14,082.76	1,347.77	1,301.10							16,824.85	45,833.34	-29,008.49	36.71%
6600 - Collection/Transmission																
6610 - Hydrants				5,691.91	-1,872.96								3,818.95	916.67	2,902.28	416.61%
6620 - Maintenance, Water Mains		255.19	1,417.69	260.45	12,439.95	9,676.32							24,049.60	50,416.67	-26,367.07	47.7%
6630 - Maintenance, Water Svc Lines			108.35		68.38								176.73	22,916.67	-22,739.94	0.77%
6640 - Maintenance, Tanks		2.78											2.78	916.67	-913.89	0.3%
6650 - Maint., Distribution General		349.24			278.57	89.61							717.42	9,166.67	-8,449.25	7.83%
6670 - Meters			4,136.05	1,463.59	3,491.01								9,090.65	2,291.67	6,798.98	396.68%

**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Water**  
July 2016 through June 2017

												TOTAL				
	Jul 16	Aug 16	Sep 16	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	Jul '16 - Jun 17	Budget	\$ Over Budget	% of Budget
<b>Total 6600 · Collection/Transmission</b>		607.21	5,662.09	7,415.95	14,404.95	9,765.93							37,856.13	86,625.02	-48,768.89	43.7%
<b>6700 · Treatment</b>																
6710 · Chemicals & Filtering		388.92	2,950.54	1,571.80	1,631.28	1,269.77							7,812.31	27,500.00	-19,687.69	28.41%
6720 · Maintenance, Treatment Equip.			69.18	638.49									707.67	3,666.67	-2,959.00	19.3%
6730 · Treatment Analysis		1,043.42	473.94	7,742.30	2,164.75	2,309.39							13,733.80	27,500.00	-13,766.20	49.94%
6700 · Treatment - Other																
<b>Total 6700 · Treatment</b>		1,432.34	3,493.66	9,952.59	3,796.03	3,579.16							22,253.78	58,666.67	-36,412.89	37.93%
6770 · Uniforms		65.39	1,262.41	2,097.12	1,677.49	1,637.70							6,740.11	8,250.00	-1,509.89	81.7%
<b>6800 · Vehicles</b>																
6810 · Fuel		598.21	461.63	558.82	615.99	513.07							2,747.72	7,333.33	-4,585.61	37.47%
6820 · Truck Equipment, Expensed		104.06	9.04	45.79	26.30	87.30							272.49	916.67	-644.18	29.73%
6830 · Truck Repairs					853.43								853.43	4,583.33	-3,729.90	18.62%
<b>Total 6800 · Vehicles</b>		702.27	470.67	604.61	1,495.72	600.37							3,873.64	12,833.33	-8,959.69	30.18%
6890 · Other Operations		105.94											105.94			
<b>Total 6000 · Operations</b>	52.50	22,763.07	26,103.45	51,075.28	33,970.70	38,975.86							172,940.86	436,104.19	-263,163.33	39.66%
<b>Total Expense</b>	59,057.29	93,171.43	110,404.19	131,462.83	130,521.03	129,305.38							653,922.15	1,335,388.68	-681,466.53	48.97%
<b>Net Ordinary Income</b>	92,257.14	61,790.53	82,255.81	35,860.91	53,342.34	96,221.28							421,728.01	599,065.48	-177,337.47	70.4%
<b>Other Income/Expense</b>																
<b>Other Income</b>																
<b>7000 · Capital Account Revenues</b>																
<b>7100 · Connection Fees</b>																
7110 · Connection Fees (New Constr)			55,966.00		-654.96								55,311.04	117,333.33	-62,022.29	47.14%
7120 · Connection Fees (Remodel)				106.00									106.00	2,750.00	-2,644.00	3.86%
7130 · Conn. Fees, PFP (New Constr)		-5,160.00	35,357.00										30,197.00	59,583.33	-29,386.33	50.68%
<b>Total 7100 · Connection Fees</b>		-5,160.00	91,323.00	106.00	-654.96								85,614.04	179,666.66	-94,052.62	47.65%
7600 · Bond Revenues, G.O.				1,616.33	67,821.55	569,427.86							638,865.74	1,054,566.33	-415,700.59	60.58%
<b>Total 7000 · Capital Account Revenues</b>		-5,160.00	91,323.00	1,722.33	67,166.59	569,427.86							724,479.78	1,234,232.99	-509,753.21	58.7%
<b>Total Other Income</b>		-5,160.00	91,323.00	1,722.33	67,166.59	569,427.86							724,479.78	1,234,232.99	-509,753.21	58.7%
<b>Other Expense</b>																
<b>8000 · Capital Improvement Program</b>																
8100 · Water		37,701.72	377,765.15	36,814.58	62,516.67	13,983.74							528,781.86	567,416.67	-38,634.81	93.19%
<b>Total 8000 · Capital Improvement Program</b>		37,701.72	377,765.15	36,814.58	62,516.67	13,983.74							528,781.86	567,416.67	-38,634.81	93.19%



**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Water**  
July 2016 through June 2017

	Jul 16	Aug 16	Sep 16	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	TOTAL				
													Jul '16 - Jun 17	Budget	\$ Over Budget	% of Budget	
<b>9000 - Capital Account Expenses</b>																	
<b>9100 - Interest Expense - GO Bonds</b>		24,942.50											24,942.50	149,655.02	-124,712.52	16.67%	
<b>9125 - PNC Equipment Lease Interest</b>	840.37	1,672.69	1,663.98	1,655.26	1,646.50	1,637.73							9,116.53	17,969.06	-8,852.53	50.74%	
<b>9150 - SRF Loan</b>						45,287.60							45,287.60	18,991.52	26,296.08	238.46%	
<b>9210 - Conservation Program/Rebates</b>			200.00	200.00	100.00								500.00				
<b>Total 9000 - Capital Account Expenses</b>	840.37	26,615.19	1,863.98	1,855.26	1,746.50	46,925.33							79,846.63	186,615.60	-106,768.97	42.79%	
<b>Total Other Expense</b>	840.37	64,316.91	379,629.13	38,669.84	64,263.17	60,909.07							608,628.49	754,032.27	-145,403.78	80.72%	
<b>Net Other Income</b>	-840.37	-69,476.91	-288,306.13	-36,947.51	2,903.42	508,518.79							115,851.29	480,200.72	-364,349.43	24.13%	
<b>Net Income</b>	<b>91,416.77</b>	<b>-7,686.38</b>	<b>-206,050.32</b>	<b>-1,086.60</b>	<b>56,245.76</b>	<b>604,740.07</b>							<b>537,579.30</b>	<b>1,079,266.20</b>	<b>-541,686.90</b>	<b>49.81%</b>	



# MONTARA WATER AND SANITARY DISTRICT AGENDA

Prepared For the Meeting Of: **March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

**SUBJECT: Unaudited Financial Statements – Executive  
Summary**

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## **Budget vs. Actual – Sewer July thru January, 2017 Variances over \$2,000:**

- 4610 Property Tax Receipts, \$105,802 above Budget –The District received \$192,794 in ERAF funds, which was split between Sewer and Water funds.
- 4710 Sewer Service Charges, \$17,640 above Budget – 1<sup>st</sup> sewer service charges remitted by the County in December.
- 4720 – Sewer Service Refunds, \$5,218 below budget – Two refunds issued in the month of December for prior period miscalculations.
- **Overall Total Operating Income for the period ending January 31, 2017 was \$121,357 above budget. Total revenue received to date is \$1,263,387.**
- 5270 Information Systems, \$2,683 below Budget – Minimal activity to date.
- 5400 Legal, \$3,694 above Budget- Increased activity in the current fiscal year.
- 5610 Accounting, \$5,250 below Budget - Difference due to timing in the billing.
- 5630 Consulting, \$6,225 below Budget – District's Strategic Plan is still being developed.
- 5640 Data Services, \$3,500 below Budget – The services of Fred Weber are not utilized until April in concurrence with the budget.
- 6170 Claims, Property Damage, \$5,833 below Budget –No activity to date.
- 6200 Engineering, \$8,540 below Budget – Majority of costs have been related to capital improvement.
- 6600 Collection/Transmission, \$5,833 below Budget – No activity to date.
- 6940 SAM Maintenance, Collection Sys, \$31,923 above Budget – Payment made for Sewer Maintenance expenses.
- 6950 SAM Maintenance, Pumping, \$29,167 below Budget – No activity to date.
- **Overall Total Operating Expenses for the period ending January 31, 2017 were \$20,067 below Budget.**
- **Total overall Expenses for the period ending January 31, 2017 were \$31,214 below budget. For a net ordinary income of \$152,571, budgeted vs. actual. Actual net ordinary income is \$302,557.**



# MONTARA WATER AND SANITARY DISTRICT AGENDA

**Prepared For the Meeting Of: March 16, 2017**

**TO: BOARD OF DIRECTORS**

**FROM: Clemens H. Heldmaier, General Manager**

- 7100 Connection Fees, \$5,629 below Budget – No new construction connections issued. 1 remodel connection issued in January.
- 7200 Interest Income, LAIF, \$5,000 below budget – 1<sup>st</sup> FY quarter interest income has not yet been booked. The District is having difficulty locating LAIF statement.
- 8000 CIP, \$192,690 below Budget – Sewer improvement CIP charges paid for in January. However, minimal activity noted for the month.
- 9175 Capital Assessment – SAM, \$40,278 below Budget – The District received a \$27,469 assessment refund.
- 9200 I-Bank Loan, \$23,066 below Budget – Variance due to timing.





# MONTARA WATER AND SANITARY DISTRICT AGENDA

Prepared For the Meeting Of: March 16, 2017

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

- **Budget vs. Actual – Water July thru January, 2017 Variances over \$2,000:**
- 4610 Property tax Receipts, \$105,802 above Budget – The District received \$192,794 in ERAF funds, which was split between Sewer and Water funds.
- 4740 Testing, Backflow, \$4,583 above Budget – quarterly activity up over the fiscal year.
- 4810 Water Sales Domestic, \$10,784 above Budget – Anticipated water sales is keeping pace with budgeted projections.
- **Overall Total Operating Income for the period ending January 31, 2017 was \$132,167 above budget. Total revenue received to date is \$1,331,138.**
- 5240 CDPH Fees, \$9,042 below Budget – No Activity to date
- 5400 Legal, \$17,398 below Budget – Majority of costs have been related to the Sewer enterprise.
- 5510 Maintenance-Office, \$2,161 above Budget, - Electrical work to District offices performed in December.
- 5530 Memberships, \$16,467 above Budget, - Historically, membership fees paid on a calendar year basis. Variance will decrease as the fiscal year continues.
- 5610 Accounting, \$5,250 below Budget - Difference due to timing in the billing.
- 5620 Audit, \$7,500 below Budget – The District did not have to undergo a single audit. Thus reducing the overall fee.
- 5630 Consulting, \$4,566 above Budget – 24 T-He Age dating expense paid in December.
- 5800 Labor, \$6,430 above Budget – The District made a catch up payment for ACWA JPIA Insurance premiums in January.
- 6170 Claims, Property Damage, \$5,658 below Budget –Minimal activity to date.
- 6200 Engineering, \$6,751 below Budget – General Engineering costs have been held in check.
- 6400 Pumping, \$30,846 below Budget – PG&E costs have been less than expected to date. A large catch up bill is typically received and paid early in the calendar year.
- 6500 Supply, \$12,342 below Budget – No activity in January.
- 6600 Collection/Transmission, \$7,286 above Budget – Water Main maintenance one big bill in January.



# MONTARA WATER AND SANITARY DISTRICT AGENDA

Prepared For the Meeting Of: **March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

- 6700 Treatment, \$12,581 below Budget – Costs related to chemicals and filtering have been held below historic levels.
- 6800 Vehicles, \$4,291 below Budget – Indicative of lower fuel costs.
- **Overall Total Operating Expenses for the period ending January 31, 2017 were \$64,831 below Budget.**
- **Total overall Expenses for the period ending January 31, 2017 were \$77,466 below budget. For a net ordinary income of \$209,633, budgeted vs. actual. Actual net ordinary income is \$551,357.**
- 7100 Connection Fees, \$968 above Budget – 1 new construction connection as well as PFP connection issued in January.
- 7600 Bond Revenues, G.O. \$16,627 below Budget – 1<sup>st</sup> property tax assessment received in December.
- 8000 CIP, \$170,259 above Budget – The 4<sup>th</sup> street project closed in January.

## RECOMMENDATION:

This is for Board information only

## Montara Water & Sanitary District Revenue & Expenditures Budget vs. Actual - Sewer July 2016 through January 2017

	Jul '16 - Jan 17	Sewer Budget	\$ Over Budget
<b>Ordinary Income/Expense</b>			
<b>Income</b>			
4220 - Cell Tower Lease	20,001.10	19,541.69	459.41
4400 - Fees			
4410 - Administrative Fee (New Constr)	1,948.00	1,750.00	198.00
4420 - Administrative Fee (Remodel)	1,448.00	875.00	573.00
4430 - Inspection Fee (New Constr)	1,840.00	1,458.31	381.69
4440 - Inspection Fee (Remodel)	3,324.00	2,041.69	1,282.31
4460 - Remodel Fees	3,395.90	4,083.31	-687.41
<b>Total 4400 - Fees</b>	<b>11,955.90</b>	<b>10,208.31</b>	<b>1,747.59</b>
4610 - Property Tax Receipts	223,302.26	117,500.00	105,802.26
4710 - Sewer Service Charges	1,002,502.87	984,863.00	17,639.87
4720 - Sewer Service Refunds, Customer	-7,551.45	-2,333.31	-5,218.14
4760 - Waste Collection Revenues	12,896.61	12,250.00	646.61
4990 - Other Revenue	279.82		
<b>Total Income</b>	<b>1,263,387.11</b>	<b>1,142,029.69</b>	<b>121,357.42</b>
<b>Gross Profit</b>	<b>1,263,387.11</b>	<b>1,142,029.69</b>	<b>121,357.42</b>
<b>Expense</b>			
5000 - Administrative			
5190 - Bank Fees	4,659.14	3,208.31	1,450.83
5200 - Board of Directors			
5210 - Board Meetings	1,978.30	1,750.00	228.30
5220 - Director Fees	1,725.00	1,925.00	-200.00
5230 - Election Expenses	819.68	2,333.31	-1,513.63
<b>Total 5200 - Board of Directors</b>	<b>4,522.98</b>	<b>6,008.31</b>	<b>-1,485.33</b>
5250 - Conference Attendance	0.00	1,166.69	-1,166.69
5270 - Information Systems	816.87	3,500.00	-2,683.13
5300 - Insurance			
5310 - Fidelity Bond	0.00	291.69	-291.69
5320 - Property & Liability Insurance	1,918.47	991.69	926.78
<b>Total 5300 - Insurance</b>	<b>1,918.47</b>	<b>1,283.38</b>	<b>635.09</b>
5350 - LAFCO Assessment	1,526.00	1,166.69	359.31
5400 - Legal			
5420 - Meeting Attendance, Legal	3,175.00	5,541.69	-2,366.69
5430 - General Legal	17,727.50	11,666.69	6,060.81
<b>Total 5400 - Legal</b>	<b>20,902.50</b>	<b>17,208.38</b>	<b>3,694.12</b>
5510 - Maintenance, Office	5,082.67	4,666.69	415.98
5530 - Memberships	708.00		
5540 - Office Supplies	4,437.59	4,666.69	-229.10
5550 - Postage	505.70	1,458.31	-952.61
5560 - Printing & Publishing	201.41	1,750.00	-1,548.59



**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Sewer**  
 July 2016 through January 2017

	Jul '16 - Jan 17	Sewer Budget	\$ Over Budget
<b>5600 - Professional Services</b>			
5610 - Accounting	12,250.00	17,500.00	-5,250.00
5620 - Audit	13,000.00	13,000.00	0.00
5630 - Consulting	10,108.14	16,333.31	-6,225.17
5640 - Data Services	0.00	3,500.00	-3,500.00
5650 - Labor & HR Support	1,125.00	1,312.50	-187.50
5660 - Payroll Services	586.88	466.69	120.19
5690 - Other Professional Services	560.25		
<b>Total 5600 - Professional Services</b>	<b>37,630.27</b>	<b>52,112.50</b>	<b>-14,482.23</b>
<b>5710 - San Mateo Co. Tax Roll Charges</b>	<b>119.00</b>	<b>1,458.31</b>	<b>-1,339.31</b>
<b>5720 - Telephone &amp; Internet</b>	<b>8,299.29</b>	<b>6,416.69</b>	<b>1,882.60</b>
<b>5730 - Mileage Reimbursement</b>	<b>581.17</b>	<b>875.00</b>	<b>-293.83</b>
<b>5740 - Reference Materials</b>	<b>0.00</b>	<b>116.69</b>	<b>-116.69</b>
<b>5800 - Labor</b>			
5810 - CalPERS 457 Deferred Plan	8,998.26	8,818.25	180.01
5820 - Employee Benefits	23,464.72	20,056.19	3,408.53
5830 - Disability Insurance	680.18	862.75	-182.57
5840 - Payroll Taxes	7,296.54	9,637.25	-2,340.71
5850 - PARS	8,246.27	8,031.31	214.96
<b>5900 - Wages</b>			
5910 - Management	58,134.34	54,467.56	3,666.78
5920 - Staff	68,745.72	69,092.31	-346.59
5930 - Staff Certification	1,050.00	1,050.00	0.00
5940 - Staff Overtime	1,762.26	1,364.44	397.82
5950 - Staff Standby	0.00		
<b>Total 5900 - Wages</b>	<b>129,692.32</b>	<b>125,974.31</b>	<b>3,718.01</b>
<b>5960 - Worker's Comp Insurance</b>	<b>1,135.48</b>	<b>2,128.56</b>	<b>-993.08</b>
<b>Total 5800 - Labor</b>	<b>179,513.77</b>	<b>175,508.62</b>	<b>4,005.15</b>
<b>Total 5000 - Administrative</b>	<b>271,424.83</b>	<b>282,571.26</b>	<b>-11,146.43</b>
<b>6000 - Operations</b>			
6170 - Claims, Property Damage	0.00	5,833.31	-5,833.31
6195 - Education & Training	0.00	583.31	-583.31
<b>6200 - Engineering</b>			
6210 - Meeting Attendance, Engineering	0.00	1,166.69	-1,166.69
6220 - General Engineering	21,792.84	29,166.69	-7,373.85
<b>Total 6200 - Engineering</b>	<b>21,792.84</b>	<b>30,333.38</b>	<b>-8,540.54</b>
<b>6320 - Equipment &amp; Tools, Expensed</b>	<b>0.00</b>	<b>583.31</b>	<b>-583.31</b>
<b>6330 - Facilities</b>			
6335 - Alarm Services	3,154.14	3,115.00	39.14
6337 - Landscaping	1,140.00	1,400.00	-260.00
<b>Total 6330 - Facilities</b>	<b>4,294.14</b>	<b>4,515.00</b>	<b>-220.86</b>
<b>6400 - Pumping</b>			
6410 - Pumping Fuel & Electricity	14,760.54	15,750.00	-989.46
<b>Total 6400 - Pumping</b>	<b>14,760.54</b>	<b>15,750.00</b>	<b>-989.46</b>
<b>6600 - Collection/Transmission</b>			
6660 - Maintenance, Collection System	0.00	5,833.31	-5,833.31
<b>Total 6600 - Collection/Transmission</b>	<b>0.00</b>	<b>5,833.31</b>	<b>-5,833.31</b>

**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Sewer**  
 July 2016 through January 2017

	Jul '16 - Jan 17	Sewer Budget	\$ Over Budget
<b>6800 - Vehicles</b>			
6810 - Fuel	412.87	466.69	-53.82
6820 - Truck Equipment, Expensed	34.06	93.31	-59.25
6830 - Truck Repairs	106.68	233.31	-126.63
<b>Total 6800 - Vehicles</b>	553.61	793.31	-239.70
<b>6900 - Sewer Authority Midcoastside</b>			
6910 - SAM Collections	187,604.69	187,604.69	0.00
6920 - SAM Operations	405,143.06	405,143.06	0.00
6940 - SAM Maintenance, Collection Sys	55,256.53	23,333.31	31,923.22
6950 - SAM Maintenance, Pumping	0.00	29,166.69	-29,166.69
<b>Total 6900 - Sewer Authority Midcoastside</b>	648,004.28	645,247.75	2,756.53
<b>Total 6000 - Operations</b>	689,405.41	709,472.68	-20,067.27
<b>Total Expense</b>	960,830.24	992,043.94	-31,213.70
<b>Net Ordinary Income</b>	302,556.87	149,985.75	152,571.12
<b>Other Income/Expense</b>			
<b>Other Income</b>			
<b>7000 - Capital Account Revenues</b>			
7100 - Connection Fees			
7110 - Connection Fees (New Constr)	78,394.27	81,816.00	-3,421.73
7120 - Connection Fees (Remodel)	26,959.40	29,166.69	-2,207.29
<b>Total 7100 - Connection Fees</b>	105,353.67	110,982.69	-5,629.02
7200 - Interest Income - LAIF	0.00	5,000.00	-5,000.00
<b>Total 7000 - Capital Account Revenues</b>	105,353.67	115,982.69	-10,629.02
<b>Total Other Income</b>	105,353.67	115,982.69	-10,629.02
<b>Other Expense</b>			
<b>8000 - Capital Improvement Program</b>			
8075 - Sewer	825,664.13	1,018,354.19	-192,690.06
<b>Total 8000 - Capital Improvement Program</b>	825,664.13	1,018,354.19	-192,690.06
<b>9000 - Capital Account Expenses</b>			
9125 - PNC Equipment Lease Interest	10,745.46	11,585.85	-840.39
9175 - Capital Assessment - SAM	49,386.02	89,664.19	-40,278.17
9200 - I-Bank Loan	2,134.81	25,201.00	-23,066.19
<b>Total 9000 - Capital Account Expenses</b>	62,266.29	126,451.04	-64,184.75
<b>Total Other Expense</b>	887,930.42	1,144,805.23	-256,874.81
<b>Net Other Income</b>	-782,576.75	-1,028,822.54	246,245.79
<b>Net Income</b>	<b>-480,019.88</b>	<b>-878,836.79</b>	<b>398,816.91</b>

**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Water**  
 July 2016 through January 2017

	Water		
	Jul '16 - Jan 17	Budget	\$ Over Budget
<b>Ordinary Income/Expense</b>			
<b>Income</b>			
4220 · Cell Tower Lease	20,001.03	19,541.69	459.34
4400 · Fees			
4410 · Administrative Fee (New Constr)	3,896.00	2,625.00	1,271.00
4420 · Administrative Fee (Remodel)	0.00	525.00	-525.00
4430 · Inspection Fee (New Constr)	3,680.00	2,479.19	1,200.81
4440 · Inspection Fee (Remodel)	460.00	466.69	-6.69
<b>Total 4400 · Fees</b>	8,036.00	6,095.88	1,940.12
4610 · Property Tax Receipts	223,302.19	117,500.00	105,802.19
4740 · Testing, Backflow	12,166.00	7,583.31	4,582.69
4810 · Water Sales, Domestic	1,060,783.65	1,050,000.00	10,783.65
4850 · Water Sales Refunds, Customer	-499.56	-1,750.00	1,250.44
4990 · Other Revenue	7,348.23		
<b>Total Income</b>	1,331,137.54	1,198,970.88	132,166.66
<b>Gross Profit</b>	1,331,137.54	1,198,970.88	132,166.66
<b>Expense</b>			
5000 · Administrative			
5190 · Bank Fees	4,018.54	5,833.31	-1,814.77
5200 · Board of Directors			
5210 · Board Meetings	1,978.28	1,750.00	228.28
5220 · Director Fees	1,725.00	1,925.00	-200.00
5230 · Election Expenses	819.67	2,333.31	-1,513.64
<b>Total 5200 · Board of Directors</b>	4,522.95	6,008.31	-1,485.36
5240 · CDPH Fees	0.00	9,041.69	-9,041.69
5250 · Conference Attendance	703.50	2,333.31	-1,629.81
5270 · Information Systems	816.87	875.00	-58.13
5300 · Insurance			
5310 · Fidelity Bond	0.00	291.69	-291.69
5320 · Property & Liability Insurance	1,918.46	1,575.00	343.46
<b>Total 5300 · Insurance</b>	1,918.46	1,866.69	51.77
5350 · LAFCO Assessment	2,048.00	1,458.31	589.69
5400 · Legal			
5420 · Meeting Attendance, Legal	3,175.00	4,958.31	-1,783.31
5430 · General Legal	19,385.00	35,000.00	-15,615.00
<b>Total 5400 · Legal</b>	22,560.00	39,958.31	-17,398.31
5510 · Maintenance, Office	6,827.82	4,666.69	2,161.13
5530 · Memberships	26,967.21	10,500.00	16,467.21
5540 · Office Supplies	4,437.53	4,666.69	-229.16
5550 · Postage	3,313.54	3,500.00	-186.46
5560 · Printing & Publishing	274.85	1,166.69	-891.84
5600 · Professional Services			
5610 · Accounting	12,250.00	17,500.00	-5,250.00
5620 · Audit	13,000.00	20,500.00	-7,500.00
5630 · Consulting	19,149.25	14,583.31	4,565.94
5650 · Labor & HR Support	1,125.00	1,166.69	-41.69
5660 · Payroll Services	586.84	495.81	91.03
5690 · Other Professional Services	560.25		
<b>Total 5600 · Professional Services</b>	46,671.34	54,245.81	-7,574.47



## Montara Water & Sanitary District Revenue & Expenditures Budget vs. Actual - Water July 2016 through January 2017

	Water		
	Jul '16 - Jan 17	Budget	\$ Over Budget
5710 - San Mateo Co. Tax Roll Charges	119.00		
5720 - Telephone & Internet	11,284.73	9,916.69	1,368.04
5730 - Mileage Reimbursement	1,009.40	1,166.69	-157.29
5740 - Reference Materials	0.00	466.69	-466.69
5790 - Other Administrative	1,112.00		
5800 - Labor			
5810 - CalPERS 457 Deferred Plan	19,806.74	19,815.81	-9.07
5820 - Employee Benefits	47,415.95	40,464.69	6,951.26
5830 - Disability Insurance	1,683.01	1,703.94	-20.93
5840 - Payroll Taxes	21,255.59	23,668.19	-2,412.60
5850 - PARS	15,958.85	15,752.94	205.91
5900 - Wages			
5910 - Management	58,136.20	54,467.56	3,668.64
5920 - Staff	206,983.15	204,628.06	2,355.09
5930 - Staff Certification	5,250.00	5,250.00	0.00
5940 - Staff Overtime	27,911.90	30,539.25	-2,627.35
5950 - Staff Standby	13,910.20	14,499.94	-589.74
<b>Total 5900 - Wages</b>	<b>312,191.45</b>	<b>309,384.81</b>	<b>2,806.64</b>
5960 - Worker's Comp Insurance	10,173.73	11,265.31	-1,091.58
<b>Total 5800 - Labor</b>	<b>428,485.32</b>	<b>422,055.69</b>	<b>6,429.63</b>
<b>Total 5000 - Administrative</b>	<b>567,091.06</b>	<b>579,726.57</b>	<b>-12,635.51</b>
6000 - Operations			
6160 - Backflow Prevention	472.45	583.31	-110.86
6170 - Claims, Property Damage	175.00	5,833.31	-5,658.31
6180 - Communications			
6185 - SCADA Maintenance	9,939.23	8,750.00	1,189.23
6180 - Communications - Other	399.12		
<b>Total 6180 - Communications</b>	<b>10,338.35</b>	<b>8,750.00</b>	<b>1,588.35</b>
6195 - Education & Training	3,876.68	3,500.00	376.68
6200 - Engineering			
6210 - Meeting Attendance, Engineering	0.00	1,166.69	-1,166.69
6220 - General Engineering	2,732.50	11,666.69	-8,934.19
6230 - Water Quality Engineering	41,266.57	37,916.69	3,349.88
<b>Total 6200 - Engineering</b>	<b>43,999.07</b>	<b>50,750.07</b>	<b>-6,751.00</b>
6320 - Equipment & Tools, Expensed	1,311.98	2,916.69	-1,604.71
6330 - Facilities			
6335 - Alarm Services	411.54	437.50	-25.96
6337 - Landscaping	2,603.53	3,500.00	-896.47
<b>Total 6330 - Facilities</b>	<b>3,015.07</b>	<b>3,937.50</b>	<b>-922.43</b>
6370 - Lab Supplies & Equipment	11.96	583.31	-571.35
6400 - Pumping			
6410 - Pumping Fuel & Electricity	29,378.28	58,333.31	-28,955.03
6420 - Pumping Maintenance, Generators	4,934.49	4,666.69	267.80
6430 - Pumping Maintenance, General	466.63	1,458.31	-991.68
6440 - Pumping Equipment, Expensed	0.00	1,166.69	-1,166.69
<b>Total 6400 - Pumping</b>	<b>34,779.40</b>	<b>65,625.00</b>	<b>-30,845.60</b>

**Montara Water & Sanitary District**  
**Revenue & Expenditures Budget vs. Actual - Water**  
 July 2016 through January 2017

	Water		
	Jul '16 - Jan 17	Budget	\$ Over Budget
<b>6500 - Supply</b>			
6510 - Maintenance, Raw Water Mains	1,350.57		
6520 - Maintenance, Wells	1,391.52	5,833.31	-4,441.79
6530 - Water Purchases	14,082.76	23,333.31	-9,250.55
<b>Total 6500 - Supply</b>	16,824.85	29,166.62	-12,341.77
<b>6600 - Collection/Transmission</b>			
6610 - Hydrants	3,818.95	583.31	3,235.64
6620 - Maintenance, Water Mains	48,535.34	32,083.31	16,452.03
6630 - Maintenance, Water Svc Lines	176.73	14,583.31	-14,406.58
6640 - Maintenance, Tanks	2.78	583.31	-580.53
6650 - Maint., Distribution General	786.53	5,833.31	-5,046.78
6670 - Meters	9,090.65	1,458.31	7,632.34
<b>Total 6600 - Collection/Transmission</b>	62,410.98	55,124.86	7,286.12
<b>6700 - Treatment</b>			
6710 - Chemicals & Filtering	7,993.40	17,500.00	-9,506.60
6720 - Maintenance, Treatment Equip.	707.67	2,333.31	-1,625.64
6730 - Treatment Analysis	16,051.65	17,500.00	-1,448.35
<b>Total 6700 - Treatment</b>	24,752.72	37,333.31	-12,580.59
<b>6770 - Uniforms</b>	6,740.11	5,250.00	1,490.11
<b>6800 - Vehicles</b>			
6810 - Fuel	2,890.05	4,666.69	-1,776.64
6820 - Truck Equipment, Expensed	238.43	583.31	-344.88
6830 - Truck Repairs	746.75	2,916.69	-2,169.94
<b>Total 6800 - Vehicles</b>	3,875.23	8,166.69	-4,291.46
<b>6890 - Other Operations</b>	105.94		
<b>Total 6000 - Operations</b>	212,689.79	277,520.67	-64,830.88
<b>Total Expense</b>	779,780.85	857,247.24	-77,466.39
<b>Net Ordinary Income</b>	551,356.69	341,723.64	209,633.05
<b>Other Income/Expense</b>			
<b>Other Income</b>			
<b>7000 - Capital Account Revenues</b>			
7100 - Connection Fees			
7110 - Connection Fees (New Constr)	72,613.04	74,666.69	-2,053.65
7120 - Connection Fees (Remodel)	106.00	1,750.00	-1,644.00
7130 - Conn. Fees, PFP (New Constr)	42,582.00	37,916.69	4,665.31
<b>Total 7100 - Connection Fees</b>	115,301.04	114,333.38	967.66
<b>7600 - Bond Revenues, G.O.</b>	654,460.59	671,087.69	-16,627.10
<b>Total 7000 - Capital Account Revenues</b>	769,761.63	785,421.07	-15,659.44
<b>Total Other Income</b>	769,761.63	785,421.07	-15,659.44
<b>Other Expense</b>			
<b>8000 - Capital Improvement Program</b>			
8100 - Water	531,341.86	361,083.31	170,258.55
<b>Total 8000 - Capital Improvement Program</b>	531,341.86	361,083.31	170,258.55

## Montara Water & Sanitary District Funds Balance Sheet As of January 31, 2017

	Sewer	Water	TOTAL
<b>ASSETS</b>			
<b>Current Assets</b>			
<b>Checking/Savings</b>			
<b>Sewer - Bank Accounts</b>			
Wells Fargo Operating - Sewer	2,577,749.97	0.00	2,577,749.97
<b>LAIF Investment Fund</b>			
Capital Reserve	3,853,967.15	0.00	3,853,967.15
Connection Fees Reserve	152,756.00	0.00	152,756.00
Operating Reserve	281,893.00	0.00	281,893.00
<b>Total LAIF Investment Fund</b>	<u>4,288,616.15</u>	<u>0.00</u>	<u>4,288,616.15</u>
<b>Total Sewer - Bank Accounts</b>	6,866,366.12	0.00	6,866,366.12
<b>Water - Bank Accounts</b>			
Wells Fargo Operating - Water	0.00	675,824.13	675,824.13
Capital Reserve	0.00	398,249.00	398,249.00
Operating Reserve	0.00	190,251.00	190,251.00
<b>Restricted Cash</b>			
Acq & Improv Fund	0.00	436.13	436.13
Connection Fees Reserve	0.00	157,000.00	157,000.00
Cost of Issuance	0.00	122.94	122.94
GO Bonds Fund	0.00	1,442,649.57	1,442,649.57
<b>Total Restricted Cash</b>	<u>0.00</u>	<u>1,600,208.64</u>	<u>1,600,208.64</u>
<b>Total Water - Bank Accounts</b>	<u>0.00</u>	<u>2,864,532.77</u>	<u>2,864,532.77</u>
<b>Total Checking/Savings</b>	6,866,366.12	2,864,532.77	9,730,898.89
<b>Accounts Receivable</b>			
<b>Sewer - Accounts Receivable</b>			
Accounts Receivable	17,320.72	0.00	17,320.72
<b>Total Sewer - Accounts Receivable</b>	<u>17,320.72</u>	<u>0.00</u>	<u>17,320.72</u>
<b>Water - Accounts Receivable</b>			
Accounts Receivable	0.00	-2,075.26	-2,075.26
Accounts Rec. - Backflow	0.00	11,399.59	11,399.59
Accounts Rec. - Water Residents	0.00	105,922.02	105,922.02
Unbilled Water Receivables	0.00	222,714.27	222,714.27
<b>Total Water - Accounts Receivable</b>	<u>0.00</u>	<u>337,960.62</u>	<u>337,960.62</u>
<b>Total Accounts Receivable</b>	17,320.72	337,960.62	355,281.34
<b>Other Current Assets</b>			
Due from Kathryn Slater-Carter	232.31	382.31	614.62
Maint/Parts Inventory	0.00	42,656.32	42,656.32
<b>Total Other Current Assets</b>	<u>232.31</u>	<u>43,038.63</u>	<u>43,270.94</u>
<b>Total Current Assets</b>	6,883,919.15	3,245,532.02	10,129,451.17
<b>Fixed Assets</b>			
<b>Sewer - Fixed Assets</b>			
General Plant	2,335,210.98	0.00	2,335,210.98
Land	5,000.00	0.00	5,000.00
<b>Other Capital Improv.</b>			
Sewer-Original Cost	685,599.18	0.00	685,599.18
Other Cap. Improv.	2,564,810.39	0.00	2,564,810.39
<b>Total Other Capital Improv.</b>	<u>3,250,409.57</u>	<u>0.00</u>	<u>3,250,409.57</u>
Seal Cove Collection System	995,505.00	0.00	995,505.00
<b>Sewage Collection Facility</b>			
Collection Facility - Org. Cost	1,349,064.00	0.00	1,349,064.00
Collection Facility - Other	3,991,243.33	0.00	3,991,243.33
<b>Total Sewage Collection Facility</b>	<u>5,340,307.33</u>	<u>0.00</u>	<u>5,340,307.33</u>

**Montara Water & Sanitary District**  
**Funds Balance Sheet**  
**As of January 31, 2017**

Treatment Facility	244,539.84	0.00	244,539.84
Accumulated Depreciation	-7,394,155.00	0.00	-7,394,155.00
<b>Total Sewer - Fixed Assets</b>	<u>4,776,817.72</u>	<u>0.00</u>	<u>4,776,817.72</u>
<b>Water - Fixed Assets</b>			
General Plant	0.00	25,889,935.10	25,889,935.10
Land & Easements	0.00	734,500.00	734,500.00
Surface Water Rights	0.00	300,000.00	300,000.00
Water Meters	0.00	1,058,985.00	1,058,985.00
Fixed Assets - Other	0.00	48,171.78	48,171.78
Accumulated Depreciation	0.00	-8,896,821.00	-8,896,821.00
<b>Total Water - Fixed Assets</b>	<u>0.00</u>	<u>19,134,770.88</u>	<u>19,134,770.88</u>
<b>Total Fixed Assets</b>	<u>4,776,817.72</u>	<u>19,134,770.88</u>	<u>23,911,588.60</u>
<b>Other Assets</b>			
<b>Sewer - Other Assets</b>			
Def'd Amts Related to Pensions	13,495.00	0.00	13,495.00
Joint Power Authority			
SAM - Orig Collection Facility	981,592.00	0.00	981,592.00
SAM - Expansion	1,705,955.08	0.00	1,705,955.08
<b>Total Joint Power Authority</b>	<u>2,687,547.08</u>	<u>0.00</u>	<u>2,687,547.08</u>
<b>Total Sewer - Other Assets</b>	<u>2,701,042.08</u>	<u>0.00</u>	<u>2,701,042.08</u>
<b>Water - Other Assets</b>			
Def'd Amts Related to Pensions	0.00	26,821.00	26,821.00
Due from Sewer	0.00	146,418.50	146,418.50
Bond Acquisition Cost OID	0.00	57,636.40	57,636.40
Bond Issue Cost	0.00	61,691.45	61,691.45
<b>Total Water - Other Assets</b>	<u>0.00</u>	<u>292,567.35</u>	<u>292,567.35</u>
<b>Total Other Assets</b>	<u>2,701,042.08</u>	<u>292,567.35</u>	<u>2,993,609.43</u>
<b>TOTAL ASSETS</b>	<u><b>14,361,778.95</b></u>	<u><b>22,672,870.25</b></u>	<u><b>37,034,649.20</b></u>
<b>LIABILITIES &amp; EQUITY</b>			
<b>Liabilities</b>			
<b>Current Liabilities</b>			
<b>Other Current Liabilities</b>			
<b>Sewer - Current Liabilities</b>			
Accrued Payables - Sewer	-75.00	0.00	-75.00
Accrued Vacations	6,911.83	0.00	6,911.83
Deposits Payable	18,201.50	0.00	18,201.50
PNC Equip. Loan - S/T	18,063.01	0.00	18,063.01
<b>Total Sewer - Current Liabilities</b>	<u>43,101.34</u>	<u>0.00</u>	<u>43,101.34</u>
<b>Water - Current Liabilities</b>			
Accrued Payables - Water	0.00	978.90	978.90
Accrued Vacations	0.00	10,719.62	10,719.62
Deposits Payable	0.00	15,394.43	15,394.43
GO Bonds - S/T	0.00	429,138.70	429,138.70
PFP Water Deposits	0.00	4,302.50	4,302.50
PNC Equip. Loan - S/T	0.00	18,062.98	18,062.98
SRF Loan Payable X102 - Current	0.00	81,026.93	81,026.93
SRF Loan Payable X109 - Current	0.00	158,287.99	158,287.99
<b>Total Water - Current Liabilities</b>	<u>0.00</u>	<u>717,912.05</u>	<u>717,912.05</u>
<b>Payroll Liabilities</b>			
Employee Benefits Payable	3,255.35	8,241.89	11,497.24
<b>Total Payroll Liabilities</b>	<u>3,255.35</u>	<u>8,241.89</u>	<u>11,497.24</u>
<b>Total Other Current Liabilities</b>	<u>46,356.69</u>	<u>726,153.94</u>	<u>772,510.63</u>



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2/17/17

Accrual Basis

**Montara Water & Sanitary District**  
**Funds Balance Sheet**  
As of January 31, 2017

<b>Total Current Liabilities</b>	46,356.69	726,153.94	772,510.63
<b>Long Term Liabilities</b>			
<b>Sewer - Long Term Liabilities</b>			
Due to Water Fund	146,418.50	0.00	146,418.50
Accrued Vacations	9,853.51	0.00	9,853.51
I-Bank Loan	800,182.73	0.00	800,182.73
PNC Equip. Loan - L/T	640,930.10	0.00	640,930.10
<b>Total Sewer - Long Term Liabilities</b>	<u>1,597,384.84</u>	<u>0.00</u>	<u>1,597,384.84</u>
<b>Water - Long Term Liabilities</b>			
Accrued Vacations	0.00	9,969.14	9,969.14
Deferred on Refunding	0.00	-224,756.00	-224,756.00
GO Bonds - L/T	0.00	11,479,503.08	11,479,503.08
PNC Equip. Loan - L/T	0.00	640,930.13	640,930.13
SRF Loan Payable - X102	0.00	91,108.13	91,108.13
SRF Loan Payable - X109	0.00	3,541,174.66	3,541,174.66
<b>Total Water - Long Term Liabilities</b>	<u>0.00</u>	<u>15,537,929.14</u>	<u>15,537,929.14</u>
<b>Total Long Term Liabilities</b>	<u>1,597,384.84</u>	<u>15,537,929.14</u>	<u>17,135,313.98</u>
<b>Total Liabilities</b>	1,643,741.53	16,264,083.08	17,907,824.61
<b>Equity</b>			
<b>Sewer - Equity Accounts</b>			
Capital Assets Net	3,408,252.20	0.00	3,408,252.20
Fund Balance - Unrestricted	8,646,292.87	0.00	8,646,292.87
Retained Earnings	-215,574.14	0.00	-215,574.14
<b>Total Sewer - Equity Accounts</b>	<u>11,838,970.93</u>	<u>0.00</u>	<u>11,838,970.93</u>
<b>Water - Equity Accounts</b>			
Capital Assets Net	0.00	2,868,858.70	2,868,858.70
Restricted Debt Service	0.00	1,384,997.90	1,384,997.90
Unrestricted	0.00	-1,562,801.59	-1,562,801.59
Retained Earnings	0.00	215,574.14	215,574.14
<b>Total Water - Equity Accounts</b>	<u>0.00</u>	<u>2,906,629.15</u>	<u>2,906,629.15</u>
<b>Equity Adjustment Account</b>	1,359,086.37	2,793,857.13	4,152,943.50
<b>Net Income</b>	<u>-480,019.88</u>	<u>708,300.89</u>	<u>228,281.01</u>
<b>Total Equity</b>	<u>12,718,037.42</u>	<u>6,408,787.17</u>	<u>19,126,824.59</u>
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<u><u>14,361,778.95</u></u>	<u><u>22,672,870.25</u></u>	<u><u>37,034,649.20</u></u>

## Montara Water & Sanitary District Funds Balance Sheet As of January 31, 2017

	Sewer	Water	TOTAL
<b>ASSETS</b>			
<b>Current Assets</b>			
<b>Checking/Savings</b>			
<b>Sewer - Bank Accounts</b>			
Wells Fargo Operating - Sewer	2,577,749.97	0.00	2,577,749.97
LAIF Investment Fund			
Capital Reserve	3,853,967.15	0.00	3,853,967.15
Connection Fees Reserve	152,756.00	0.00	152,756.00
Operating Reserve	281,893.00	0.00	281,893.00
<b>Total LAIF Investment Fund</b>	<b>4,288,616.15</b>	<b>0.00</b>	<b>4,288,616.15</b>
<b>Total Sewer - Bank Accounts</b>	<b>6,866,366.12</b>	<b>0.00</b>	<b>6,866,366.12</b>
<b>Water - Bank Accounts</b>			
Wells Fargo Operating - Water	0.00	675,824.13	675,824.13
Capital Reserve	0.00	398,249.00	398,249.00
Operating Reserve	0.00	190,251.00	190,251.00
<b>Restricted Cash</b>			
Acq & Improv Fund	0.00	436.13	436.13
Connection Fees Reserve	0.00	157,000.00	157,000.00
Cost of Issuance	0.00	122.94	122.94
GO Bonds Fund	0.00	1,442,649.57	1,442,649.57
<b>Total Restricted Cash</b>	<b>0.00</b>	<b>1,600,208.64</b>	<b>1,600,208.64</b>
<b>Total Water - Bank Accounts</b>	<b>0.00</b>	<b>2,864,532.77</b>	<b>2,864,532.77</b>
<b>Total Checking/Savings</b>	<b>6,866,366.12</b>	<b>2,864,532.77</b>	<b>9,730,898.89</b>
<b>Accounts Receivable</b>			
<b>Sewer - Accounts Receivable</b>			
Accounts Receivable	17,320.72	0.00	17,320.72
<b>Total Sewer - Accounts Receivable</b>	<b>17,320.72</b>	<b>0.00</b>	<b>17,320.72</b>
<b>Water - Accounts Receivable</b>			
Accounts Receivable	0.00	-2,075.26	-2,075.26
Accounts Rec. - Backflow	0.00	11,399.59	11,399.59
Accounts Rec. - Water Residents	0.00	105,922.02	105,922.02
Unbilled Water Receivables	0.00	222,714.27	222,714.27
<b>Total Water - Accounts Receivable</b>	<b>0.00</b>	<b>337,960.62</b>	<b>337,960.62</b>
<b>Total Accounts Receivable</b>	<b>17,320.72</b>	<b>337,960.62</b>	<b>355,281.34</b>
<b>Other Current Assets</b>			
Due from Kathryn Slater-Carter	232.31	382.31	614.62
Maint/Parts Inventory	0.00	42,656.32	42,656.32
<b>Total Other Current Assets</b>	<b>232.31</b>	<b>43,038.63</b>	<b>43,270.94</b>
<b>Total Current Assets</b>	<b>6,883,919.15</b>	<b>3,245,532.02</b>	<b>10,129,451.17</b>
<b>Fixed Assets</b>			
<b>Sewer - Fixed Assets</b>			
General Plant	2,335,210.98	0.00	2,335,210.98
Land	5,000.00	0.00	5,000.00
<b>Other Capital Improv.</b>			
Sewer-Original Cost	685,599.18	0.00	685,599.18
Other Cap. Improv.	2,564,810.39	0.00	2,564,810.39
<b>Total Other Capital Improv.</b>	<b>3,250,409.57</b>	<b>0.00</b>	<b>3,250,409.57</b>
<b>Seal Cove Collection System</b>	<b>995,505.00</b>	<b>0.00</b>	<b>995,505.00</b>
<b>Sewage Collection Facility</b>			
Collection Facility - Org. Cost	1,349,064.00	0.00	1,349,064.00
Collection Facility - Other	3,991,243.33	0.00	3,991,243.33
<b>Total Sewage Collection Facility</b>	<b>5,340,307.33</b>	<b>0.00</b>	<b>5,340,307.33</b>

**Montara Water & Sanitary District**  
**Funds Balance Sheet**  
**As of January 31, 2017**

Treatment Facility	244,539.84	0.00	244,539.84
Accumulated Depreciation	-7,394,155.00	0.00	-7,394,155.00
<b>Total Sewer - Fixed Assets</b>	<u>4,776,817.72</u>	<u>0.00</u>	<u>4,776,817.72</u>
<b>Water - Fixed Assets</b>			
General Plant	0.00	25,889,935.10	25,889,935.10
Land & Easements	0.00	734,500.00	734,500.00
Surface Water Rights	0.00	300,000.00	300,000.00
Water Meters	0.00	1,058,985.00	1,058,985.00
Fixed Assets - Other	0.00	48,171.78	48,171.78
Accumulated Depreciation	0.00	-8,896,821.00	-8,896,821.00
<b>Total Water - Fixed Assets</b>	<u>0.00</u>	<u>19,134,770.88</u>	<u>19,134,770.88</u>
<b>Total Fixed Assets</b>	<u>4,776,817.72</u>	<u>19,134,770.88</u>	<u>23,911,588.60</u>
<b>Other Assets</b>			
<b>Sewer - Other Assets</b>			
Def'd Amts Related to Pensions	13,495.00	0.00	13,495.00
Joint Power Authority			
SAM - Orig Collection Facility	981,592.00	0.00	981,592.00
SAM - Expansion	1,705,955.08	0.00	1,705,955.08
<b>Total Joint Power Authority</b>	<u>2,687,547.08</u>	<u>0.00</u>	<u>2,687,547.08</u>
<b>Total Sewer - Other Assets</b>	<u>2,701,042.08</u>	<u>0.00</u>	<u>2,701,042.08</u>
<b>Water - Other Assets</b>			
Def'd Amts Related to Pensions	0.00	26,821.00	26,821.00
Due from Sewer	0.00	146,418.50	146,418.50
Bond Acquisition Cost OID	0.00	57,636.40	57,636.40
Bond Issue Cost	0.00	61,691.45	61,691.45
<b>Total Water - Other Assets</b>	<u>0.00</u>	<u>292,567.35</u>	<u>292,567.35</u>
<b>Total Other Assets</b>	<u>2,701,042.08</u>	<u>292,567.35</u>	<u>2,993,609.43</u>
<b>TOTAL ASSETS</b>	<u><b>14,361,778.95</b></u>	<u><b>22,672,870.25</b></u>	<u><b>37,034,649.20</b></u>
<b>LIABILITIES &amp; EQUITY</b>			
<b>Liabilities</b>			
<b>Current Liabilities</b>			
<b>Other Current Liabilities</b>			
<b>Sewer - Current Liabilities</b>			
Accrued Payables - Sewer	-75.00	0.00	-75.00
Accrued Vacations	6,911.83	0.00	6,911.83
Deposits Payable	18,201.50	0.00	18,201.50
PNC Equip. Loan - S/T	18,063.01	0.00	18,063.01
<b>Total Sewer - Current Liabilities</b>	<u>43,101.34</u>	<u>0.00</u>	<u>43,101.34</u>
<b>Water - Current Liabilities</b>			
Accrued Payables - Water	0.00	978.90	978.90
Accrued Vacations	0.00	10,719.62	10,719.62
Deposits Payable	0.00	15,394.43	15,394.43
GO Bonds - S/T	0.00	429,138.70	429,138.70
PFP Water Deposits	0.00	4,302.50	4,302.50
PNC Equip. Loan - S/T	0.00	18,062.98	18,062.98
SRF Loan Payable X102 - Current	0.00	81,026.93	81,026.93
SRF Loan Payable X109 - Current	0.00	158,287.99	158,287.99
<b>Total Water - Current Liabilities</b>	<u>0.00</u>	<u>717,912.05</u>	<u>717,912.05</u>
<b>Payroll Liabilities</b>			
Employee Benefits Payable	3,255.35	8,241.89	11,497.24
<b>Total Payroll Liabilities</b>	<u>3,255.35</u>	<u>8,241.89</u>	<u>11,497.24</u>
<b>Total Other Current Liabilities</b>	<u>46,356.69</u>	<u>726,153.94</u>	<u>772,510.63</u>

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2/17/17

Accrual Basis

**Montara Water & Sanitary District**  
**Funds Balance Sheet**  
As of January 31, 2017

<b>Total Current Liabilities</b>	46,356.69	726,153.94	772,510.63
<b>Long Term Liabilities</b>			
<b>Sewer - Long Term Liabilities</b>			
Due to Water Fund	146,418.50	0.00	146,418.50
Accrued Vacations	9,853.51	0.00	9,853.51
I-Bank Loan	800,182.73	0.00	800,182.73
PNC Equip. Loan - L/T	640,930.10	0.00	640,930.10
<b>Total Sewer - Long Term Liabilities</b>	<u>1,597,384.84</u>	<u>0.00</u>	<u>1,597,384.84</u>
<b>Water - Long Term Liabilities</b>			
Accrued Vacations	0.00	9,969.14	9,969.14
Deferred on Refunding	0.00	-224,756.00	-224,756.00
GO Bonds - L/T	0.00	11,479,503.08	11,479,503.08
PNC Equip. Loan - L/T	0.00	640,930.13	640,930.13
SRF Loan Payable - X102	0.00	91,108.13	91,108.13
SRF Loan Payable - X109	0.00	3,541,174.66	3,541,174.66
<b>Total Water - Long Term Liabilities</b>	<u>0.00</u>	<u>15,537,929.14</u>	<u>15,537,929.14</u>
<b>Total Long Term Liabilities</b>	<u>1,597,384.84</u>	<u>15,537,929.14</u>	<u>17,135,313.98</u>
<b>Total Liabilities</b>	1,643,741.53	16,264,083.08	17,907,824.61
<b>Equity</b>			
<b>Sewer - Equity Accounts</b>			
Capital Assets Net	3,408,252.20	0.00	3,408,252.20
Fund Balance - Unrestricted	8,646,292.87	0.00	8,646,292.87
Retained Earnings	-215,574.14	0.00	-215,574.14
<b>Total Sewer - Equity Accounts</b>	<u>11,838,970.93</u>	<u>0.00</u>	<u>11,838,970.93</u>
<b>Water - Equity Accounts</b>			
Capital Assets Net	0.00	2,868,858.70	2,868,858.70
Restricted Debt Service	0.00	1,384,997.90	1,384,997.90
Unrestricted	0.00	-1,562,801.59	-1,562,801.59
Retained Earnings	0.00	215,574.14	215,574.14
<b>Total Water - Equity Accounts</b>	<u>0.00</u>	<u>2,906,629.15</u>	<u>2,906,629.15</u>
<b>Equity Adjustment Account</b>	1,359,086.37	2,793,857.13	4,152,943.50
<b>Net Income</b>	<u>-480,019.88</u>	<u>708,300.89</u>	<u>228,281.01</u>
<b>Total Equity</b>	<u>12,718,037.42</u>	<u>6,408,787.17</u>	<u>19,126,824.59</u>
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<u><u>14,361,778.95</u></u>	<u><u>22,672,870.25</u></u>	<u><u>37,034,649.20</u></u>





# MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: **March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager

**SUBJECT: SAM Flow Report for January 2017**

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The Sewer Authority Mid-Coastside (SAM) has prepared the following attached reports for the SAM Board of Directors and the California Regional Water Quality Control Board:

- Flow Report for January 2017.
- Collection System Monthly Overflow Report – January 2017.

The Average Daily Flow for Montara was 0.784 MGD in January 2017. There was one reportable overflow in January due to mechanical issues, and one overflow due to other reasons in the Montara System. SAM indicates there were 11.37 inches of rain in January 2017.

## RECOMMENDATION:

Review and file.

Attachments

# Sewer Authority Mid-Coastside

Monthly Collection System Activity/SSO Distribution Report, January 2017

January 2017

Total	Number of S.S.O.'s			
	HMB	GCSD	MWSD	SAM
Roots	0	0	0	0
Grease	0	0	0	0
Mechanical	1	0	1	0
Wet Weather	0	0	0	0
Other	1	0	1	0
<b>Total</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>
			<b>100%</b>	

### 12 Month Moving Total

Total	12 month rolling Number			
	HMB	GCSD	MWSD	SAM
Roots	2	3	4	0
Grease	0	0	0	0
Mechanical	2	0	1	1
Wet Weather	0	0	0	0
Other	4	2	2	0
<b>Total</b>	<b>15</b>	<b>5</b>	<b>7</b>	<b>1</b>
	<b>13%</b>	<b>33%</b>	<b>47%</b>	<b>7%</b>

### Reportable SSOs

Total	Reportable Number of S.S.O.'s			
	HMB	GCSD	MWSD	SAM
January 2017	0	0	2	0
<b>12 Month Moving Total</b>	<b>2</b>	<b>5</b>	<b>7</b>	<b>1</b>

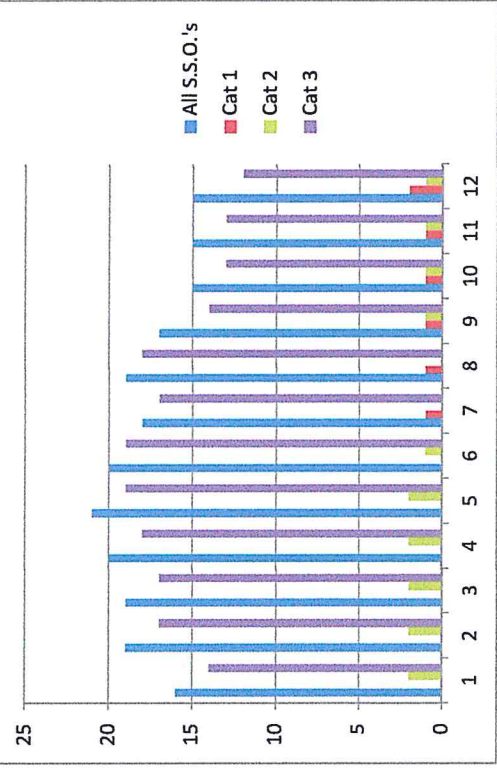
### SSOs / Year / 100 Miles

Total	Number of S.S.O.'s / Year / 100 Miles			
	HMB	GCSD	MWSD	SAM
January 2017	0.0	0.0	7.4	0.0
<b>12 Month Moving Total</b>	<b>14.4</b>	<b>15.1</b>	<b>25.9</b>	<b>13.7</b>
Category 1	0.0	0.0	7.4	0.0
Category 2	0.0	0.0	0.0	13.7
Category 3	5.4	15.1	18.5	0.0
<b>Miles of Sewers</b>	<b>104.5</b>	<b>33.2</b>	<b>27.0</b>	<b>7.3</b>
	<b>35.4%</b>	<b>31.8%</b>	<b>25.8%</b>	<b>7.0%</b>

### 12 Month Rolling Total Sewer Cleaning Summary

Month	HMB	GCSD	MWSD	Total Feet	Total Miles
Feb-16	8,952	7,014	10,830	26,796	5.1
Mar-16	12,396	17,919	11,725	42,040	8.0
Apr-16	8,468	10,816	12,705	31,989	6.1
May-16	11,530	15,123	11,652	38,305	7.3
June-16	9,762	2,161	7,367	19,290	3.7
July-16	34,037	28,984	8,192	71,213	13.5
Aug -16	31,070	5,694	16,714	53,478	10.1
Sep - 16	13,228	35,432	11,406	60,066	11.4
Oct - 16	27,226	7,389	15,283	49,898	9.5
Nov - 16	25,535	33,638	10,436	69,609	13.2
Dec - 16	33,928	19,306	10,127	63,361	12.0
Jan - 17	16,650	16,144	11,837	44,631	8.5
<b>Annual ft</b>	<b>232,782</b>	<b>199,620</b>	<b>138,274</b>	<b>570,676</b>	
<b>Annual Mi.</b>	<b>44.1</b>	<b>37.8</b>	<b>26.2</b>		<b>108.1</b>

12 Month Moving SSO Totals Through January 2017



## Attachment A

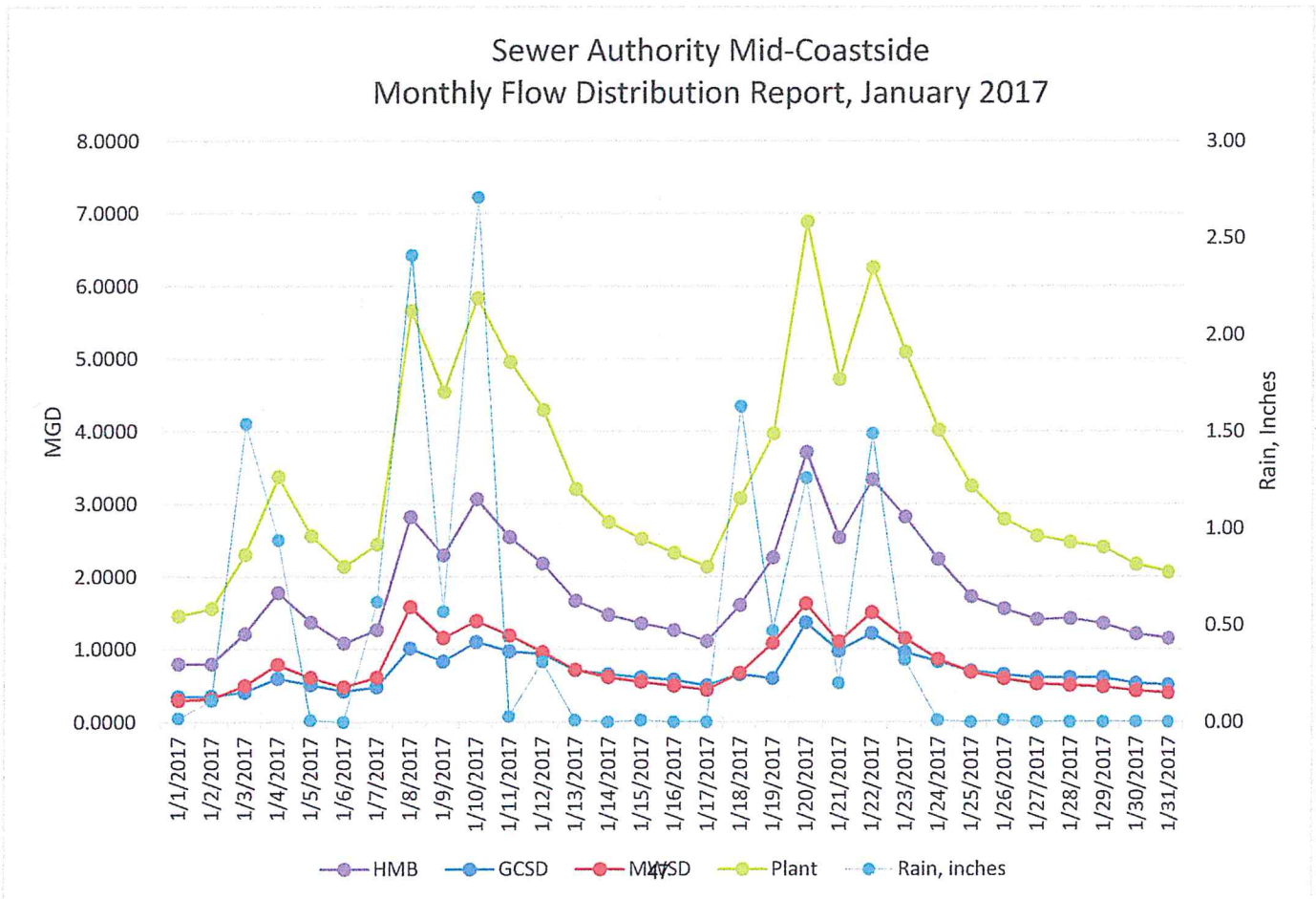
### Flow Distribution Report Summary For January 2017

The daily flow report figures for the month of January 2017 have been converted to an Average Daily Flow (ADF) for each Member Agency. The results are attached for your review.

\*Influent flow is calculated using the mid-plant flow meter less process water and trucked in waste

The summary of the ADF information is as follows:

	<u>MGD</u>	<u>%</u>
The City of Half Moon Bay	1.821	55.0%
Granada Community Services District	0.706	21.3%
Montara Water and Sanitary District	<u>0.784</u>	<u>23.7%</u>
<b>Total</b>	<b>3.311</b>	<b>100.0%</b>



# Sewer Authority Mid-Coastside

## Monthly Flow Distribution Report for January 2017

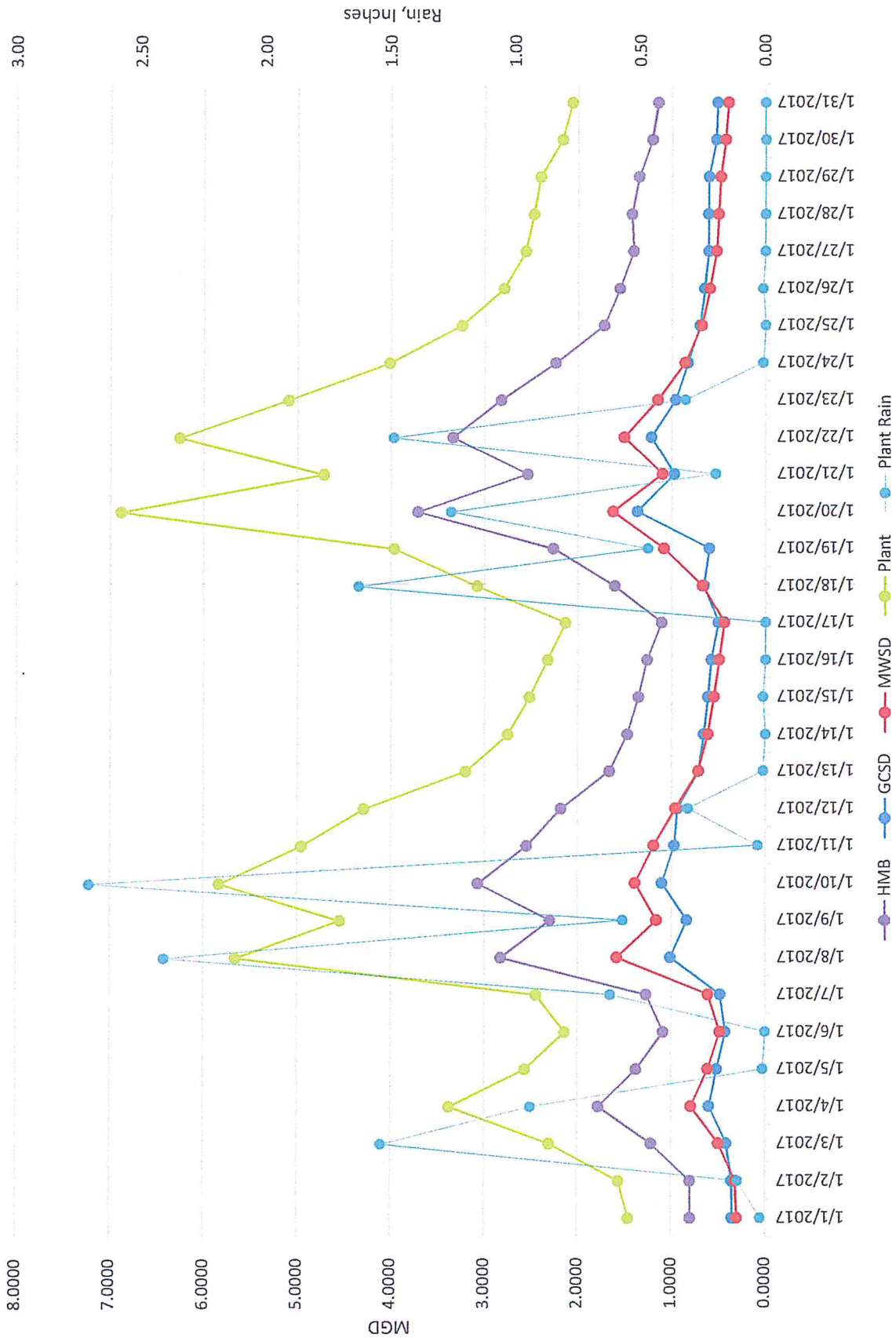
<u>Date</u>	<u>HMB</u>	<u>GCSD</u>	<u>MWSD</u>	<u>Plant</u>	<u>Rain Plant</u>	<u>Rain Portola</u>	<u>Rain Montara</u>
1/1/2017	0.7964	0.349	0.300	1.457	0.02	0.03	0.01
1/2/2017	0.7993	0.356	0.318	1.562	0.11	0.22	0.46
1/3/2017	1.2147	0.414	0.499	2.305	1.54	0.45	0.83
1/4/2017	1.7787	0.599	0.791	3.377	0.94	0.45	0.63
1/5/2017	1.3741	0.513	0.611	2.564	0.01	0.00	0.00
1/6/2017	1.0859	0.424	0.482	2.142	0.00	0.00	0.00
1/7/2017	1.2696	0.481	0.612	2.448	0.62	0.69	0.81
1/8/2017	2.8262	1.014	1.584	5.662	2.41	1.36	1.75
1/9/2017	2.2981	0.836	1.158	4.546	0.57	0.34	0.18
1/10/2017	3.0683	1.103	1.390	5.834	2.71	1.25	1.58
1/11/2017	2.5476	0.972	1.191	4.960	0.03	0.19	0.10
1/12/2017	2.1840	0.939	0.962	4.292	0.31	0.26	0.35
1/13/2017	1.6651	0.713	0.717	3.205	0.01	0.00	0.00
1/14/2017	1.4738	0.657	0.614	2.752	0.00	0.00	0.00
1/15/2017	1.3550	0.613	0.550	2.521	0.01	0.00	0.00
1/16/2017	1.2625	0.579	0.495	2.327	0.00	0.00	0.00
1/17/2017	1.1099	0.503	0.442	2.135	0.00	0.00	0.00
1/18/2017	1.6069	0.654	0.671	3.080	1.63	0.89	1.18
1/19/2017	2.2642	0.599	1.083	3.969	0.47	0.17	0.34
1/20/2017	3.7128	1.366	1.626	6.887	1.26	1.49	1.38
1/21/2017	2.5404	0.975	1.098	4.721	0.20	0.31	0.41
1/22/2017	3.3397	1.218	1.507	6.259	1.49	0.88	1.12
1/23/2017	2.8229	0.957	1.149	5.096	0.32	0.07	0.24
1/24/2017	2.2404	0.831	0.861	4.020	0.01	0.01	0.00
1/25/2017	1.7240	0.703	0.684	3.246	0.00	0.00	0.00
1/26/2017	1.5545	0.650	0.595	2.791	0.01	0.00	0.00
1/27/2017	1.4076	0.605	0.521	2.561	0.00	0.00	0.00
1/28/2017	1.4245	0.610	0.500	2.476	0.00	0.00	0.00
1/29/2017	1.3504	0.606	0.480	2.406	0.00	0.00	0.00
1/30/2017	1.2078	0.527	0.427	2.170	0.00	0.00	0.00
1/31/2017	1.1463	0.510	0.396	2.064	0.00	0.00	0.00
<b>Totals</b>	<b>56.452</b>	<b>21.876</b>	<b>24.314</b>	<b>105.835</b>	<b>14.68</b>	<b>9.06</b>	<b>11.37</b>

### Summary

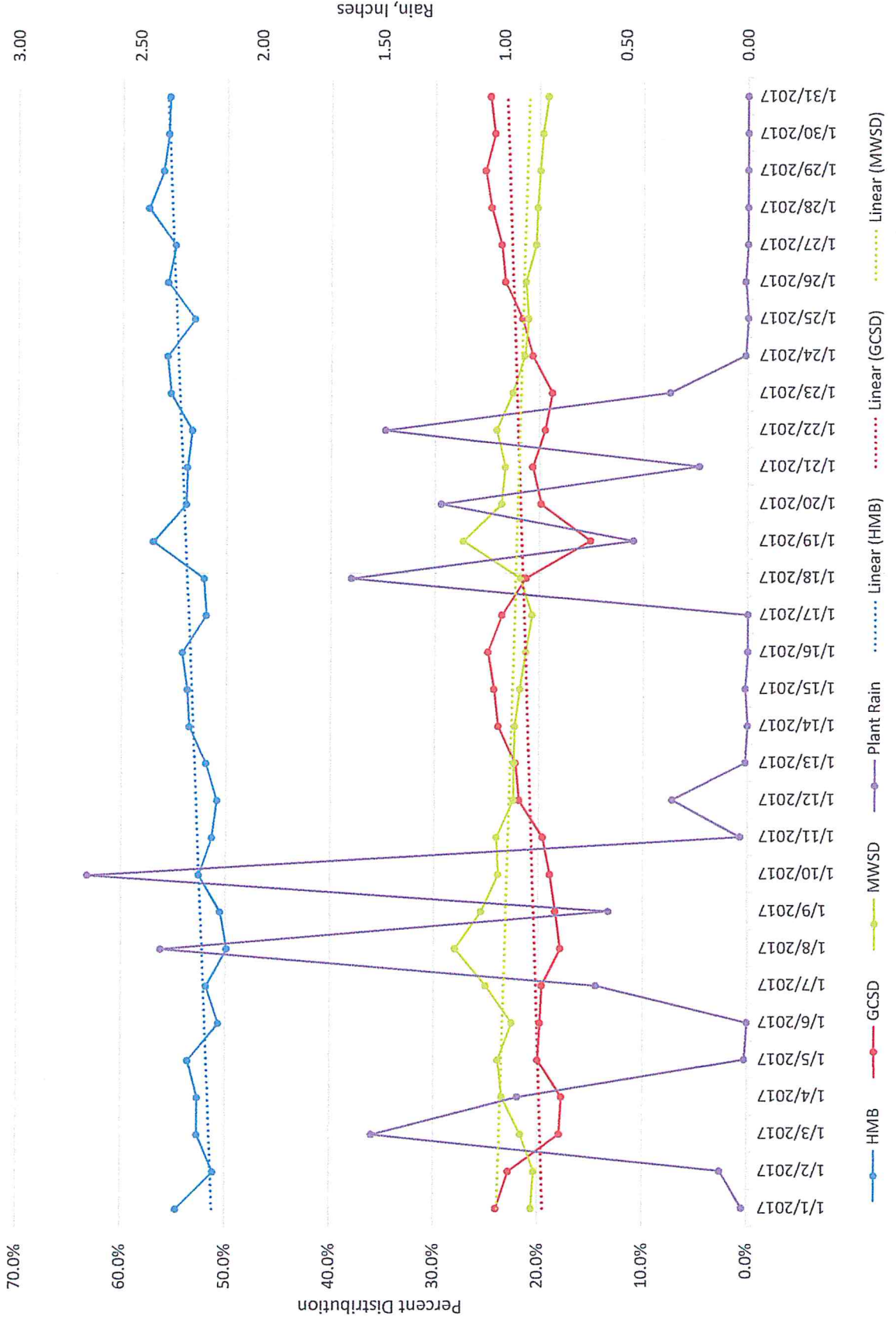
	<u>HMB</u>	<u>GCSD</u>	<u>MWSD</u>	<u>Plant</u>
Minimum	0.796	0.349	0.300	1.457
<b>Average</b>	<b>1.821</b>	<b>0.706</b>	<b>0.784</b>	<b>3.311</b>
Maximum	3.713	1.366	1.626	6.887
<b>Distribution</b>	<b>55.0%</b>	<b>21.3%</b>	<b>23.7%</b>	<b>100.0%</b>



# Sewer Authority Mid-Coastside Monthly Flow Distribution Report, January 2017

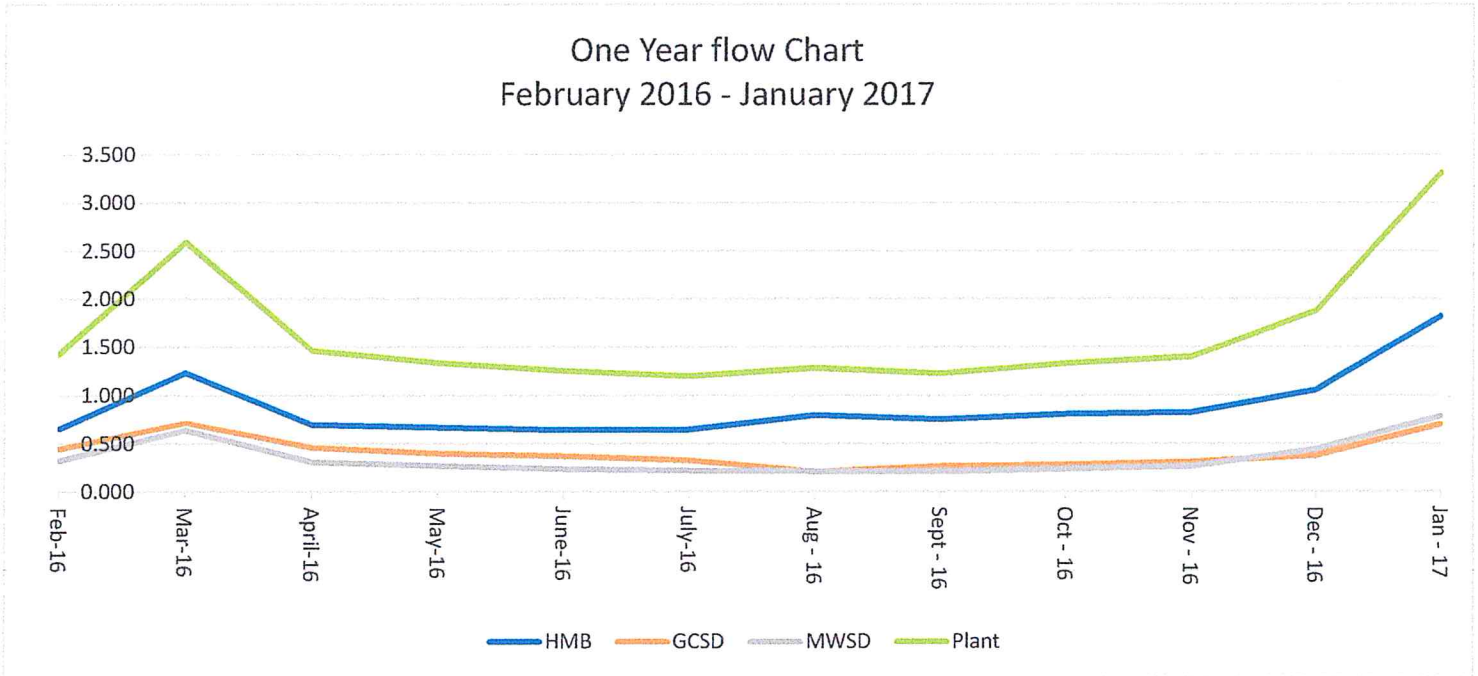


# Percent Distribution January 2017

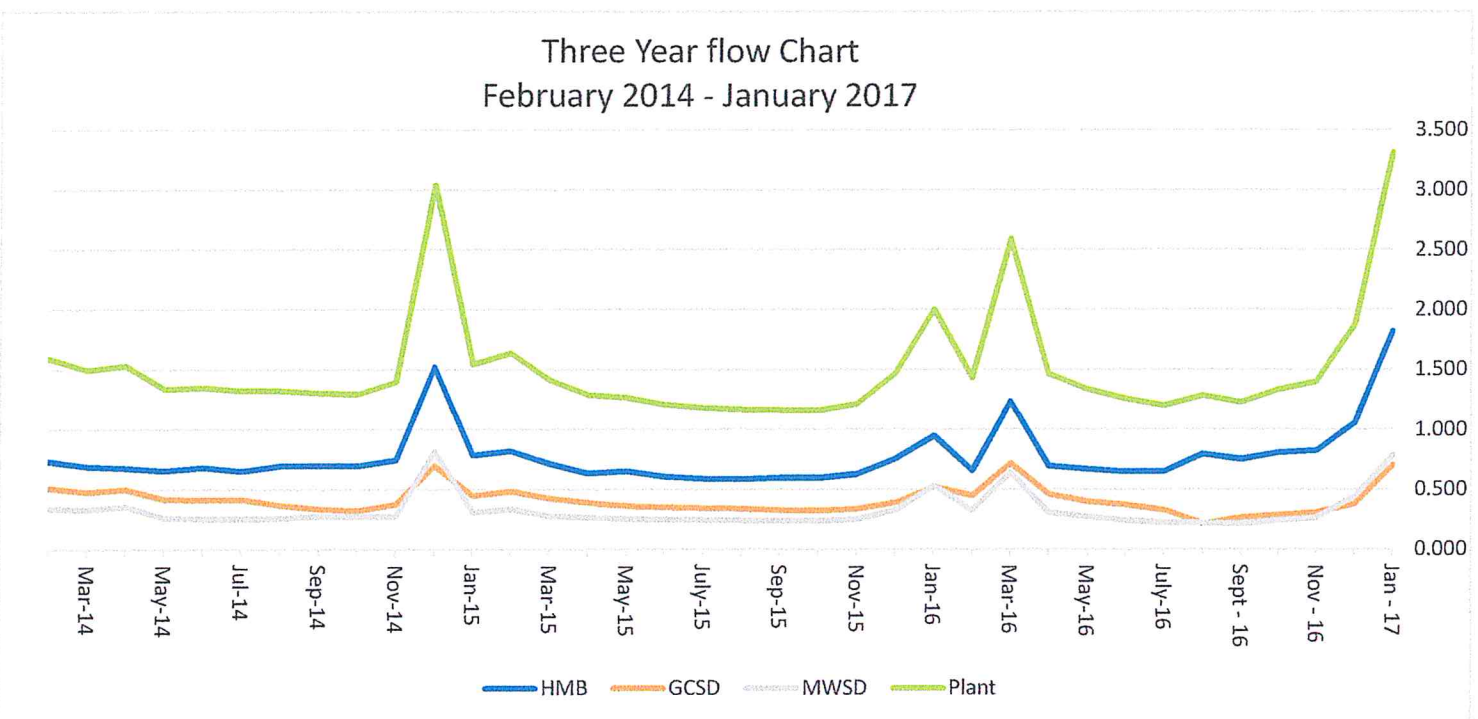


Most recent flow calibration December 2016 PS, November 2016 Plant

One Year flow Chart  
February 2016 - January 2017



Three Year flow Chart  
February 2014 - January 2017





# MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: March 16, 2017

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager

**SUBJECT: Review of Current Investment Portfolio**

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The District's Investment Policy and Guidelines requires that the Board review the status of the current investment portfolio. The following summarizes the status of these accounts:

- The District has most of its idle sewer funds deposited in the State of California's Local Agency Investment Fund (LAIF). The Monthly Average interest rate for January 2017 the rate was 0.751.
- The District has one checking account with Wells Fargo Bank for Water and Sewer Funds that is largely backed by Federal securities.

## RECOMMENDATION:

District staff attempts to cash manage idle funds in LAIF as long as possible before transferring to the Wells Fargo checking accounts for disbursements.





# MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: **March 16, 2017**  
TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager

## **SUBJECT: Connection Permit Applications Received**

As of March 1, 2017 the following new **Sewer Connection Permit** applications were received since the last report:

Date of Application	Property Owner	Site Address	Home Size
2/1/2017	Dave & Rebecca Jackson	525 Buena Vista	SFD
03/08/17	Paul McCormack	824 Stetson	SFD

As of March 1, 2017 the following new **Water (Private Fire Sprinkler) Connection Permit** applications were received since the last report:

Date of Application	Property Owner	Site Address	Home Size
2/1/2017	Dave & Rebecca Jackson	525 Buena Vista	SFD

As of March 1, 2017 the following new **Water Connection Permit** applications were received since the last report:

Date of App.	Property Owner	Site Address	Home Size	Type of Connection
03/08/17	Paul McCormack	824 Stetson	SFD	Domestic

### RECOMMENDATION:

No action is required. This is for Board information only.



# MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: March 16th, 2017

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager

**SUBJECT: Monthly Water Production Report**

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The attached two charts summarize the monthly water production for the District.

The first shows a consolidated from all sources by month. The second shows each water source the District uses, both wells and surface water. The production is shown in gallons of water produced.

## RECOMMENDATION:

No action is required. These reports are provided for the Board's information only.

Attachments: 2









# MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting of: March 16th, 2017

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager

A handwritten signature in black ink, appearing to be 'C. Heldmaier'.

**SUBJECT: Rain Report**

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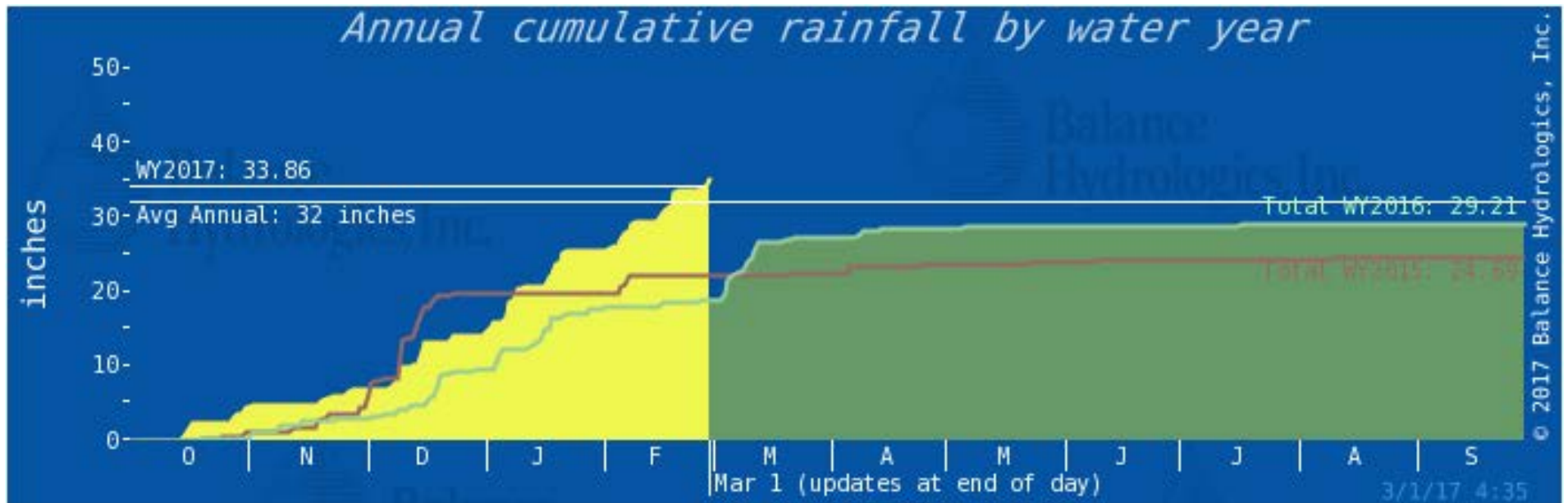
The attached chart shows the monthly rainfall at Alta Vista Treatment Plant for the current and prior water years along with seven-year average rain fall.

## RECOMMENDATION:

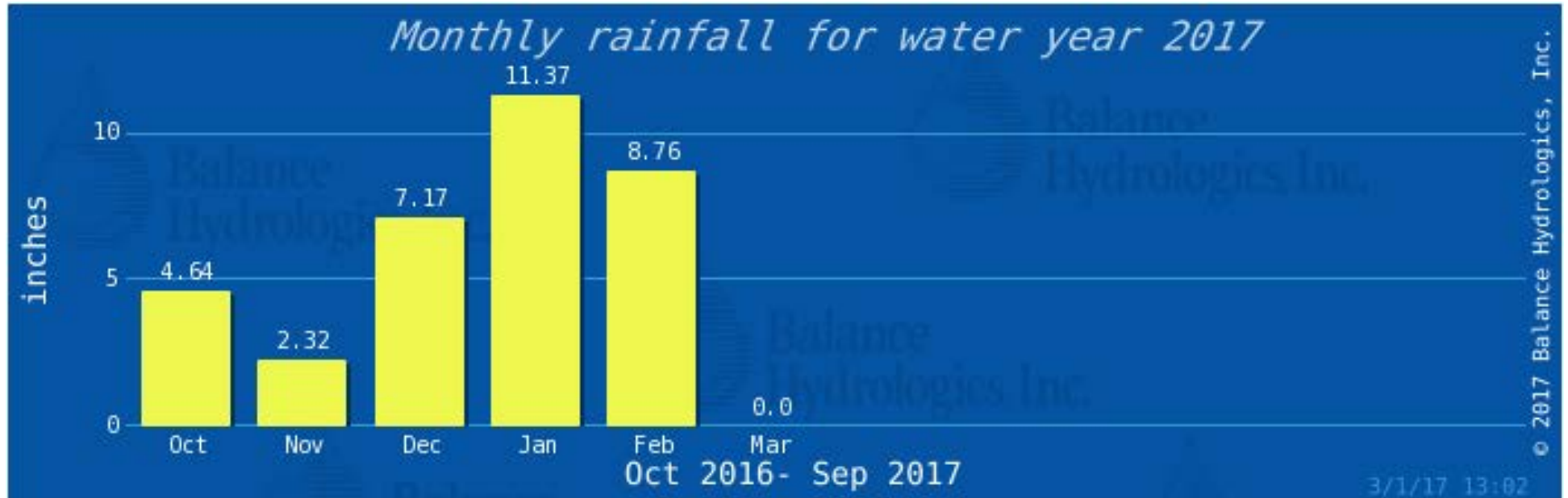
No action is required. These reports are provided for the Board's information only.

Attachments: 2

# Annual Cumulative Rainfall



# Monthly Rainfall Report Oct 2016 – Sept 2017





# MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: March 16th, 2017

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager

**SUBJECT: Monthly Solar Energy Report**

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The attached chart summarizes the monthly solar production at the Alta Vista Array. Since the installation of the solar panels the District produced 38748 kWh and saved 65869 lbs of CO<sub>2</sub>.

*Please note - due to an electrical storm in December, the solar array equipment was damaged and has been disconnected. Initial steps have been taken, and array is projected to be back on-line by April.*

## RECOMMENDATION:

No action is required. This information is provided for the Board's information only.

Attachments: 1







# MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: **March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager

**SUBJECT: Monthly Public Agency Retirement Service  
Report for December 2016.**

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The District has received the monthly PARS report for December 2016.

Contributions are calculated on a bi-weekly basis, and contributions are made on a monthly basis.

The following monthly reports are submitted as consent agenda items on a monthly basis.

RECOMMENDATION:

This is for Board information only.

Attachment

*MONTARA WATER & SANITARY DISCTRICT  
PARS REP Program*

Monthly Account Report for the Period  
12/1/2016 to 12/31/2016

Clemens Heldmaier  
General Manager  
Montara Water & Sanitary Disctrict  
8888 Cabrillo Highway  
Montara, CA 94037

*Account Summary*

Source	Beginning Balance as of 12/1/2016	Contributions	Earnings	Expenses	Distributions	Transfers	Ending Balance as of 12/31/2016
Employer Contribution	\$439,019.68	\$6,465.12	\$7,473.51	\$204.34	\$0.00	\$0.00	\$452,753.97
<b>Totals</b>	<b>\$439,019.68</b>	<b>\$6,465.12</b>	<b>\$7,473.51</b>	<b>\$204.34</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$452,753.97</b>

*Investment Selection*

Capital Appreciation Index PLUS

*Investment Objective*

The primary goal of the Capital Appreciation objective is growth of principal. The major portion of the assets are invested in equity securities and market fluctuations are expected.

*Investment Return*

1-Month	3-Months	1-Year	Annualized Return			Plan's Inception Date
			3-Years	5-Years	10-Years	
1.68%	1.94%	-	-	-	-	3/8/2016

Information as provided by US Bank, Trustee for PARS; Not FDIC Insured; No Bank Guarantee; May Lose Value

Past performance does not guarantee future results. Performance returns may not reflect the deduction of applicable fees, which could reduce returns. Information is deemed reliable but may be subject to change.

Investment Return: Annualized rate of return is the return on an investment over a period other than one year multiplied or divided to give a comparable one-year return.

Account balances are inclusive of Trust Administration (unless invoiced), Trustee and Investment Management fees

**December 2016 PARS Statement  
Detail Information**

PARS Beginning Balance as of December 1, 2016     \$ 439,019.68

**Contributions:**

November 15, 2016 Calculation

Wages	\$ 26,161.25	
Employer - 6.5%	\$ 1,700.48	
Employee - 8.25%	\$ 1,532.08	
Contributions Subtotal		\$ 3,232.56

Fund Impact - PARS Wages		
Sewer	Water	Total
\$ 8,740.91	\$ 17,420.35	\$ 26,161.25
\$ 568.16	\$ 1,132.32	\$ 1,700.48

November 30, 2016 Calculation

Wages	\$ 26,161.25	
Employer - 6.5%	\$ 1,700.48	
Employee - 8.25%	\$ 1,532.08	
Contributions Subtotal		\$ 3,232.56
Rounding		\$ -
Total Contributions thru November		\$ 6,465.12

Earnings		\$7,473.51
Expenses	\$ (204.34)	
PARS Ending Balance as of December 31, 2016		\$ 452,753.97





# MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting of: March 16, 2017

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager

A handwritten signature in black ink, appearing to be 'Clemens Heldmaier'.

**SUBJECT: Review and Possible Action Concerning  
Amendment to District Code Providing for Well  
Conversions**

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At the Board meeting on January 19, 2017, the Board adopted an ordinance adding section 5-3.104 to the District Code providing for payment of connection fees and associated charges by installments for conversion of well usage to the District's water system. The purpose of the ordinance is to encourage well conversions by alleviating the burden of up-front payment of the entire amount of such charges.

In connection with the adoption of the ordinance, members of the public expressed concern that MWSD Code Section 5-3.103 may be read to require well conversions without exception. As explained at the meeting, the policies established by MWSD Resolution 1498 and Local Coastal Program (LCP) Policy 1.1 9f mandate conversions only when established by County building permit or other County entitlement conditions. Likewise, it was noted that conversions may be required when the County Health Official orders a well to be abandoned for public health reasons or by an agreement signed by the property owner(s) in connection with sewer service under MWSD Code Section 3-3.600.

District Counsel has prepared an ordinance amending Section 5-3.103 clarifying that, except for the County-mandated conversions or those agreed upon under the Sewer Code, conversions are volitional,

**RECOMMENDATION:** Discuss and adopt the proposed Ordinance.

# ORDINANCE NO. \_\_\_\_

## ORDINANCE OF THE MONTARA WATER AND SANITARY DISTRICT AMENDING SECTION 5-3.103 OF THE MONTARA WATER AND SANITARY DISTRICT CODE RELATING TO OWNER INITIATED CONVERSION OF WATER SERVICE FROM PRIVATE WELLS TO THE DISTRICT'S WATER SYSTEM

### THE BOARD OF THE MONTARA WATER AND SANITARY DISTRICT DOES ORDAIN AS FOLLOWS:

**Section 1.** The Board of the Montara Water and Sanitary District hereby finds and declares:

a. Section 5-3.103 of the Montara Water and Sanitary District Code ("MWSD Code") currently requires, subject to certain exceptions, that Premises located within the urban area (therein defined), that are capable of being served by the District's water system shall be connected to that system for permanent Domestic Service (as defined in MWSD Code §5-2.106) and that irrespective of location within or outside of the urban area, Premises that are capable of being served by the District's water system shall be connected to that system for Fire Protection Service.

b. Private wells draw from aquifers that also supply the District's water system, thereby affecting the District's management of its public water supply.

c. MWSD Code Section 5-3.103 was enacted to alleviate the adverse effects on the public health, welfare and necessity arising from intensive use of private wells within the District.

e. Resolution No. 1498 entitled, "Resolution of the Montara Water and Sanitary District Establishing Policy for Conversion of Domestic Water Service from Wells to the District's Public Water System," adopted August 4, 2011 by this Board, interprets MWSD Code Section 5-3.103 to provide that connections to the water system of property served by wells shall be made in conjunction with the issuance of building permits by the County of San Mateo for remodeling or other improvements to for structures on the premises that include additional fixture units as that term is defined in MWSD code section 3-1.1 00j).

d. Resolution No. 1498 also provides that the obligation of owners of premises issued sewer connection permits subject to the provisions of MWSD Code Section 3-

# ORDINANCE NO. \_\_\_\_

## ORDINANCE OF THE MONTARA WATER AND SANITARY DISTRICT AMENDING SECTION 5-3.103 OF THE MONTARA WATER AND SANITARY DISTRICT CODE RELATING TO OWNER INITIATED CONVERSION OF WATER SERVICE FROM PRIVATE WELLS TO THE DISTRICT'S WATER SYSTEM

3.600, requiring said premises to be connected to the District's water system when that system is capable of serving the premises, shall remain in full force and effect and that said obligation is unaffected by the Resolution's policy related to the issuance of building permits by the County of San Mateo.

e. San Mateo County Local Coastal Program ("LCP") Policy 1.19, governing the issuance of permits by the County for development in the urban area established by the LCP, provides in pertinent part:

"f. If a public water supply is available, major remodels or expansions of existing development, or new development on vacant lots, served by private wells constructed after September 12, 1989, are not permitted unless the project will connect to the public water system and abandon the well. For purposes of this policy, major remodels or expansions include all projects where new construction has a value equal or greater to 50% of the value of the existing structure."

f. The intent of the amendment to the MWSD Code enacted hereby is to clarify and conform the provisions governing conversion of private well sources to the District's water system with the policies established by Resolution 1498 and LCP Policy 1.19f and to acknowledge volitional conversions.

**Section 2.** Section 5-3.103 of the Montara Water and Sanitary District Code is hereby amended to read as follows:

**"Section 5-3.103. Applications in Conjunction With Conversion of Private Well Water Sources.**

In addition to applications for connection to the District's water system for Premises served by privately-owned wells that are required as a condition of a building permit or other entitlement issued by the County of San Mateo, by order of the County Health Official, or by a certificate, declaration, or agreement entered under Section 3-3.600, owners of Premises so served may apply for connection irrespective of such requirements. Applications for well conversion connections either required or upon an owner's volition shall be governed by Section 5-3.202 (New Service Connection on Existing Main) or Section 5-3.203 (Service From New Main), as applicable."

**ORDINANCE NO. \_\_\_\_**

**ORDINANCE OF THE MONTARA WATER AND SANITARY DISTRICT  
AMENDING SECTION 5-3.103 OF THE MONTARA WATER AND  
SANITARY DISTRICT CODE RELATING TO OWNER INITIATED  
CONVERSION OF WATER SERVICE FROM PRIVATE WELLS TO THE  
DISTRICT'S WATER SYSTEM**

**Section 3.** Upon adoption, this Ordinance shall be entered in the minutes of the Board and posted for one week in three (3) public places in the District and shall become effective immediately upon expiration of one week following said posting.

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President

COUNTERSIGNED:

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Secretary

\* \* \*

I hereby certify that the foregoing Ordinance was duly and regularly passed and adopted by the Board of the Montara Water and Sanitary District, San Mateo County, California, at a regular meeting thereof held on the 16<sup>th</sup> day of March 2017, by the following vote of the members thereof:

AYES, and in favor thereof, Directors:

NOES, Directors:

ABSENT:

---

Secretary





# MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: **March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager

**SUBJECT: Review and Possible Action Concerning 2017  
District's Water Master Plan Update and 2017  
Connection Fee Study Update**

---

Montara Water and Sanitary District (MWSD or District) has developed its last Water System Master Plan Update in 2011, followed by the development of the Connection Fee Study, as the 2011 Water Master Plan results were instrumental in lifting the moratorium on new connections and thus opening the process of adding new water connections to the District's water system.

Following the development of the 2011 Water Master Plan and the certification of the Public Works Plan (PWP) Amendment allowing new water connections by the California Coastal Commission, the District proceeded with the addition of new water connections that applied for service, both for new residences and private well conversions. During the over five (5) years that passed since the Board adopted the 2011 Master Plan findings, accepted the PWP Amendment, and started issuing new connections, the District has implemented all capital improvements outlined as near-term improvements in the 2011 Master Plan. These included but are not limited to the following key improvements:

- New 100,000-gallon Schoolhouse Tank No. 1
- New 100,000-gallon Schoolhouse Tank No. 2
- New 500,000-gallon Alta Vista Tank No. 2
- Rehabilitation of multiple water supply sources
- Acquisition of the Pillar Ridge Manufactured Home Park Water System
- Replacement and rehabilitation of multiple distribution system mains, valve stations, and other appurtenances
- Rehabilitation of key controls elements at the Alta Vista Water Treatment Plant
- Supervisory Control and Data Acquisition System (SCADA) Upgrade

Following over five (5) years of water system operation without the moratorium and completion of major water system capital improvements, the District feels that a 2017 Update of the Water System Master Plan and the Connection Fee Study must be completed to review the current water demands, water supply portfolio, anticipated growth per the San Mateo County Local Coastal Program (SMC LCP), and identify system improvements needed to continue operating the water system and adding new customers. The proposed 2017 Water System Master Plan Update (2017 Master Plan



# MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: **March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager

Update) would result in the development of the long-term (ten years or longer) Capital Improvements Program (CIP) for adding new customers to the water system that would, in turn, serve as the foundation for the 2017 Connection Fee Study Update.

As the District Water Engineer has been collecting data for the District's Annual Report to the Coastal Commission and various annual reporting to the California State Water Board Division of Drinking Water (DWD), the fiscal impact of the 2017 Master Plan Update is limited to \$18,000. A cost estimate for the 2017 Connection Fee Update will be provided at the meeting.

Staff will present further information about both existing studies and next steps to complete 2017 updates at the meeting.

## RECOMMENDATION:

Authorize the General Manager to initiate the following studies and provide reports to the Board at the May 4, 2017 Board meeting:

1. 2017 Water Master Plan Update, and
2. 2017 Water Connection Fee Update

Attachments

**LAW OFFICES OF  
DAVID E. SCHRICKER, P.C.**  
A PROFESSIONAL CORPORATION  
563 S. Murphy Ave.  
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schrickerlaw@aol.com  
www.schrickerlaw.com

*Via e-mail*

## **MEMORANDUM**

**DATE:** March 10, 2017

**TO:** Clemens Heldmaier, General Manager, Montara Water and Sanitary District  
("MWSD," or "District")

**cc:** Tanya Yurovsky, MWSD Water Engineer; Alex Handlers, Rate Consultant

**FROM:** David E. Schricker, Attorney

**RE:** Legal Requirements – Water Capacity Charge

---

This memorandum responds to your request for a review of the legal requirements for establishing MWSD's water capacity charge. In that regard, MWSD's Board Agenda for March 16, 2017 includes authorization of updates of MWSD's Water Master Plan and water connection fee, the latter of which includes the capacity charge for connecting to the District's water system. The Master Plan sets forth the capital facilities to be funded by the capacity charge. The most recent Master Plan and connection fee studies were completed in 2011.<sup>1</sup>

Subdivision (a) of Government Code Section 66013 sets forth the governing principle for establishing a water connection fee (section references herein are to the Government Code unless otherwise stated):

*"(a) Notwithstanding any other provision of law, when a local agency imposes fees for water connections or sewer connections, or imposes capacity charges, those fees or charges shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed, unless a question regarding the amount of the fee or charge*

---

<sup>1</sup> SRT Consultants Memorandum, *Montara Water and Sanitary District's Capital Improvements Program - District Engineer's Report*, dated April 1, 2011; Bartle Wells Associates, *Water Capacity Charge*, dated April 2011;

## MEMORANDUM

Clemens Heldmaier, General Manager  
March 10, 2017  
Page 2

imposed in excess of the estimated reasonable cost of providing the services or materials is submitted to, and approved by, a popular vote of two-thirds of those electors voting on the issue.” (Italics added).

A capacity charge is defined as:

“...a charge for *public facilities in existence at the time a charge is imposed or charges for new public facilities to be acquired or constructed in the future* that are of proportional benefit to the person or property being charged, including supply or capacity contracts for rights or entitlements, real property interests, and entitlements and other rights of the local agency involving capital expense relating to its use of existing or new public facilities. A "capacity charge" does not include a commodity charge.” (§66013(b)(3); Italics added).

The charge thus may include provision for a “buy-in” of existing facilities as well as new facilities. The charge is to be proportional to the benefit derived from those facilities under the connection.

The charge must be accounted for as follows:

“(c) A local agency receiving payment of a charge as specified in paragraph (3) of subdivision (b) shall deposit it in a separate capital facilities fund with other charges received, and account for the charges in a manner to avoid any commingling with other moneys of the local agency, except for investments, and shall expend those charges solely for the purposes for which the charges were collected. Any interest income earned from the investment of moneys in the capital facilities fund shall be deposited in that fund.” (§66013(c)).

The record and reporting of the accounting must adhere to the following:

“(d) For a fund established pursuant to subdivision (c), a local agency shall make available to the public, within 180 days after the last day of each fiscal year, the following information for that fiscal year:

- (1) A description of the charges deposited in the fund.
- (2) The beginning and ending balance of the fund and the interest earned from investment of moneys in the fund.
- (3) The amount of charges collected in that fiscal year.
- (4) An identification of all of the following:
  - (A) Each public improvement on which charges were expended and the amount of the expenditure for each



## MEMORANDUM

Clemens Heldmaier, General Manager  
March 10, 2017  
Page 3

improvement, including the percentage of the total cost of the public improvement that was funded with those charges if more than one source of funding was used.

(B) Each public improvement on which charges were expended that was completed during that fiscal year.

(C) Each public improvement that is anticipated to be undertaken in the following fiscal year.

(5) A description of each interfund transfer or loan made from the capital facilities fund. The information provided, in the case of an interfund transfer, shall identify the public improvements on which the transferred moneys are, or will be, expended. The information, in the case of an interfund loan, shall include the date on which the loan will be repaid, and the rate of interest that the fund will receive on the loan.

(e) The information required pursuant to subdivision (d) may be included in the local agency's annual financial report." (§66013(d)).

In sum, the Water Master Plan update is to set out the capital facilities to be funded by the updated connection fee. The fee is to be based upon the estimated number of new connections needed to meet the capacity demand represented by those connections. The District must account for the fees separately and provide an annual report of the accounting.

Procedurally, the connection charge must be approved at an open and public meeting at which oral or written comments can be made as part of a regularly scheduled meeting (§66016). Also, notice of the meeting, including a general explanation of the matter to be considered, and a statement that data supporting the fee is available, shall be mailed at least 14 days prior to the meeting to any interested party who files a written request for the notice (id). Although a public hearing is not statutorily required for consideration of a capacity charge, I recommend that a hearing be held following published notice so as to provide ample opportunity for public participation.<sup>2</sup>

Public comment at the Board meeting on February 2, 2017 raised the question whether a property owner who desires to convert from well usage to the District's water system should be required to pay the connection fee because the owner's property is subject to the ad valorem tax for the District's general obligation bonds issued for acquisition and improvement of the water system.

---

<sup>2</sup> Connection charges are not subject to a majority protest hearing under California Constitution Article XIID (Proposition 218, November 6, 1996 General Election; Richmond v. Shasta Community Services Dist. (2004) 32 Cal 4th 409, 9 Cal Rptr 3d 121, 83 P3d 518, 2004 Cal LEXIS 978).

## MEMORANDUM

Clemens Heldmaier, General Manager  
March 10, 2017  
Page 4

That comment is apparently based on the assumption that the bond proceeds were used for existing improvements and that the connection fee for a well conversion would represent a double "tax" or assessment for use of those improvements. However, as discussed above, the capacity charge is for new improvements for capacity made necessary by the demand created by new connections, or for the new demand imposed on the use of existing facilities. Moreover, all properties subject to the tax are deemed benefitted by the acquisition and bond-funded improvements irrespective of whether they are connected to the water system ( Solvang Municipal Improvement District v. Board of Supervisors, etc. (112 Cal.App.3<sup>rd</sup> 545, 552; 169 Cal.Rptr. 391). Simply stated, there is no relationship between the use of bond proceeds and connection fees.

Another comment suggested that new use represented by well conversions could effect an "economy of scale," presumably calling for a credit against the connection fee. However, economies of scale relate to operational costs, not capital costs. Connection fees relate solely to the latter.

As discussed above, enactment of connection fees and their use are strictly regulated by statute. Underlying their determination is the requirement that they be proportional to the benefit conferred by use of the facilities they fund.



David E. Schricker, Attorney

# **MONTARA WATER & SANITARY DISTRICT**

## **WATER CAPACITY CHARGE**

**APRIL 2011**

### **BARTLE WELLS ASSOCIATES**

Independent Public Finance Advisors

1889 Alcatraz Avenue

Berkeley, CA 94703-2714

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# Montara Water & Sanitary District

## Water Capacity Charges

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### INTRODUCTION

The Montara Water and Sanitary District (District or MWSD) provides water, sewer and trash disposal services to the unincorporated areas of Montara and Moss Beach, located in San Mateo County, north of Half Moon Bay and south of Pacifica. MWSD currently serves 1,658 domestic water customers.

On March 3, 2011 the District Board of Directors passed Ordinance No. 161 which amended the District code to repeal Section 5-4.229, the moratorium on new water connections, and added Section 5-4.100(a), which allows for the connections of new water customers. Section 5-4.100(a) states:

(a) Availability of water supplies shall be determined by the Board in conjunction with its approval of the Water System Master Plan. The Master Plan shall include data from which such availability may be determined in increments of one or more five (5) year periods. The availability of water supplies so determined shall not constitute, expressly or impliedly, a guarantee that a sufficient quantity of water will be available to serve Customers' demands continuously or at a given time or to serve Applicants' proposed demands. Likewise, the availability of water supplies so determined shall not constitute, expressly or impliedly, a guarantee that a water service connection permit will be issued to any Person or Applicant. The Board may, at its discretion, establish by resolution priorities for the issuance of permits in furtherance of the public health, welfare and safety.

In 2011, the District Engineer, SRT Consultants, has revised the Water System Master Plan and concluded there is sufficient water supply available to start adding new customers.<sup>1</sup> The District Board at the meeting of February 3, 2011 adopted the 2011 master plan.

In anticipation of new water customers connecting to the water system, MWSD requested Bartle Wells Associates (BWA) to prepare a water capacity charge study. This report describes how BWA calculated the water capacity charges applicable to new water connections. It presents the assumptions and recommendations resulting from BWA's capacity charge analysis. The capacity charge analysis is made pursuant to California Government Code 66000 et al (commonly referred to as the Mitigation Fee Act).

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<sup>1</sup> SRT Consultants, Montara Water and Sanitary District 2011 Water System Master Plan, January 2011.

## PURPOSE OF THE CAPACITY CHARGE

The purpose of the capacity charge is to recover the capital costs imposed on the District in response to the growth in future new customers (i.e., service connections). New water connections could occur from existing well users connecting to the water system and new residential and commercial developments. The District's 2011 Water System Master Plan indicates that there is sufficient capacity to connect new customers.<sup>2</sup> Notwithstanding the available capacity for new customers, there are new capital improvements to the water system needed to be constructed and installed in order to serve the new connections. The charge is directly related to the need for new capital improvements to serve new customers.

The District Manager and Engineer have determined that water customers that have a fire protection service connection shall not be able to use that service connection for domestic water use.<sup>3</sup> Every new customer, including those with a fire protection connection, will have to have a new service connection for domestic water use. As described in this report, BWA calculates a capacity charge applicable to the new domestic water service connection.

## DEFINITION

The capacity charge is a one-time fee charged to an applicant requesting a new service connection.<sup>4</sup> The charge is established pursuant to the Mitigation Fee Act (California Government Code 66000 et al). Section 66013(a) specifically addresses water and sewer connections as follows:

Notwithstanding any other provision of law, when a local agency imposes fees for water connections or sewer connections, or imposes capacity charges, those fees or charges shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed, unless a question regarding the amount of the fee or charge imposed in excess of the estimated reasonable cost of providing the services or materials is submitted to, and approved by, a popular vote of two-thirds of those electors voting on the issue.

The capacity charge is not considered a tax or special assessment. It is not subject to Proposition 218, which added Articles XIIC and XIID to the California Constitution.

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<sup>2</sup> 2011 Water System Master Plan, p. 3-17 and SRT's Presentation on the 2011 Water System Master Plan at the March 17, 2011.

<sup>3</sup> Source: District Code Section 5-4.111b

<sup>4</sup> Capacity and connection fees are used interchangeably, but there is a subtle distinction as identified in Government Code Section 66013. "A capacity charge means a charge for facilities in existence at the time a charge is imposed or charges for new facilities to be constructed in the future that are of benefit to the person or property being charged." [Govt. Code Sec. 66013(b)(3)] "A [connection] fee means a fee for the physical facilities necessary to make a water connection or sewer connection, including, but not limited to, meters, meter boxes, and pipelines from the structure or project to a water distribution line or sewer main, and that does not exceed the estimated reasonable cost of labor and materials for installation of those facilities." [Govt. Code Sec. 66013(b)(5)] BWA calculates a capacity charge as explained in this report.

The charge is for the physical facilities necessary to make a water or sewer connection and for facilities that benefit the person or property being charged and making the service connection.

## **NEXUS**

The Mitigation Act requires a local agency (such as the District) to establish a reasonable relationship, or “nexus” between the charge’s uses and the type of development on which the charge is imposed. SRT’s memorandum describes the infrastructure improvements that are needed to serve the new customers and estimates the costs to construct and install these capital projects.<sup>5</sup> SRT’s memo explains the reasons why the improvements are needed. BWA’s report explains how the capacity charge is calculated on the basis of capital costs related to the expansion of the utility system caused by addition of new connections. The capacity charges are used to pay for capital improvements needed to serve existing well users and new residential and commercial development.

## **LEGAL REQUIREMENTS**

Government Code Section 66001 establishes the following requirements in establishing, increasing, or imposing a capacity charge/fee.

- Identify the purpose of the fee;
- Identify the use to which the fee will be put;
- Demonstrate how there is a reasonable relationship between the fee’s use and the type of development project on which the fee is imposed;
- Demonstrate how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed; and
- In addition, when an agency imposes a fee as a condition of development approval, it shall determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of that facility attributable to the development on which the fee is imposed.

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<sup>5</sup> Memorandum, SRT Consultants, Montara Water & Sanitary District’s Capital Improvements Program—District Engineer’s Report, April 1, 2011

## **COST OF SERVICE**

The capacity charge shall not exceed the estimated reasonable cost of providing the service or facility for which the fee is imposed (Government Code Section 66005). As demonstrated in BWA's analysis and this report, the proposed capacity charge is based on cost of service.

## **STRUCTURE OF THE CAPACITY CHARGE**

The capacity charge consists of the relationship between the number of additional new connections and the facilities to be constructed to accommodate the extra demand caused by these new connections. The capacity charge includes these projected capital expenditures for expansion projects as represented in the capital improvement plan.

New users of the system are charged their allocated share of estimated costs of future new capital projects. This incremental cost approach is based on the economic principle that new system users should be responsible for the next increment of capital cost which the new users cause. Capacity fees computed under the incremental cost method recover the cost of system expansion using recent construction costs and estimated cost of future facilities related to system capacity expansion.

## **FUTURE NEW WATER CONNECTIONS**

The District staff and engineer provided BWA with projected annual connections through the fiscal year 2025. The number of connections per year is based on the feasibility of the District staff to process applications and implement approved projects while taking into account the estimated customer demand for new connections and available capacity. The feasibility of new customer connections to the MWSD system is believed to be the limiting factor due to the time required to process new service applications, review engineering plans, negotiate with contractors, and oversee domestic service installations. The demand for new connections is estimated to be higher in the earlier years based on the number of existing well users within the service area (314) who are likely to connect to the system. Generally, it is estimated that the District is capable of adding 50 new connections per year with the demand for connections decreasing to 20 connections per year in FY 2021/22 once all well users are projected to be connected to the system.

Table 1 presents the potential number of connections per fiscal year over the next 15 years. The projected number of connections per year can be reevaluated based on actual data compiled for the first several years of new system connections and District staff feedback.



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**Table 1**  
**Montara Water & Sanitary District**  
**Forecast of Future New Water Connections**

Fiscal Year	Annual	Cumulative
2010/11	20	20
2011/12	50	70
2012/13	50	120
2013/14	50	170
2014/15	50	220
2015/16	50	270
2016/17	50	320
2017/18	50	370
2018/19	50	420
2019/20	50	470
2020/21	50	520
2021/22	20	540
2022/23	20	560
2023/24	20	580
2024/25	20	600

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Source: MWSD Staff and District Engineer  
Based on Urban Water Master Plan

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The District requires each service connection to have a water meter. The District also requires each new customer to have domestic water service connection and meter separate from a fire suppression service connection. For the purpose of the BWA analysis, service connections are measured in terms of water meters. A water meter size is based on the amount flow through the service connection. So, meter size can be used as a measure of the demand the new service connection places on the utility system. The most common meter size is the 5/8-inch meter, and it is set as the base of the equivalent meter scale.

Table 2 shows the current number of existing meters and their relative sizes. These connections are based on MWSD billing records and are consistent with the BWA rate study conducted in November, 2010.<sup>6</sup> Almost all of the meters are 5/8-inch and is used as the base meter size.

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<sup>6</sup> Bartle Wells Associates, Water Rates and Charges Effective December 1, 2010, November 12, 2010

**Table 2**  
**Montara Water and Sanitary District**  
**Current Water Customer Distribution**

Meter Size	Existing Meter Connections	Connection Percentage
5/8 x 3/4 inch meter	1,621	97.77%
3/4 inch meter	8	0.48%
1 inch meter	16	0.97%
1-1/2 inch meter	5	0.30%
2 inch meter	6	0.36%
3 inch meter	0	0.00%
<u>4 inch meter</u>	<u>2</u>	<u>0.12%</u>
Total	1,658	100%

Table 3 shows the projected distribution of new meters and their equivalents based upon the American Water Works Association meter ratios.

The meter ratios are based in proportional unit flow. For example, a 3/4-inch meter allows for 10% more volume of water than a 5/8-inch meter. Thus, a 3/4-inch meter has a flow equivalent to 1.10 5/8-inch meters. Based on these projections, the District can expect the 600 new connections to be equal to the addition of 621 equivalent meters.

**Table 3**  
**Montara Water and Sanitary District**  
**Projected Equivalent Meters**

Meter Size	Connection Percentage	# of New Meters	Meter Ratios	Projected Equivalent Connections
5/8 x 3/4 inch meter	97.77%	586	1.0	586
3/4 inch meter	0.48%	3	1.1	3
1 inch meter	0.97%	6	1.4	8
1-1/2 inch meter	0.30%	2	1.8	4
2 inch meter	0.36%	2	2.9	6
3 inch meter	0.00%	0	11.0	0
<u>4 inch meter</u>	<u>0.12%</u>	<u>1</u>	<u>14.0</u>	<u>14</u>
Total	100%	600		621

## NEW CUSTOMER CAPITAL IMPROVEMENTS PROGRAM

The District has developed a New Customer Capital Improvements Program (CIP) prepared by SRT.<sup>7</sup> The 2011 new customer CIP is for the fifteen-year future period, fiscal year 2010/11 through fiscal year 2024/25, and appears in Table 4 and shows the District Engineer's construction cost estimates with the year of construction for capital projects. Water capital improvements total \$8.81 million.

Table 4 provides a detailed list of the capital projects in the 2011 new customer CIP and extends to the year 2025, the year at which the forecasted 600 new connections is expected to be completed. The CIP identifies 13 capital improvements projects. The projects include improvements and upgrades to existing facilities, development of additional water supply, expansion of water storage, a new storage tank, and development and implementation of the second phase to the District's Public Works Plan.

Approximately 36%, or \$3.42 million, of the total capital cost is expected to be paid in the current fiscal year and is necessary to ensure reliability of existing and future infrastructure for new customers. The \$1.3 million expenditure for securing existing water sources was paid from the District's Sewer Fund. This capital expenditure occurred in prior years, but is attributable directly to future capacity. The District intends to reimburse the sewer fund for this advance from revenues collected from water capacity charges. The reliability in water supply provided by these moneys will benefit future new domestic water users.

Based on SRT's engineering judgment and the nature of the capital projects, the costs shown in Table 4 have been allocated 100% to future users of the water system.

The sole source of revenue for these capital improvements is the water capacity charge.

None of the capital projects listed in Table 4 will be paid with revenues from the private fire protection connection charge, which has paid and will pay for capital facilities related to fire protection. There are no moneys from the General Obligation Bonds issued by the District in 2003 that can be used for the capital projects shown in Table 4.

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<sup>7</sup> Memorandum, SRT Consultants, Montara Water & Sanitary District's Capital Improvements Program—District Engineer's Report, April 1, 2011

**Table 4**  
**Montara Water and Sanitary District**  
**Water Capital Improvement Plan -- 100% For Future New Water Customers**

Project	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	
Develop Additional Supply Reliability	\$20,000	\$50,000	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$300,000	\$500,000	\$0	\$0	\$0	\$0	\$0	\$970,000
Portola Tank Telemetry Upgrade	0	0	50,000	0	0	0	0	0	0	0	0	0	0	0	0	\$50,000
New PRV Stations—Ten Stations; Upgrade Existing for New Customers	0	50,000	50,000	50,000	50,000	25,000	25,000	25,000	25,000	0	0	0	0	0	0	\$300,000
SCADA Improvements	0	0	50,000	0	0	0	0	0	0	0	0	0	0	0	0	\$50,000
Schoolhouse Booster Pump Station Upgrade – New Pumps	0	50,000	200,000	50,000	0	0	0	0	0	0	0	0	0	0	0	\$300,000
Treatment Upgrades	10,000	100,000	50,000	50,000	50,000	10,000	10,000	10,000	10,000	10,000	10,000	0	0	0	0	\$320,000
Securing existing sources*	1,300,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$1,300,000
Phase I PWP Projects	1,770,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$1,770,000
PWP Phase II Development and Implementation	50,000	400,000	500,000	500,000	0	0	0	0	0	0	0	0	0	0	0	\$1,450,000
Valve Installation Program	0	15,000	15,000	15,000	15,000	15,000	15,000	15,000	0	0	0	15,000	15,000	15,000	15,000	\$165,000
New Water Storage Tank	0	0	0	50,000	200,000	300,000	0	0	0	0	0	0	0	0	0	\$550,000
Wagner Well Pump Upgrade	0	0	25,000	0	0	0	0	0	0	0	0	0	0	0	0	\$25,000
<u>Water Main Upgrades</u>	0	300,000	300,000	300,000	300,000	360,000	0	0	0	0	0	0	0	0	0	\$1,560,000
<b>Total</b>	<b>\$3,150,000</b>	<b>\$965,000</b>	<b>\$1,290,000</b>	<b>\$1,065,000</b>	<b>\$615,000</b>	<b>\$710,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$335,000</b>	<b>\$510,000</b>	<b>\$10,000</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$8,810,000</b>

Source: Table 9 in April 1, 2011 Memorandum from the District's Engineer, SRT Consultants, to the District's General Manager on Montara Water & Sanitary District's Capital Improvement Program--District Engineer's Report

\* Currently on loan from the District's Sewer Fund and is expected to be reimbursed through revenues collected from the water capacity charges collected from new customers



## CAPACITY CHARGE CALCULATION

Table 5 shows the calculation of the water capacity charge for a domestic water connection. This charge is over and above any fire protection connection charge. Costs related to new capacity consist of the current estimated costs of the water capital projects related to system expansion of \$8.81 million. Dividing this total amount by the forecasted increase in equivalent water meters of 621 yields a water capacity charge per new connection of \$14,187.

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**Table 5**  
**Montara Water & Sanitary District**  
**Capacity Charge Calculation**

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CIP attributable to future new service connections	\$8,810,000
Projected number of new equivalent meters	621
Water Capacity Charge per Equivalent Meter	\$14,187

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BWA relies on the 2011 New Customer CIP and the 2011 Water System Master Plan to calculate the recommended capacity charge. The charge is based on assumptions of capital costs and growth in future, new customers. The cost and growth assumptions should be reviewed at least every five years. The 2011 New Customer CIP should be updated annually, and the 2011 Water System Master Plan should be updated every five years in accordance with the District Code Section 5-4.100(a).

## PROPOSED CAPACITY CHARGE

The proposed water capacity charge varies proportionally by meter size and appears in Table 6. The proposed charge for the 5/8-inch meter is \$14,187 and increases by meter size up to the 4-inch meter.

BWA recommends that the MWSD Board adopt these charges. BWA also recommends that the Board authorize the District Manager to negotiate a capacity charge for any applicant that requests a service connection and meter greater than 4-inch. For these larger meter requests, the negotiated capacity charge should be based upon a calculation attributable to the domestic water usage of the applicant. Finally BWA recommends that the Board authorize the District Manager to negotiate a capacity charge different than those proposed in Table 6, if the District Manager believes an applicant is requesting a service connection and meter than is not adequate for the building proposed to connect to the water system. The last recommendation would prevent a

user seeking to pay a lower capacity charge but actually putting a larger demand on the water system.

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**Table 6**  
**Montara Water & Sanitary District**  
**Total Meter and Capacity Charges By Size of Meter**

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Meter Size	Meter Ratios	Fee or Charge
5/8 x 3/4 inch meter	1.0	\$14,187
3/4 inch meter	1.1	15,606
1 inch meter	1.4	19,862
1-1/2 inch meter	1.8	25,537
2 inch meter	2.9	41,142
3 inch meter	11.0	156,057
4 inch meter	14.0	198,618

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## TOTAL COSTS TO CONNECT TO THE WATER SYSTEM

In order to connect to the MWSD water system, the new customer would pay fees in addition to the water capacity charge. There are administrative and inspection fees, a deposit for the engineering review and contracting cost estimates, the cost of a service connection, and the cost of the water meter—all of which the new customer’s responsibility. The cost of a service connection will be determined on a case-by-case basis in consultation with District staff. Table 7 illustrates these fees and costs, assumes a service connection cost of \$2,500, and calculates the total costs by meter size.

**Table 7**  
**Montara Water & Sanitary District**  
**Total Estimated Costs to Connect to the Water System--Illustrative**

Description	Cost
Administrative Fee	\$419
Inspection Fee	\$396
Engineering Review Deposit	\$2,269
Estimated Service Connection Contracting Cost*	\$2,500
<b>Meter Charges</b>	
5/8 x 3/4 inch meter	\$232
3/4 inch meter	264
1 inch meter	344
1-1/2 inch meter	531
2 inch meter	715
3 inch meter	1,087
4 inch meter	1,539
<b>Capacity Charges</b>	
5/8 x 3/4 inch meter	\$14,187
3/4 inch meter	15,606
1 inch meter	19,862
1-1/2 inch meter	25,537
2 inch meter	41,142
3 inch meter	156,057
4 inch meter	198,618
<b>Total Connection Costs By Meter Size</b>	
5/8 x 3/4 inch meter	\$20,003
3/4 inch meter	21,454
1 inch meter	25,790
1-1/2 inch meter	31,652
2 inch meter	47,441
3 inch meter	162,728
4 inch meter	205,741

\* Connection contracting costs will vary depending upon distance from main.

## ACCOUNTING FOR CAPACITY CHARGES

Government Code §66013 specifies the following procedures for the deposit, investment, accounting, and expenditure of water capacity charges:

- The District must deposit the charges in a separate fund or account and avoid commingling them with its other moneys, except for investment purposes. Interest earned on the fund accrues to the fund.
- For fees collected after December 31, 1998, the District must make available to the public, within 180 days of the end of the fiscal year, the following information:
  - Description of charges deposited in the fund
  - Beginning and ending balance of fund and interest earned
  - Amount of charges collected within the fiscal year
  - Identification of the following:
    - . Each public improvement on which charges were spent and amount spent on each improvement, including percentage from connection charges if other funds were also used
    - . Each public improvement on which charges were expended that was completed within the year
    - . Each public improvement that is expected to be undertaken in the following fiscal year
    - . Description of each inter-fund transfer or loan made from the capital facilities fund, including public improvements on which the transferred moneys are or will be expended, date the loan will be repaid, and interest to be earned by the capital facilities fund.

These requirements to maintain water capacity charges in a separate account and make annual reports do not apply to money received pursuant to a development or reimbursement agreement, charges used to pay debt service or collected under a bond indenture, or charges to reimburse advances made under a prior reimbursement agreement. The information can be included in the District's annual report.



## ANNUAL ADJUSTMENTS

The District's water capacity charges should be adjusted regularly to prevent the charges from falling behind the costs of constructing new facilities. Several methods can be used to adjust the capital improvement fees, including:

- Engineering News Record Construction Cost Index: ENR magazine publishes construction cost indices monthly for 20 major U.S. cities and an average of 20 cities around the U.S. These indices can be used to estimate the change in construction cost of facilities. For example, if the ENR Index has increased by three percent since the last water capacity charge adjustment, the charge should be increased by three percent.
- U.S., California, or regional consumer price index.
- Interest rate and borrowing costs: The interest and borrowing costs for debt issued to finance water capital projects can be added to the connection fee annually.

BWA recommends that the District adjust its water capacity charge annually by the change in the ENR-CCI for San Francisco. This is the most appropriate index because it directly reflects construction costs. The adjustment to the capacity charge should be made annually at the same time the District Board adjusts water rates.

Suggested language for implementing the recommended policy is:

Each year, commencing on     (m/d/y)     and continuing thereafter on each     (m/d/y)    , the water capacity charge shall be adjusted by an increment based on the change in the Engineering News Record Construction Cost Index for San Francisco over the prior year.

However, the District Board may at its option determine, by ordinance adopted prior thereto, that such adjustment shall not be effective for the next succeeding year, or may determine other amounts as appropriate.

Water capacity charges should be reviewed in detail when information is updated, such as after the completion of capital projects identified in the Master Plan or if the District issues any debt, but not less than every five years.

## RECOMMENDATIONS

BWA recommends the following to the District Board and staff:

- Adopt the water capacity charges shown in Table 6.
- Account for the water capacity charge revenues and capital expenditures pursuant to Govt. Code §66013. The accounting of these revenues and expenditures differ from those related to the fire protection connection charge.
- Review the capacity charges annually and consider adjusting them using the ENR-CCI for San Francisco.
- Update the New Customer CIP annually.
- Update the Water System Master Plan every five years.
- Re-calculate the water capacity charge at least once every five years.

BWA concludes the proposed capacity fees are based on the cost of service. They recover the costs of new facilities related to establishment of new connections. BWA believes the proposed water capacity charges are fair and reasonable.

# Montara Water and Sanitary District 2011 Water System Master Plan

*Public Workshop  
March 17, 2011*



# PRESENTATION OVERVIEW

- Water System Retrospective
- Master Plan Purpose and Approach
- General System Overview
- Supply and Demand Overview
  - Production Data Summary
  - Consumption Data Summary
  - Demand Analysis
  - Reliable Supply v. Demand Analysis
- Capital Improvements Program



# WATER SYSTEM RETROSPECTIVE

## MWSD Acquisition and System Improvements

- MWSD acquires system in May 2003
- MWSD Board and Management begin system-wide improvement projects



# WATER SYSTEM RETROSPECTIVE

## Pipeline Improvements

- Raw Water Pipeline Replacement
- Distribution System Flow Improvements
- Water Main Replacement Project

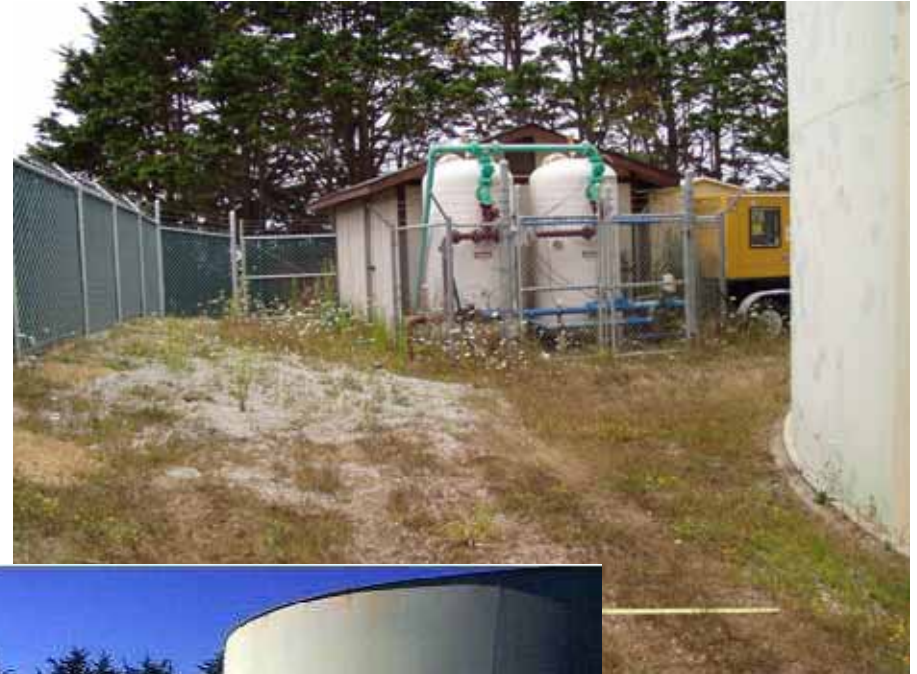




# WATER SYSTEM RETROSPECTIVE

## Alta Vista Improvements

- Alta Vista Tank Seismic and Safety Improvements
- Alta Vista Water Treatment Plant Seismic and Efficiency Improvements
- Alta Vista Water Treatment Plant Raw Water Tank Solids Settling Improvements



# WATER SYSTEM RETROSPECTIVE

## Replacement Projects

- Portola Tank Road Replacement and Drainage Improvements



- Pressure Regulating Stations Replacement Project





# WATER SYSTEM RETROSPECTIVE

## Well and Pumping Improvements

- Well Pumping and Power Efficiency Improvements
- Variable Frequency Drive Installation at Wells
- Wagner & Drake Well Pumping & Treatment Modifications
- South Airport & Airport #3 Well Rehabs
- Portola #1, Portola #3, & Portola #4 Well Rehabs, Pump and Motor Replaced
- North Airport Well Treatment Installation



# WATER SYSTEM RETROSPECTIVE

## Controls Improvements

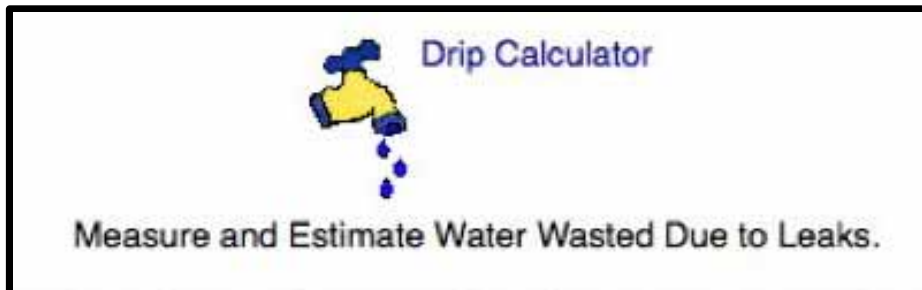
- Supervisory Control & Data Acquisition System (SCADA) Improvements
- Solar Power Installation
- All Water Meters Replaced with Automated Meter Reading System



# WATER SYSTEM RETROSPECTIVE

## Conservation Program

- Rebate Program
- Leak Detection Program
- Water Audit
- Leak Repair Program
- Public Education

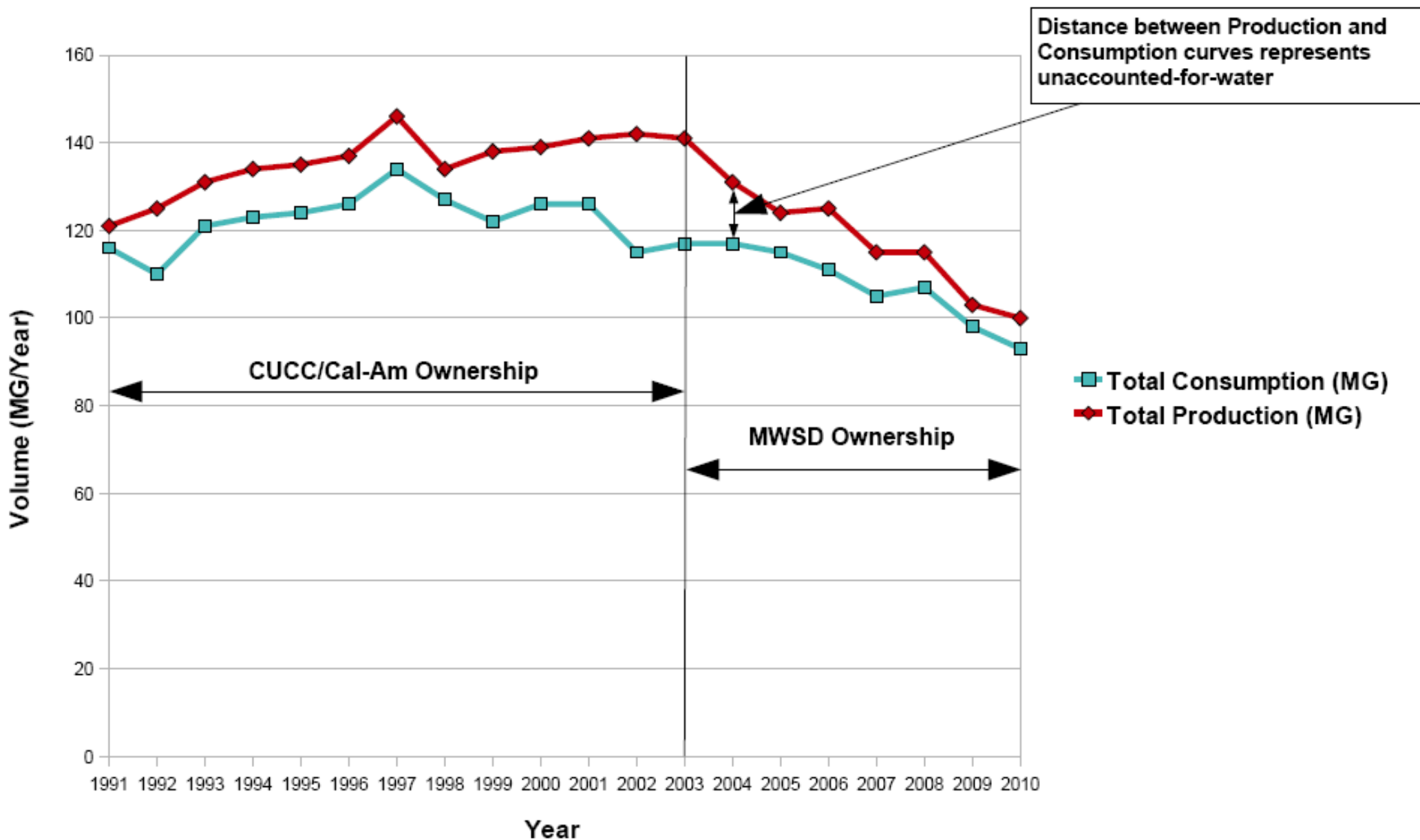


**SILICON VALLEY**  
**Water Conservation**  
**AWARDS**

# WATER SYSTEM RETROSPECTIVE

## Significant Changes in Water Demand

Production and Consumption Trend  
1991 - 2010





# WATER SYSTEM RETROSPECTIVE

## Summary

- MWSD has made significant improvements in the system that resulted in production and consumption shifts
- A critical time for the following:
  - Detailed data evaluation since MWSD acquisition
  - Revisiting old planning documents and understanding previous system conditions
  - Development of an updated and representative ***Water System Master Plan***

# **MASTER PLAN PURPOSE AND APPROACH**

## **Master Plan Objectives:**

- To present a clear picture of the current supply, demand, and distribution system conditions of the water system
- To project the future demands on the system and assess the capacity of the sources and distribution system to meet that demand
- To act as the guiding document for future policy and management decisions

# MASTER PLAN PURPOSE AND APPROACH

## Master Plan Outcomes:

- A living planning document that focuses on water system supply, demand, and distribution system analysis, usually updated every 5-10 years
- ***Capital Improvements Program***: a short-term plan that identifies capital projects and equipment purchases, and provides a general schedule and budget for the improvements

# MASTER PLAN PURPOSE AND APPROACH

## MWSD Specific

### Master Plan Approach

MWSD Now	MWSD's Needs	How MWSD Can Address the Needs
<p><b>Serving Customers with Water Meeting All Drinking Water and Safety Standards</b></p> <p><b><u>Facilities</u></b>            Water Storage Tanks            Wells and Pumps            Surface Water Treatment Plant            Wellhead Treatment            Distribution System</p> <p><b><u>Sources</u></b>            Montara Creek            Nine Groundwater Wells</p>	<p><b>Ability to Reliably Serve Current and Future Water Demands</b></p> <p><b>Continue to Serve Water Meeting All Drinking Water and Safety Standards</b></p> <p><b>Function Reliably and Cost-Effectively to Keep Water Rates as Low as Possible</b></p>	<p><b><u>Short-Term: Now to 2015</u></b></p> <p>Implement facility improvements</p> <p>Explore options for additional water supply</p> <p><b><u>Long-Term: 2015 - Buildout</u></b></p> <p>Develop additional water supply to meet buildout demands</p> <p>Implement facility improvements</p>



# CURRENT WATER SYSTEM OVERVIEW

- 1614 Residential, 30 Commercial, and 133 PFP Connections



# CURRENT WATER SYSTEM OVERVIEW

- **CRITICAL:** The production of MWSD sources are dependent upon the demand on the system
- **Production:** The production of the system is the volume of water that the sources produced and fed into the MWSD system. Production was calculated based on the operator logs for each water source.
  - Used to calculate demand
- **Consumption:** The consumption values represent the actual usage of the MWSD customers. Consumption was calculated based on the billing record summaries.
  - Used to calculate conservation
- **Unaccounted-for-water:** Difference between Production and Consumption; water losses

# **SUPPLY AND DEMAND OVERVIEW**

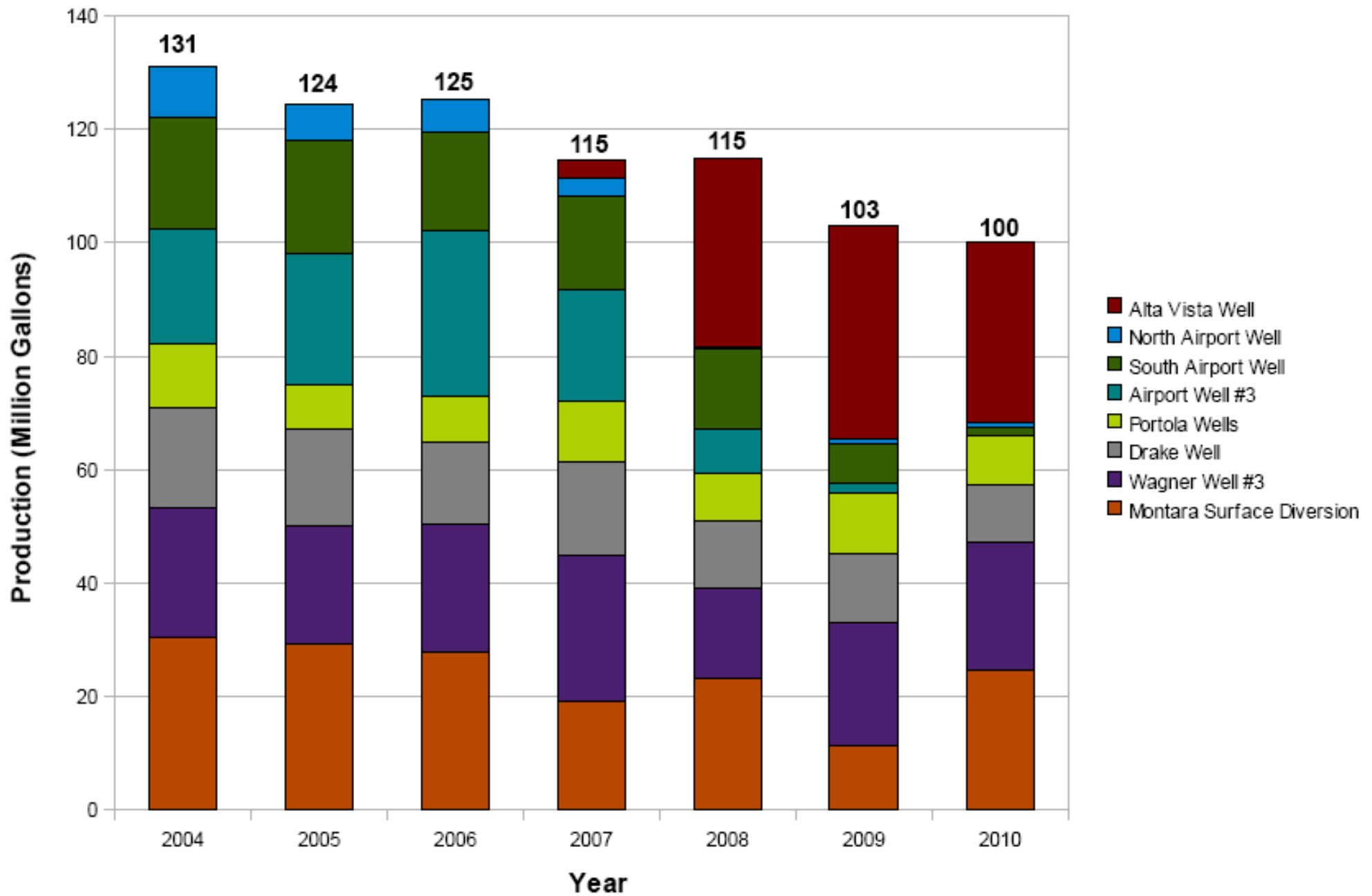
## **Production Data Summary**

### **2004 - 2010**

- **Average Daily Source Production**      318,418 gpd
- **Maximum Daily Source Production**      473,758 gpd
  - Averaged from actual max day data, 2006-2010
- Production has decreased over the last 7 years
- System Reliability has increased over the last 7 years
  - System-wide improvements
  - Additional supply

# Total Annual Production

Production by Source, 2004 - 2010





# SUPPLY AND DEMAND OVERVIEW

## Production Data Summary

Source	Rated Capacity	Annual Average Production Rate (gpm), 2004 -2007 <sup>1</sup>	Annual Average Production Rate (gpm), 2007 -2010
Alta Vista Well	150	N/A	72
North Airport Well	100	46	58
South Airport Well	55	42	35
Airport Well #3	100	73	55
Drake Well	35	37	37
Portola Well #1	9	6	6
Portola Well #3	10	7	6
Portola Well #4	16	6	8
Wagner Well #3	70	58	69
Montara Surface Water	75	63	49
<b>Total</b>	<b>620</b>	<b>344</b>	<b>395</b>

<sup>1</sup>Production Rates prior to the installation of Alta Vista Well

# SUPPLY AND DEMAND OVERVIEW

## 2011 Reliable Supply Capacity

**Reliable Supply:** the total source capacity with the largest source out of service

**The Largest Source:** Alta Vista Well

### Calculation:

Total source capacity	620 gpm
<u>Alta Vista Well capacity</u>	<u>150 gpm</u>
Total reliable capacity	470 gpm

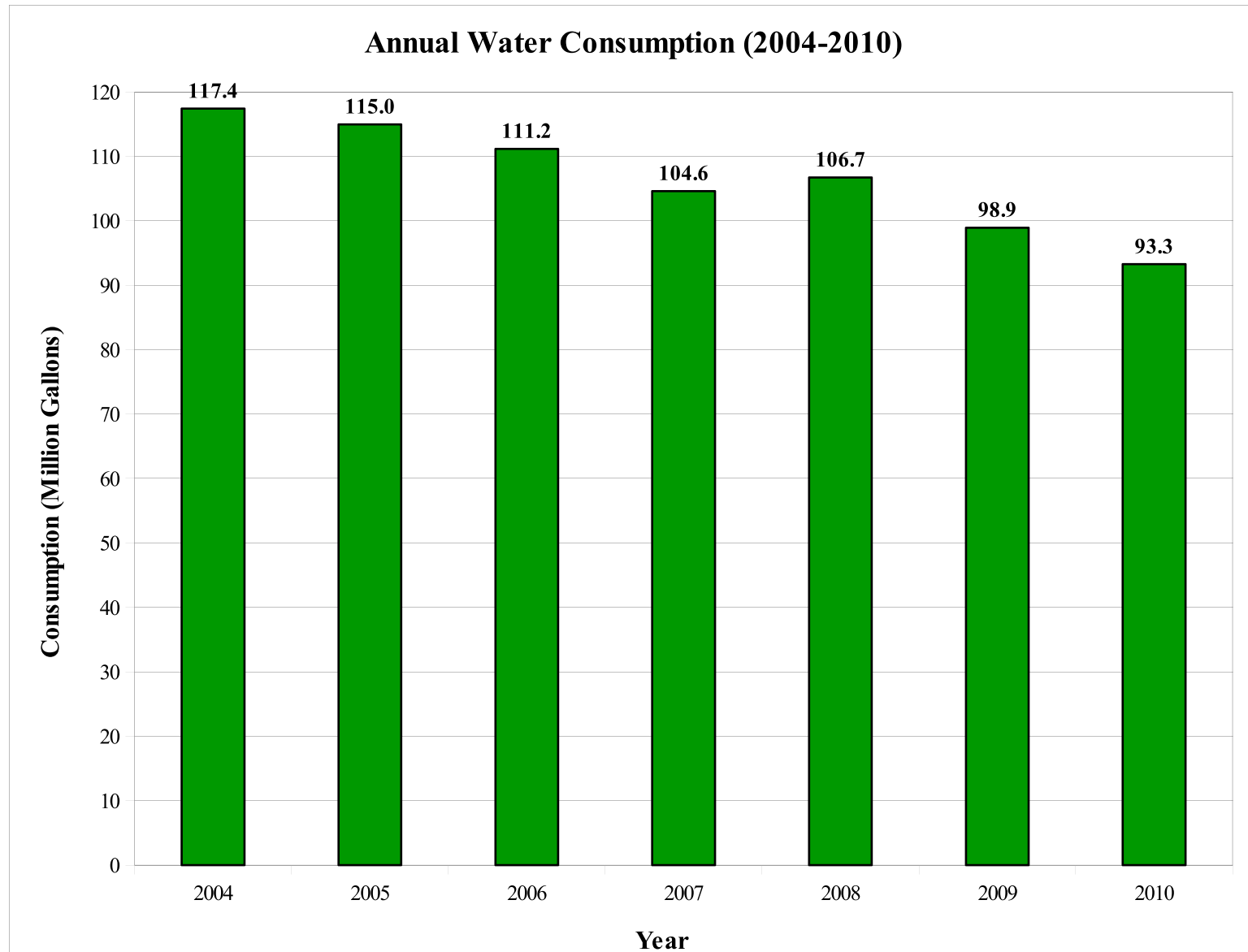
### Calculation Logic:

- Airport Wells are no longer considered a single source, making Alta Vista Well the largest single source

# SUPPLY AND DEMAND OVERVIEW

## Consumption Data Summary

### 2004 - 2010

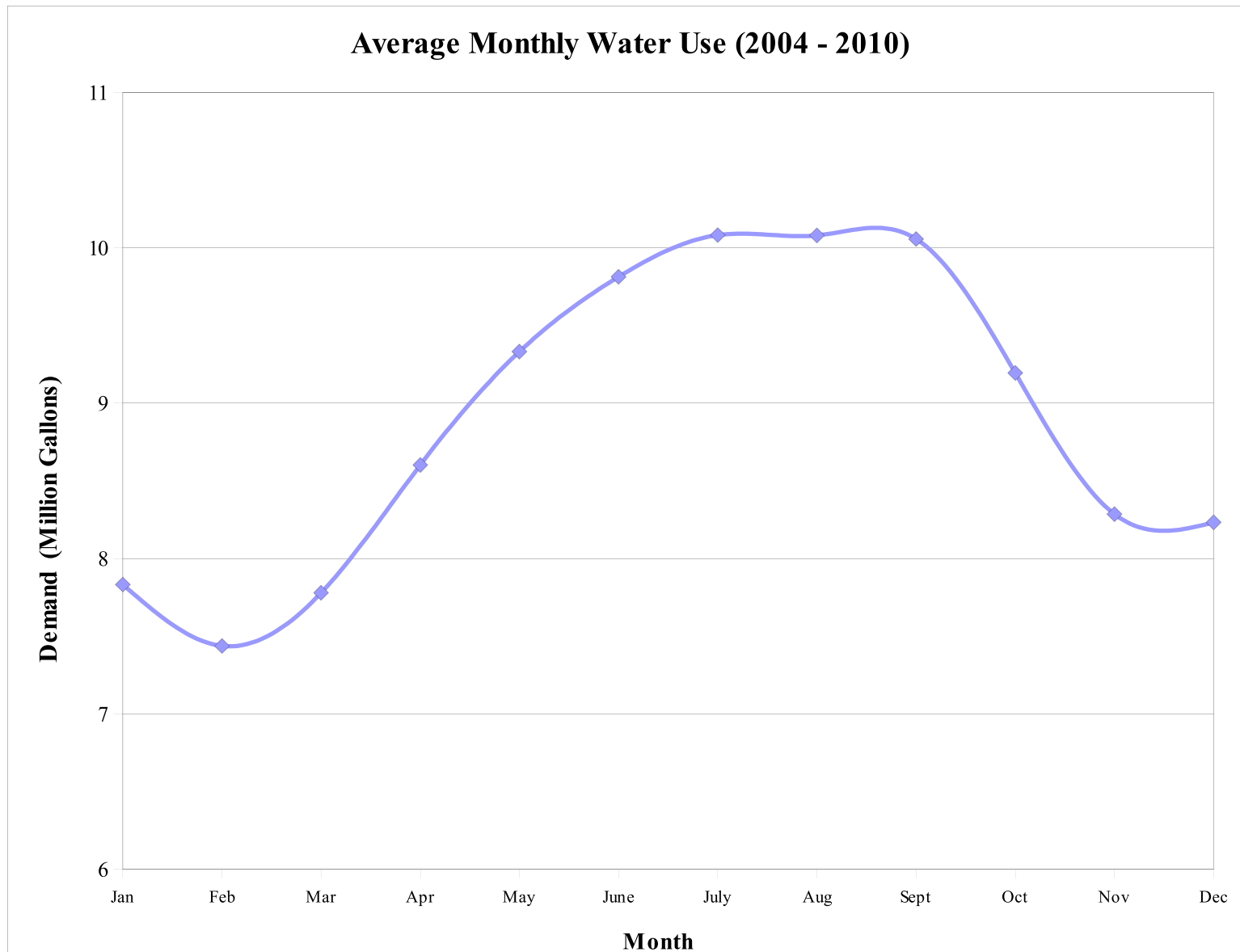


- Average Annual Consumption = 106.73 MG
- Average Daily Water Use = 292,400 gpd

# SUPPLY AND DEMAND OVERVIEW

## Average Monthly Water Use 2004 - 2010

The driest months of the year, May through October, have the highest consumption volumes on average, most likely due to increases in water used for irrigation.

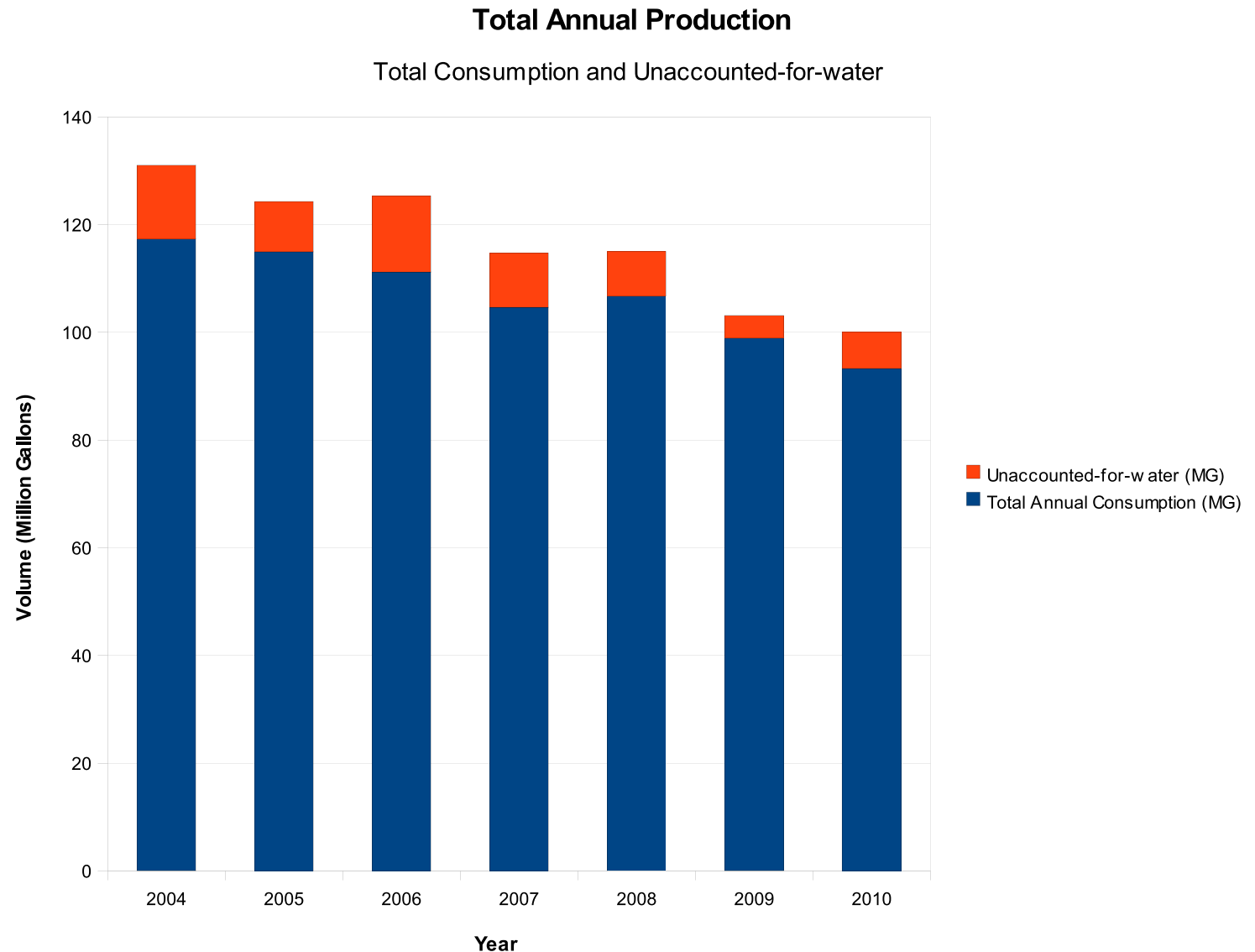




# SUPPLY AND DEMAND OVERVIEW

## Unaccounted-for-water, 2004 - 2010

- Decrease due to main and hydrant replacements, other operational uses, water quality improvements, and leak repair
- Average Unaccounted-for-water = 8%
- 2009-2010: Unaccounted-for-water has decreased though flushing frequency has increased



# SUPPLY AND DEMAND OVERVIEW

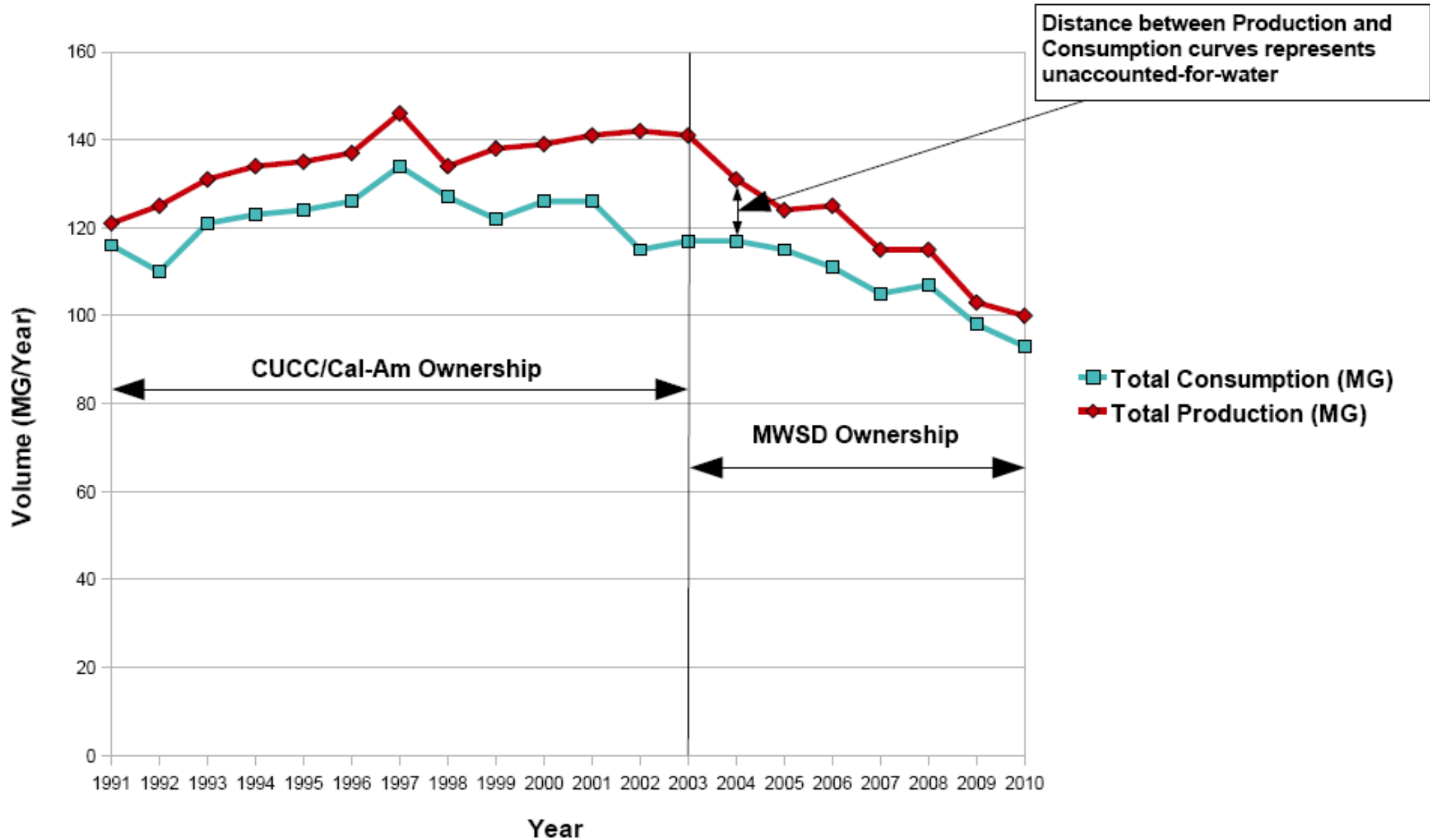
## Conservation Efforts Since 2004

- Consumption data from 2004 - 2010 used to calculate conservation
- Annual average conservation = 4% per year
- Total conservation, 2004 – 2010 = 21%
- 21% conservation = ~ 68,000 gpd conserved

Year	Consumption (gpd)	Annual Change (gpd)	Annual Percent Change
2004	321,649	--	--
2005	314,983	- 6,666	- 2%
2006	304,574	- 10,408	- 3%
2007	286,642	-17,932	- 6%
2008	292,393	5,751	2%
2009	271,066	- 21,327	- 7%
2010	254,318	- 16,748	- 6%
<b>Average annual change in consumption</b>			<b>- 4%</b>
<b>Total change in consumption (2004 - 2010)</b>			<b>- 21%</b>

# SUPPLY AND DEMAND OVERVIEW

Production and Consumption Trend  
1991 - 2010



# SUPPLY AND DEMAND OVERVIEW

## Demand Analysis

### ADD, MDD, and Per Capita Demands

- Customer demand calculation is based on the production data analysis and includes unaccounted-for-water
- Per capita demand was determined from 2000 US Census data, MWSD production records, and water connection records

Per Capita Demand Calculation	
Average Daily Demand (ADD)	318,418 <sup>1</sup>
Maximum Daily Demand (MDD)	473,758 <sup>1</sup>
Number of Residential System Connections	1614
Household Size	2.74 people/household <sup>2</sup>
Population Served	4,422 people
<b>Per Capita Demand</b>	<b>72 gpcd<sup>3</sup></b>

<sup>1</sup> Calculated empirically from production records

<sup>2</sup> Based on 2000 census data

<sup>3</sup> The ADD includes the 30 commercial water connections in the service area, so the population absorbs that demand in the per capita demand estimate

# SUPPLY AND DEMAND OVERVIEW

## Demand Analysis

### Existing Population Demands

- Based on the population *living within District service area*, calculated from the number of sewer connections vs. the number of water connections

Year	Number of Sewer Connections	Number of Water Connections	Number of Houses Not Connected to MWSD	Population not connected to MWSD	Estimated Population within Service Area
2010	1928	1614	314	860	5,283

- $ADD = 5,283 \text{ people} \times 72 \text{ gpcd} = 380,376$
- $MDD = ADD \times 1.5 = 570,564$



# SUPPLY AND DEMAND OVERVIEW

## Demand Analysis

### Future Population Demands

- Based on 2000 US Census data, MWSD sewer and water connection records, the 2009 DRAFT SM County LCP, and calculated per capita demand

Year	Total Population	Average Annual Rate of Growth	Projected Average Daily Demand	Projected Maximum Daily Demand (gpd)
2000	4,903	--	--	--
2010	5,283	.75	380,376	570,564
2020	5,836	1	420,192	630,288
2030	6,447	1	464,184	696,276
2040	7,121	1	512,712	769,068
2050	7,866	1	566,352	849,528
2060	8,689	1	625,608	938,412
Buildout (2066)	9,215	1	663,480	995,220

# SUPPLY AND DEMAND OVERVIEW

## Reliable Supply vs. Projected Demands

### Summary of Results

- Reliable supply will match projected MDD around the year 2027
- Additional connections can be served with existing supply

Year	Total Reliable Supply (gpd) <sup>1</sup>	Projected Maximum Daily Demand (gpd)	Excess or Deficit Supply (gpd)
2010	676,800	570,564	106,236
2020	676,800	630,288	46,512
2030	676,800	696,276	-19,476
2040	676,800	769,068	-92,268
2050	676,800	849,528	-172,728
2060	676,800	938,412	-261,612
Buildout (2066)	676,800	995,220	-318,420

<sup>1</sup> Calculated from the reliable supply capacity of 470 gpm for 24 hours

# **CAPITAL IMPROVEMENTS PROGRAM (CIP)**

- Water Master Plan is a living document conducted every 5 to 10 years.
- One of the results of a Water Master Plan is usually a Capital Improvement Program (CIP)
- A CIP identifies and prioritizes projects that are necessary to ensure a safe and reliable water supply for years to come.
- CIP Projects are usually scheduled according to future need and available budget.

# CAPITAL IMPROVEMENTS PROGRAM (CIP)

- CIP Projects are identified different ways:
  - System Calculations / Deficiency Analysis
  - Infrastructure Inspection and Assessment
  - Operator Interviews
  - Redundancy Review
  - Hydraulic Computer Modeling – Distribution System Analysis

# CAPITAL IMPROVEMENTS PROGRAM

## Distribution System Analysis

The background features a map of a city's water distribution system. The map is overlaid with several colored zones: a large pink area in the upper center, a yellow area to the left, a purple area to the right, and a cyan area at the bottom. A network of lines representing pipes is visible across the map. On the right side, there are two legends. The top legend lists zones with corresponding color swatches: 'COURTNEY ZONE' (pink), 'ALVA WEST ZONE' (yellow), 'HARBOR ZONE' (cyan), 'WEST BEACH/ST. CATH.' (purple), 'WESTLA ZONE' (light purple), 'WINDY ZONE' (light blue), and 'ALVA EAST WEST BEACH' (green). The bottom legend, titled 'PIPE SIZE (INCH)', lists pipe diameters from 1 to 18 inches, each associated with a specific line style and color.

- Model utilizes Navier Stokes equations to mathematically simulate the water system.
- Once calibrated, the model can be used to test system stress, such as fire flows, peak hour demands, and future demands.
- Model results such as high pipeline velocity or headloss, or low/high node pressures, can help identify areas in need of improvement.
- System capacity can be improved dramatically by merely replacing aged pipes.



# CAPITAL IMPROVEMENTS PROGRAM

- Schoolhouse Booster Pump Station Upgrade
- Main Replacements
- Wagner Well Pump Upgrade
- PRV and Valve Installation Program



# CAPITAL IMPROVEMENTS PROGRAM

- Develop Additional Supply Reliability
- Portola Tank Telemetry Upgrade
- SCADA Improvements
- Treatment Upgrades



# SUMMARY

- Since acquisition of the Water System, MWSD has made system improvements, promoted community conservation, and acquired a new source
- Data analysis of MWSD water production and consumption records provided important information on current and future water demand trends
- Due to system improvements, conservation, and additional supply sources, MWSD has water available in excess of current demands



A photograph of a small waterfall in a garden. The waterfall is constructed from a wooden plank and is surrounded by lush green plants and grasses. Two people are visible in the scene: one person is crouching on the left, holding a long metal rod that extends into the water, and another person is standing on the right, looking towards the waterfall. The text "END OF PRESENTATION" is overlaid in large, bold, black letters across the center of the image.

**END OF PRESENTATION**





# Montara Water and Sanitary District **WATER SYSTEM MASTER PLAN**



**December 2011**

Prepared by:









## **Acknowledgments**

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SRT Consultants acknowledges the support and contributions of the Montara Water and Sanitary District Board of Directors and staff in the development of this Water System Master Plan.

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**2011  
WATER SYSTEM  
MASTER PLAN**





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# **EXECUTIVE SUMMARY**





## Executive Summary

The 2011 Water System Master Plan Update (2011 Master Plan) addresses the current and future water supply needs of Montara Water and Sanitary District (MWSD or District) and creates a basis for the MWSD's Capital Improvements Program (CIP). The 2011 Master Plan describes and assesses the existing water infrastructure, examines current and projected water demands, and outlines viable alternatives to allow the District to fulfill its mission of providing “the people of Montara and Moss Beach with reliable, high-quality water, wastewater, and trash disposal services at an equitable price, and to ensure the fiscal and environmental vitality of the district for future generations.” The objectives of this 2011 Master Plan include addressing the following key issues for the MWSD Water System:

- Assess current and future water supply reliability to ensure adequate daily service and fire protection for the District's customers;
- Assess the water system seismic reliability and emergency response capabilities; and
- Develop a plan for addressing future demands through buildout, as outlined in the San Mateo County Local Coastal Program (LCP), including a capital improvements program (CIP).

### MWSD Water System

MWSD's existing water system includes surface and groundwater sources, water storage tanks, a surface water treatment plant, well-head treatment units, distribution pipelines, and a booster pump station. MWSD serves water that comes from Montara Creek, a surface water source, and nine groundwater wells that withdraw water from various groundwater basins. Each source has a rated capacity, established at the time it was brought on line; however, all sources normally operate below their respective rated capacities. Rated capacities are important in determining the reliable capacity of the system and addressing the maximum demand that the system can serve.

MWSD sources currently have a rated capacity of 620 gallons per minute (gpm), due to the addition of the Alta Vista Well with a rated capacity of 150 gpm. MWSD sources average a combined production rate of 395 gpm, based on production rates from November 2007 through December 2010. A summary of average production rates for each source for this time period is presented in Table ES-1. Detailed production data for 2004 – 2010 can be found in Appendix A and Appendix B.

<b>Table ES-1 Average Monthly Production Rates 2007 – 2010</b>		
<b>Source</b>	<b>Rated Capacity</b>	<b>Annual Average Production Rate (gpm)<sup>1</sup></b>
<b>Alta Vista Well</b>	150	72
<b>North Airport Well</b>	100	58
<b>South Airport well</b>	55	35
<b>Airport Well #3</b>	100	55
<b>Drake Well</b>	35	37
<b>Portola Well #1</b>	9	6
<b>Portola Well #3</b>	10	6
<b>Portola Well #4</b>	16	8
<b>Wagner Well #3</b>	70	69
<b>Montara Surface Diversion</b>	75	49
<b>Total Average Monthly Production</b>	<b>620</b>	<b>395</b>

<sup>1</sup>Production rates are the operating rates of each source, and are only recorded when the source is being used. The annual average is determined from the operating production rates of each source and are averaged over the operating time, not total time.

The current rated capacities, including the new Alta Vista Well, were utilized in evaluating the total MWSD source capacity. In summary, the District's water system currently relies on the following source capacities:

Nine active groundwater wells	545 gpm
<u>Surface water from Montara Creek</u>	<u>75 gpm</u>
<b>Total source capacity</b>	<b>620 gpm</b>

Reliable capacity of the system is defined as the capacity of the system with the largest source out of service; the largest source in the MWSD system was established to be the Alta Vista Well, with a rated capacity of 150 gpm. The following calculation determines the reliable capacity of the system, assuming the Alta Vista Well is out of service:

Total source capacity	620 gpm
<u>Alta Vista Well capacity</u>	<u>150 gpm</u>
<b>Total reliable capacity</b>	<b>470 gpm</b>

### **Water Consumption**

MWSD water use billing records were used to evaluate the annual consumption trends over the seven year time period (2004-2010). The water consumption generally declined each year, with the exception of a small increase in 2008. The general decrease in consumption is attributed to the implementation of the main replacement program, meter replacement program, and improved operational practices by the District, as well as voluntary conservation by the District's customers. A summary of the consumption data is presented in Table ES-2.

	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Total Consumption (MG)</b>	117.40	114.97	111.17	104.62	106.72	98.94	92.83
<b>Average Daily Water Use (gpd)</b>	320,770	314,122	303,742	285,859	291,580	271,066	254,318

From this data, average and per capita water use values were calculated. The average annual consumption is approximately 107 million gallons (MG) and the average daily consumption is approximately 292,000 gallons per day (gpd).

### **Current Water Demand**

The demand on the MWSD system was determined from the production records, since the demand values must include unaccounted-for-water to accurately represent the supply required to support the customer water use. On average, MWSD water sources produced 318,418 gpd over the past seven years, 2004 through 2010, with an annual average minimum production of 274,118 gpd in 2010 and an annual average maximum of 359,023 gpd in 2004. The data trend generally indicates the production decreasing across the seven years, with relatively stable production from all sources, except for the Airport Well No. 3, the South Airport Well, and Alta Vista Well. Most notably, when the Alta Vista Well came on line in 2008 for the first full year of production, MWSD was able to lessen its dependence on the Airport Wells, thus realizing an important improvement in the water system reliability. Table ES-3 presents MWSD's average and peak water demands based on the 2004-2010 production records.

	<b>Demand on MWSD System (gallons)</b>	<b>Water Use (gallons)</b>	<b>Peaking Ratio</b>
Average Daily Demand (ADD)	318,418	292,232	1.0
Maximum Daily Demand (MDD)	473,758 <sup>a</sup>	438,348 <sup>b</sup>	1.5 <sup>c</sup>
Maximum Hour	34,500 <sup>d</sup>	31,658 <sup>d</sup>	2.6
Design Fire (2 hours, 2,000 gpm)	240,000	240,000	N/A

<sup>a</sup> Based on daily production data for maximum production months, 2005-2010. 2004 data was not used due to inaccessibility.

<sup>b</sup> Calculated from maximum daily production values, with an 8 percent reduction for unaccounted-for-water.

<sup>c</sup> Calculated empirically from system MDD and ADD values.

<sup>d</sup> Calculated utilizing a peaking ratio of 2.6, as used in previous MWSD Master Plans.

Water demand per person was calculated from 2000 U.S. Census population data (household size, 2.74), water connection records (1614 connections), and MWSD production records (318,418 gpd). Based on these values, the per capita daily water demand was established as approximately 72 gallons per capita per day (gpcd). This per capita demand is significantly lower than the 84 gpcd estimated for the years 2000-2003, as reported in the 2004 Master Plan Update.

**Future Water Demand**

Future demands on the MWSD water system were estimated for the all years through buildout. Future demand estimates are based on the following assumptions:

- The population already residing or owning property in the service area that is not connected to MWSD, will be connected to system, and
- The District will serve new homes being built in the service area in accordance with the current San Mateo County LCP Update.

Assuming the entire population were to be served by MWSD through buildout, the projected demands on the system for future years is based on the population growth rate of 1 percent established in the Draft 2009 San Mateo County LCP Update and the calculated per capita demand. Table ES-4, below, presents the projected ADD and MDD through buildout.

<b>Year</b>	<b>Total Population</b>	<b>Average Annual Rate of Growth, percent</b>	<b>Projected Average Daily Demand (gpd)<sup>e</sup></b>	<b>Projected Maximum Daily Demand (gpd)<sup>f</sup></b>
2000	4,903 <sup>a</sup>		--	--
2010	5,283 <sup>b</sup>	0.75	380,376	570,564
2020	5,836 <sup>c</sup>	1	420,192	630,288
2030	6,447 <sup>c</sup>	1	464,184	696,276
2040	7,121 <sup>c</sup>	1	512,712	769,068
2050	7,866 <sup>c</sup>	1	566,352	849,528
2060	8,689 <sup>c</sup>	1	625,608	938,412
Buildout (2066)	9,215 <sup>c,d</sup>	1	663,480	995,220

<sup>a</sup> From U.S. Census data

<sup>b</sup> From MWSD sewer and water connection records

<sup>c</sup> Assuming 1 percent annual rate of growth as per Draft 2009 San Mateo County LCP Update

<sup>d</sup> Calculated from household size and number of units presented in the Draft 2009 San Mateo County LCP Update

<sup>e</sup> Assumes 72 gpcd demand through buildout.

<sup>f</sup> Assumes 1.5 peaking ratio based on empirical analysis of MWSD system (Table ES-3)

**Water System Reliability**

To determine the water system reliability, the MDD was compared to the reliable supply capacity. Table ES-5 shows the current available capacity of the system, and compares this volume of water to the MDD of the current population within the MWSD service area. If no improvements or additional sources were added to the MWSD system, the system will not be able to support the demands of the projected population through buildout, indicated in Table ES-5 as deficits in supply.



<b>Year</b>	<b>Reliable System Capacity (gpd)<sup>a</sup></b>	<b>Maximum Daily Demand (gpd)</b>	<b>Excess or Deficit Supply (gpd)</b>
<b>2010</b>	676,800	570,564	106,236
<b>2020</b>	676,800	630,288	46,512
<b>2030</b>	676,800	696,276	-19,476
<b>2040</b>	676,800	769,068	-92,268
<b>2050</b>	676,800	849,528	-172,728
<b>2060</b>	676,800	938,412	-261,612
<b>2066</b>	676,800	995,220	-318,420

<sup>a</sup> Daily reliable system capacity excludes Alta Vista Well production, and is calculated assuming that the sources are operating at rated capacity for 24 hours.

### **Water Quality**

The MWSD water quality is monitored and reported in compliance with all federal and state regulations. Regulations at the federal level are promulgated by the United States Environmental Protection Agency (USEPA), which is responsible for setting standards and assuring compliance. Regulations at the state level are maintained by the California Department of Public Health (CDPH), which carries out similar responsibilities. To ensure high water quality, MWSD owns and operates CDPH-approved treatment facilities and associated processes, including a surface water treatment plant and several well-head treatment units. Approximately 1,200 analyses are conducted on the drinking water per year, and reported to the consumers in the annual Consumer Confidence Report (CCR).

Based on the 2010 MWSD CCR, MWSD is in compliance with all water quality regulations. However, there are water quality concerns that the District mitigates to ensure safe drinking water: (1) Copper was found at levels that exceeded the Regulatory Action Level (AL) of 1.3 parts per million (ppm) in the 2005 residential tap sampling; (2) Nitrate was detected at Airport Well 3 at levels above the Maximum Contaminant Level (MCL) of 45 ppm; this well is currently kept offline; (3) Manganese was found at levels that exceeded the secondary MCL of 50 parts per billion (ppb); exceeding the secondary MCLs poses no health risks; (4) Arsenic was detected at the Alta Vista Well at levels *below* the MCL, but above 5 ppm. The 2010 MWSD CCR can be found in Appendix C.

### **Distribution System and Storage Requirements**

The competence and deficiencies of the MWSD water system were evaluated based on current and projected demands. The distribution and storage system facilities and associated design criteria were utilized to evaluate the efficiency of the system at handling the established demands. The current and future demand analysis for the MWSD system was the basis of the design criteria, which ultimately informed the storage capacity requirements, distribution system evaluation, system deficiencies, and the CIP.

*Storage Requirements*

The total required volume of storage in a water system includes water for operational, emergency, and fire-fighting uses. Operational storage is directly related to the amount of water necessary to meet peak demands. The intent of operational storage is to provide the difference in quantity between the customer's peak demands and the system's available supply. The volume of water allocated for emergency uses is decided based on the historical record of emergencies experienced, and on the amount of time which is expected to lapse before the emergency can be corrected. Water storage for fighting fires is regulated in quantity by the National Fire Code, Insurance Service Office, and local Fire Department. The current and future storage requirements for the MWSD system are presented in Table ES-6. There is a current storage deficit of 333,276 gallons, and future growth at buildout would require an additional of 1,153,765 gallons of storage.

<b>Figure ES-6 Summary of Required Storage Volume</b>				
	<b>Current</b>	<b>2020</b>	<b>2040</b>	<b>Buildout</b>
<b>ADD</b>	318,418	420,192	512,712	663,480
<b>MDD</b>	473,758	630,288	769,068	995,220
<b>Operational Storage</b> (25% of MDD)	118,440	157,572	192,267	248,805
<b>Emergency Storage</b> (2 x ADD)	636,836	840,384	1,025,424	1,326,960
<b>Fire Fighting Storage</b> (2 hrs @ 2,000 gpm)	240,000	240,000	240,000	240,000
<b>Total Storage Needed</b>	<b>995,276</b>	<b>1,237,956</b>	<b>1,457,691</b>	<b>1,815,765</b>
<b>Existing Storage</b>	662,000	662,000	662,000	662,000
<b>Storage Deficit</b>	<b>333,276</b>	<b>575,956</b>	<b>795,691</b>	<b>1,153,765</b>

**Capital Improvements Program**

The analysis summarized in the 2011 MWSD Water System Master Plan demonstrates that the water system requires improvements to address system deficiencies due to the addition of new customers, continue to improve water supply reliability, and ensure sufficient response under daily operational scenarios, fire flow, and other emergency conditions. These potential improvements make up the District's CIP and include the rehabilitation of the existing infrastructure, addition of new facilities, development of new sources of supply, and implementation of a repair and replacement and preventive maintenance program. The proposed improvements are categorized *Priority Level 1* and *Priority Level 2*, based on the District's CIP prioritization criteria.

*Priority Level 1* projects almost exclusively address the system deficiencies related to adding new customers to the system. Most of the identified system deficiencies are due to adding new connections to the system and increasing demand. These improvements will be implemented in

the next 15 years, a timeline that is based on new system connections, construction feasibility, and cash flow. The projects and actions described below would allow the District to address system deficiencies and continue to operate an efficient and reliable system. The proposed *Priority Level 1* improvements continue the District’s progress toward sustainability through investments that: (1) diversify sources of water supply, (2) improve water quality, (3) encourage conservation of water and energy, and (4) meet current and future infrastructure needs. The near-term improvements will almost entirely be funded through the Water Capacity Charge (WCC).

Table ES-7, below, contains *Priority Level 1* projects that have been formulated to provide benefit to, and be paid for by, new District customers. Two of the projects will provide some benefit to new and existing customers, and a percentage of these project costs will be funded through water rates. The *Priority Level 1* projects are planned to be implemented from FY 2010/2011 through FY 2024/2025.

<b>Table ES-7 Near-Term Improvements Cost Summary</b>			
<b>Project</b>	<b>Total Project Cost</b>	<b>Covered through Water Rates</b>	<b>New Customer FRC</b>
Develop Additional Supply Reliability	\$2,270,000	-	\$2,270,000
Portola Tank Telemetry Upgrade	\$50,000	-	\$50,000
New and Upgraded PRV Stations	\$300,000	-	\$300,000
SCADA Improvements	\$50,000	-	\$50,000
Schoolhouse booster Pump Station	\$600,000	\$300,000	\$300,000
Treatment Upgrades	\$320,000	-	\$320,000
Phase I PWP Storage Projects	\$2,600,000	\$780,000	\$1,820,000
Phase II PWP Development and Implementation	\$1,450,000	-	\$1,450,000
Valve Installation Program	\$165,000	-	\$165,000
New Water Storage Tank	\$550,000	-	\$550,000
Wagner Well Pump Upgrade	\$25,000	-	\$25,000
Water Main Upgrades	\$1,560,000	-	\$1,560,000
<b>Total Cost Project Costs</b>	<b>\$9,940,000</b>	<b>\$1,080,000</b>	<b>\$8,860,000</b>

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# **SECTION ONE**

## **Introduction**

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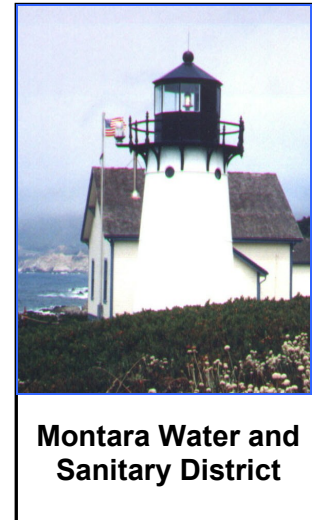




## 1.0 Introduction

The Montara Water and Sanitary District (MWSD or District) provides water, sewer, and trash disposal services to the coastal communities of Montara, Moss Beach, and adjacent areas located north of Half Moon Bay and south of Pacifica, in San Mateo County, California. In 2003, the Board of Directors adopted the following statement as the District's mission:

*To sensitively manage the natural resources entrusted to our care, to provide the people of Montara and Moss Beach with reliable, high-quality water, wastewater, and trash disposal services at an equitable price, and to ensure the fiscal and environmental vitality of the district for future generations.*



The District owns and operates water storage, treatment, and distribution facilities (“water system” or “water infrastructure”) that provide potable water to over five thousand people. The water system serves 1,644 domestic accounts, over 95 percent of them residential connections, distributed among seven pressure zones. The water served is diverted from a surface water source, Montara Creek, and extracted from nine groundwater wells that withdraw water from Montara Creek and Denniston Creek groundwater basins. The system also includes a surface water treatment plant, three potable water storage tanks, and over 150,000 feet of distribution pipelines.

### 1.1 Purpose

The purpose of this 2011 Water System Master Plan Update (Master Plan) is to address the District's current and future water supply needs and create a foundation for the MWSD's Capital Improvements Program (CIP). This Master Plan describes and assesses the existing water infrastructure, examines current and projected water demands, and outlines viable alternatives that will allow the District to fulfill its mission.

The objectives of this Master Plan include addressing the following key issues for the Water System:

- Assess current and future water supply reliability to ensure adequate daily service and fire protection for the District's customers;
- Assess the water system seismic reliability and emergency response capabilities; and
- Develop a plan for addressing future demands through buildout, as outlined in the San Mateo County Local Coastal Program (LCP), including a capital improvements program (CIP).

Figure 1.1 demonstrates the District's planning approach to address its water system needs.

<b>MWSD Now</b>	<b>MWSD's Needs</b>	<b>How MWSD Can Address the Needs</b>
<p><b>Serving Customers with Water Meeting All Drinking Water and Safety Standards</b></p> <p><b>Facilities</b> Water Storage Tanks Wells and Pumps Surface Water Treatment Plant Wellhead Treatment Distribution System</p> <p><b>Sources</b> Montara Creek Airport Wells (3) Portola Estates Well (3) Wagner Well Drake Well Alta Vista Well</p>	<p><b>Ability to Reliably Serve Current and Future Water Demands</b></p> <p><b>Continue to Serve Water Meeting All Drinking Water and Safety Standards</b></p> <p><b>Function Reliably and Cost-Effectively</b></p> <p><b>Resource Sustainability</b></p>	<p><b>Short-Term: Now to 2015</b> Implement facility improvements Explore options for additional water supply</p> <p><b>Long-Term: 2015 - Buildout</b> Develop additional water supply to meet buildout demands Implement facility improvements</p> <p><b>Continuous</b> Water Conservation Program to maintain low per capita usage Groundwater Monitoring</p>

**Figure 1.1 Master Plan Approach**

Facilities required to address the water system needs must be sized to provide sufficient quantities of water at adequate pressures while meeting the system demands. For the purpose of this Master Plan, the ability of the system to meet demands has been evaluated based on various flow scenarios, including:

- Average Daily Demand
- Maximum Day Demand
- Peak Hour Demand, and
- Design Fire Flow

Water quality considerations have a major impact on the type and location of the facilities recommended for implementation in this Master Plan. Ensuring water system operational and seismic reliability through careful monitoring and control of equipment and process units and backup equipment and backup power provisions is essential in meeting the water supply and water quality requirements.

## **1.2 Background**

In May 2002, the Montara Sanitary District filed a condemnation action to acquire the local water system. The District's filing came after the voters of Montara and Moss Beach, with 81 percent of the votes in favor, authorized the issue of up to \$19 million in general obligation bonds to purchase and rehabilitate the water system.

The Board of Directors of the Montara Sanitary District, in a special meeting held on May 29, 2003, approved a Settlement and Asset Purchase Agreement with the California-American Water

Company (Cal-Am), which owned the water system serving Montara, Moss Beach, and adjacent areas. The Agreement was negotiated under the auspices of the County of San Mateo Superior Court.

The Agreement approved on May 29, 2003 authorized the Montara Sanitary District to take possession of Cal-Am's Montara Water System and all its assets on August 1, 2003. In a document dated August 1, 2003, California Department of Public Health (CDPH or Department, formerly Department of Health Services) approved the application for a permit amendment requested by the then re-named Montara Water and Sanitary District. Domestic Water Supply Permit No. 02-04-98P-4110010, issued on February 23, 1998 by CDPH to Citizens Utility Company of California and amended in 2002 when Cal-Am acquired the system, was again amended in 2003 to recognize the MWSD's ownership and operation of the water system.

### 1.3 Previous Studies

Several studies preceded this master planning effort and have evaluated alternative water supply options for the District service area:

- The *1996 Water System Master Plan Update* prepared by Montgomery Watson for Citizens Utility Company of California evaluated potential new groundwater wells in the Montara and Denniston basins; rehabilitation of existing wells; water transfers from Federal, State, or local agencies<sup>1</sup>; water purchases from neighboring districts; increased diversion from Montara Creek; new local surface water diversions; and seawater desalination.
- The *1999 Montara Water Supply Study for Montara Sanitary District* prepared by the California Department of Water Resources (DWR) examined the development of new groundwater and surface water sources; new water contract; water transfers; water from dewatering of Devil's Slide; seawater desalination; use of recycled water for irrigation and aquifer recharge; and increased water conservation.
- The *1999 Preliminary Feasibility Assessment of Groundwater in the Martini Creek, McNee Ranch and Upper Montara Area*, prepared by Balance Hydrologics for the Montara Sanitary District, indicated that additional local groundwater may be available, recommended conjunctive use of surface and groundwater resources, identified several potential well locations for further study, and recommended measuring flows on Martini Creek.
- The *2000 Water System Master Plan Update* prepared by Montgomery Watson for Citizens Utility Company of California elaborated on the alternatives put forth by the previous studies.
- The *2002 Montara Water Supply Source Study, Groundwater Alternatives* prepared by Bookman-Edmonston for Cal-Am discussed 42 potential sources of groundwater.
- The *2004 Water System Master Plan*, prepared by Olivia Chen Consultants
- The *2005 Water System Master Plan Addendum*, prepared by SRT Consultants

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<sup>1</sup> The primary types of water transfers are water rights or entitlement transfers that involve purchasing an appropriated water right or a contract entitlement. Some quantity of imported supply would be available from the transfer every year, usually more in wet years than in dry years. Water purchased from distant agencies would be transferred to the purchaser through the conveyance systems of other utilities.

- The *Bay Area Clean Water Agencies (BACWA) Integrated Watershed Management Plan* compiled by BACWA, included the MWSD Groundwater Exploration Project, which consisted of drilling up to 2 test wells for the purpose of characterizing the aquifers in terms of optimal potable water supply use.
- The *2007 Brackish Water/Seawater Desalination Feasibility Study*, prepared by RBF Consulting for MWSD, indicated that the construction of a seawater desalination facility on the District's property appears feasible.

## **1.4 Previous Water Supply Augmentation Efforts**

The studies completed since 1996 were consistent in many of their findings. The discussion in this section summarizes the results, research, testing, and evaluation of alternatives as they relate to potential future water supply sources for MWSD.

### ***1.4.1 Groundwater***

There is a general consensus that groundwater represents the least costly, most readily available source of water supply for MWSD. Completed studies have estimated capacities at various locations, but ultimately concluded that further investigations are required to define the extent and reliability of groundwater resources. The District investigated potential new groundwater sources in the Martini and Montara Creek basins in 2004-2005. Several test wells were drilled for the purpose of groundwater exploration. One location at the District's Alta Vista property demonstrated high yield and good water quality. At the request of the California Coastal Commission (Coastal Commission or CCC), the District developed this borehole into a test well. This test well was converted into a production well with the rated capacity of 150 gallons per minute (gpm).

In addition, the District continues its attempts to secure rights to conduct groundwater exploration work within the Caltrans right-of-way (ROW) east of Montara. This ROW was secured by Caltrans for a future highway over 30 years ago. Caltrans no longer plans to construct the highway and the land ownership will most likely be transferred to another governmental entity as parkland. This option appears to have high potential for finding groundwater sources to address the District's future supply needs.

### ***1.4.2 Surface Water***

The first four studies advocated use of surface water sources to the maximum extent possible; however, lack of sufficient hydrologic information precluded the preparers of the reports from estimating volumes of surface water available for development. Most of the studies raised water quality concerns about potential surface sources. In addition, concerns from resource agencies including California Department of Fish and Game (DFG), Fish and Wildlife Service (FWS), and National Oceanic and Atmospheric Administration (NOAA), about diminishing fish population in coastside creeks and endangered species protection, will most likely prohibit any new and/or increased creek diversions in the District's service area.

### ***1.4.3 Water Transfers***

The earlier studies deemed water transfers and water wheeling feasible for the MWSD water system. However, starting with the *2000 Master Plan Update*, it became apparent that there were



no reliable supplies available to purchase from outside of the service area. Recent (2008) correspondence from the Bay Area Water Supply and Conservation Agency (BAWSCA) together with BAWSCA's earlier letter (2003) firmly stated that the agency had no ability to secure water transfers from the San Francisco Public Utilities Commission (SFPUC) to MWSD due to the terms of its existing contracts with SFPUC and the SFPUC water allocation commitments to its existing wholesale customers. Water from the Department of Transportation (Caltrans) dewatering of the Devil's Slide area was evaluated by the *1996 Master Plan Update* and the *1999 DWR Study*. The project would involve constructing an over 5-mile-long pipeline to convey water to MWSD from the slide area. The feasibility, cost-effectiveness, and long-term reliability of this supply cannot be assured. Recent communications with Caltrans representatives indicated that water supply from the dewatering operations within the MWSD service area was scarce and of poor quality.

#### ***1.4.4 Recycled Water***

The *2000 Master Plan Update* excluded the use of recycled water as a non-feasible solution to meet the short-term needs of the District. The study recommended keeping water reclamation as a potential long-term solution. Since there is no treated wastewater being produced within the District's boundaries at this time and the number of large irrigation customers using potable water for irrigation is minimal, the alternative of augmenting the District's water supply by direct application of recycled water in the District's service area appeared non-feasible at that time. However, there are options for MWSD to construct decentralized wastewater treatment facilities within the service area to treat wastewater and utilize as a resource for crop irrigation. Further research needs to be conducted to evaluate the feasibility of decentralized recycled water for the District.

#### ***1.4.5 Water Conservation***

Previous studies discarded water conservation as a reliable source of additional supply due to MWSD's historically low per capita rate of water consumption. This low rate of consumption was stated as the reason and further significant reductions were deemed difficult to achieve. However, during the last six years of District's ownership of the water system, the District, with cooperation of its water customers, was able to achieve an 18-percent reduction in demand and thus create a significant additional water supply source. Since this reduction in demand is mostly attributed to water main leak rate reduction, operational changes implemented by the District, and changes in landscaping use by the customers, this water conservation level is considered highly sustainable. However, it is unlikely that the District would be able to achieve further significant demand reduction through conservation.

#### ***1.4.6 Brackish and Seawater Desalination***

The feasibility of seawater desalination has been evaluated several times. The *1996 Master Plan Update* proposed desalination as a source of additional water supply. The alternative was subsequently found too costly. The *2000 Master Plan Update* evaluated this alternative again at length. The study concluded that seawater desalination may become more cost-effective in the future and should be further considered. The 2007 study started as a *Brackish Water Desalination Study*; however, when no brackish water was discovered and with full agreement with DWR, the funding agency for the study, the study re-focused on the feasibility of seawater desalination on-site at the MWSD property. The existing outfall remaining from the

decommissioned wastewater treatment plant on District's property was considered as a potential intake for the facility. The study found that seawater desalination appears to be technically feasible. Participation in a regional seawater desalination project with other Midcoast water purveyors has also been discussed as a long-term water supply option. Brackish water desalination at a location other than the District property (Montara State Beach, for example) also remains a feasible option for the District's water supply augmentation. Brackish water and seawater desalination are second only to groundwater as the most feasible and effective options for water supply augmentation.

## **1.5 New Supply**

The identification of supplemental water sources has been a central issue in the Montara/Moss Beach area since 1986, when the California Public Utilities Commission (PUC) as the agency having jurisdiction over the water system under the previous ownership, established a moratorium on new water connections based on the finding that water supplies were inadequate to meet demands on the system. Even prior to finalizing the water system acquisition process, the District proactively initiated a study and procured permits for groundwater exploration. The drilling of test wells resulted in finding a new groundwater well with proposed rated capacity of 150 gpm. In addition, various conservation efforts by the District and its customers secured an additional water supply of approximately 40 gpm.



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## **SECTION TWO**

### **Water Supply and Consumption**

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## 2.0 Water Supply and Consumption

MWSD's existing water system includes surface and groundwater sources, water storage tanks, a surface water treatment plant, well-head treatment units, distribution pipelines, and a booster pump station. Figure 2.1, on the following page, presents an approximate layout of the District facilities. The color coded areas represent the seven pressure zones in the distribution system.

### 2.1 Water Supply

MWSD currently withdraws water from one surface source and several groundwater wells:

- *Montara Creek* provides the surface water source. MWSD diverts water from the creek at a diversion point north of Montara. The water is conveyed from the diversion point to the Alta Vista Water Treatment Plant (AVWTP) site through a 6-inch-diameter raw water pipeline. This completely dilapidated pipeline was replaced by the District immediately upon taking ownership of the water system. Montara Creek flows are diverted through the pipeline into a 77,000-gallon concrete raw water tank where suspended solids are allowed to pre-settle prior to treatment at the AVWTP. Treated water is stored in the existing 462,000-gallon Alta Vista storage tank, and then conveyed to the distribution system. MWSD's pre-1913 water rights allow diversions from Montara Creek of up to 200 gallons per minute (gpm) subject to regulatory and resource agency approvals.
- *Groundwater* is currently extracted at nine locations: Alta Vista Well, Drake Well, Portola Estates Wells I, III and IV, Wagner Well, North Airport Well, South Airport Well, and Airport Well 3, the latter three commonly known as the Airport Wells.

#### 2.1.1 Source Capacities

MWSD serves water that comes from Montara Creek, a surface water source, and nine groundwater wells that withdraw water from various groundwater basins. Each source has a rated capacity, established at the time it was brought on line; however, all sources normally operate below their respective rated capacities. Rated capacities are important in determining the reliable capacity of the system and addressing the maximum demand that the system can serve. This section establishes the rated and actual capacity of the District's water system and determines its current reliable capacity.



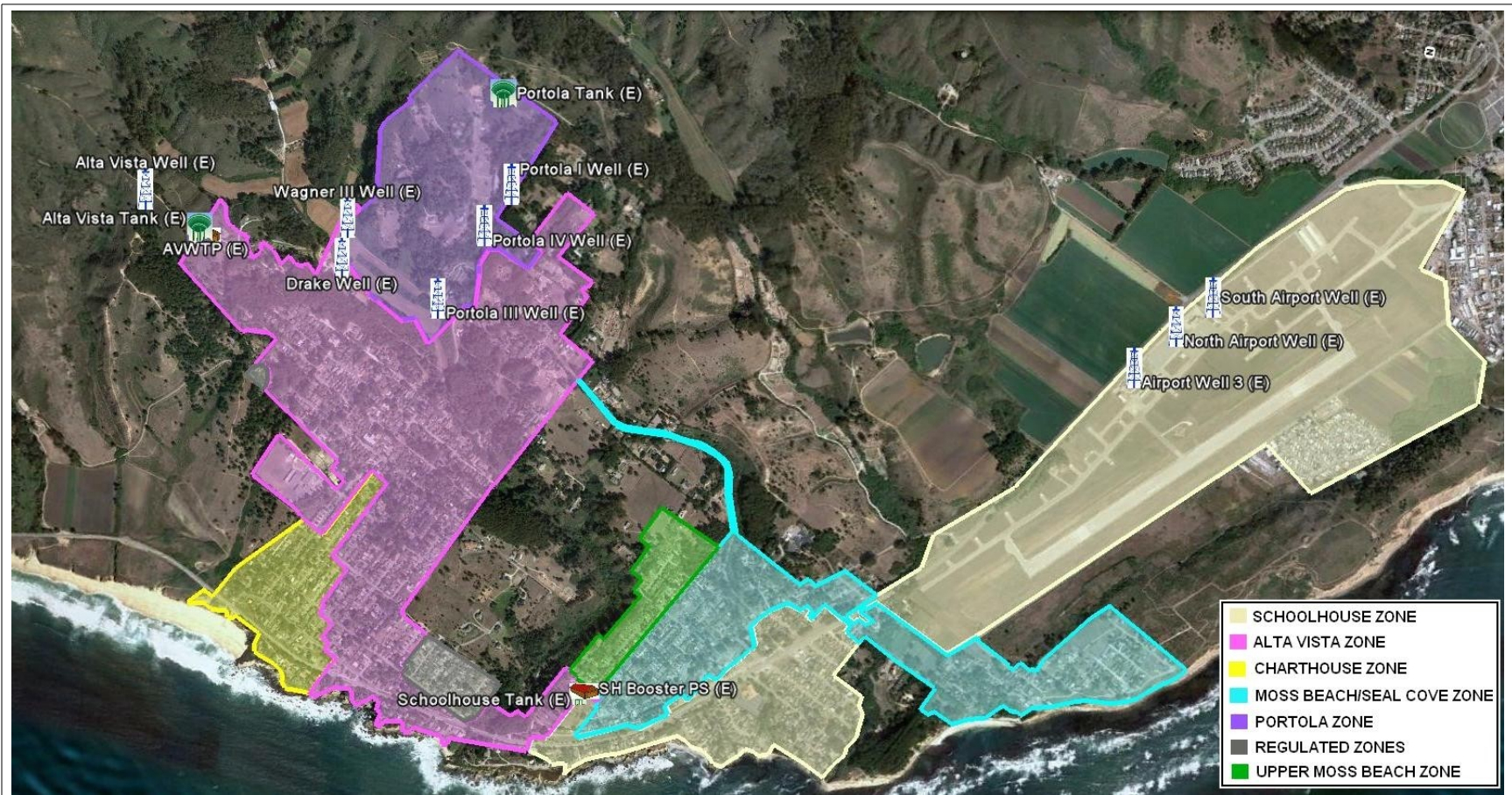


Figure 2.1 MWSD Water System Layout

Annual Average Estimates

To accurately evaluate the capacity of the system, an analysis was conducted with the data collected since MWSD acquired the system. Although data was available for the period of 2000 – 2003, and is included in the *2004 MWSD Water System Master Plan*, the quality and consistency of data collection at the utility during this time period is unknown. Since actual production records were not available prior to January 2004 to verify the accuracy of the data and subsequent analysis, the *2011 Master Plan* only includes data collected since the MWSD acquisition.

Two sets of analyses were completed with the data collected from January 2004 – December 2010: January 2004 – October 2007, prior to the addition of Alta Vista Well, and November 2007 – December 2010, with the addition of Alta Vista Well. The actual reported production rates were recorded while the source was in service and are not intended to imply that the source can continuously operate at the reported rate. Most sources operate at the reported rates for fewer than 12 hours per day due to diurnal customer demand fluctuations. In addition, some sources are taken out of service during certain times of the year, depending on source conditions and system demands. The data summarized in this section represent the actual production rates of the sources.

2004 – 2007 Source Capacities

From January 2004 through October 2007, MWSD sources had a rated capacity of 470 gpm. These sources average a combined production rate of 348 gpm, while in service. A summary of average production rates for each source for this time period is presented in Table 2.1. Detailed annual rates of production data for 2004 – 2010 can be found in Appendix A.

<b>Table 2.1 Average Monthly Production Rates 2004 – 2007</b>		
<b>Source</b>	<b>Rated Capacity</b>	<b>Annual Average Production Rate (gpm)<sup>1</sup></b>
North Airport Well	100	56
South Airport well	55	42
Airport Well #3	100	73
Drake Well	35	37
Portola Well #1	9	6
Portola Well #3	10	7
Portola Well #4	16	6
Wagner Well #3	70	58
Montara Surface Diversion	75	63
<b>Total</b>	<b>470</b>	<b>348</b>

<sup>1</sup>Production rates are the operating rates of each source, and are only recorded when the source is being used. The annual average is determined from the operating production rates of each source and are averaged over the operating time, not total time.

2007 – 2010 Source Capacities

MWSD sources currently have a rated capacity of 620 gpm, due to the addition of the Alta Vista Well with a rated capacity of 150 gpm. MWSD sources average a combined production rate of

395 gpm, based on production rates from November 2007 through December 2010. A summary of average production rates for each source for this time period is presented in Table 2.2. Detailed annual rates of production data for 2004 – 2010 can be found in Appendix A.

<b>Table 2.2 Average Monthly Production Rates 2007 – 2010</b>		
<b>Source</b>	<b>Rated Capacity</b>	<b>Annual Average Production Rate (gpm)<sup>1</sup></b>
<b>Alta Vista Well</b>	150	72
<b>North Airport Well</b>	100	58
<b>South Airport well</b>	55	35
<b>Airport Well #3</b>	100	55
<b>Drake Well</b>	35	37
<b>Portola Well #1</b>	9	6
<b>Portola Well #3</b>	10	6
<b>Portola Well #4</b>	16	8
<b>Wagner Well #3</b>	70	69
<b>Montara Surface Diversion</b>	75	49
<b>Total Average Monthly Production</b>	<b>620</b>	<b>395</b>

<sup>1</sup>Production rates are the operating rates of each source, and are only recorded when the source is being used. The annual average is determined from the operating production rates of each source and are averaged over the operating time, not total time.

### Montara Creek

The capacity of the surface water source, Montara Creek, is unknown. There are no stream flow gages on the creek in the vicinity of Montara. The District has the right to divert up to 200 gpm, but the availability of such a flow rate is uncertain. In addition, California Department of Fish and Game (CDFG) requirements are likely to limit diversion rates at certain seasons to protect endangered species. Presently, the AVWTP has a rated operating capacity of 75 gpm. AVWTP production records for 2004-2010 indicate that the treatment plant produces between 37 gpm to 73 gpm when in operation. When turbidity is too high, which is typically in the winter months, the plant cannot operate. In addition, the treatment plant cannot operate at times in the summer months when flow in the raw water pipeline falls below 30 gpm.

### Groundwater Wells

MWSD operates nine active groundwater wells with a combined rated capacity of 545 gpm, including the addition of the Alta Vista Well in November 2007. According to monthly production records from November 2007 through December 2010, the average production rate of the nine wells was 346 gpm while in operation, or about 63 percent of their rated capacity. On average, the new Alta Vista Well produced 72 gpm, which is approximately 48 percent of its rated capacity. The wells typically operate no more than 12 hours in a given day, and they do not operate all days during the year. The typical operating hours depend on water quality, well location, and system demands.

Prior to November 2007, when the Alta Vista Well was added to the system, the eight wells had a rated capacity of 395 gpm. According to monthly production records from January 2004 through October 2007, the average production rate from the active wells was 285 gpm, or about 72 percent of their rated capacity.

Production records for 2004 to 2010 show variable yields from District's wells due to operational constraints and maintenance issues. As a result, wells sometimes produced well below their rated capacities. Two of the wells, Drake and Wagner, normally operate close to their respective rated capacities.

### 2.1.2 System Reliability

The current rated capacities, including the new Alta Vista Well, were utilized in evaluating the total MWSD source capacity. In summary, the District's water system currently relies on the following source capacities:

Nine active groundwater wells	545 gpm
<u>Surface water from Montara Creek</u>	<u>75 gpm</u>
<b>Total source capacity</b>	<b>620 gpm</b>

Reliable capacity of the system is defined as the capacity of the system with the largest source out of service. The *2005 Water System Master Plan Addendum* defined the Airport Wells, collectively, as the largest source in the system for the supply reliability calculation, even though each well is technically an individual source. In 2005, considering the Airport Wells as one source was a valid argument based on water quality history, current treatment, and the then current lease agreement. In 2005, it was determined that the nitrate contamination issue in the Airport aquifer would equally affect all Airport Wells, and would therefore present the risk of complete shutdown of the sources if nitrate levels continued to rise. This was based on the similar levels of nitrates (average concentration, 2000-2003) in AW3 (34 mg/L) and NAW (40 mg/L). Also, it was assumed that the levels at SAW (7 mg/L), would soon increase. At the time of the last update, blending was being used as a treatment process for elevated nitrate levels at the airport wells, also linking the three wells together as one source. In addition, there was a provisional lease agreement for the land on which the Airport Wells operate, which was under review and if terminated would have taken all three wells offline at the same time. Based on this evaluation, conducted in 2005, the Airport Wells were determined to be interconnected and a single source due to their collective vulnerability.

The single largest source in the system was reevaluated for the 2011 Master Plan Update, and it was determined that the Airport Wells no longer act as a single source in the system. Primarily, the water quality records now indicate that each source is independently influenced by the nitrate contamination. The trends from 2004-2010 indicate that the average nitrate levels in AW3 (50 mg/L) and NAW (38 mg/L) are diverging, and that concentrations at the SAW (7 mg/L) are not increasing. Blending has been discontinued as a treatment process for the Airport Wells, and the AW3 and NAW wellheads are now treated individually for nitrates without blending. In addition, a long-term lease agreement for the land on which the Airport Wells operate has been negotiated. Based on this current analysis, the Airport Wells are now considered individual sources for the MWSD system, as they are no longer collectively vulnerable to water quality or legal issues.

After the determination was made that the Airport Wells are no longer considered a single source, the largest source in the MWSD system was established to be the Alta Vista Well, with a rated capacity of 150 gpm.

The following calculation determines the reliable capacity of the system, assuming the Alta Vista Well is out of service:

Total source capacity	620 gpm
<u>Alta Vista Well capacity</u>	<u>150 gpm</u>
<b>Total reliable capacity</b>	<b>470 gpm</b>

### 2.1.3 Source Production

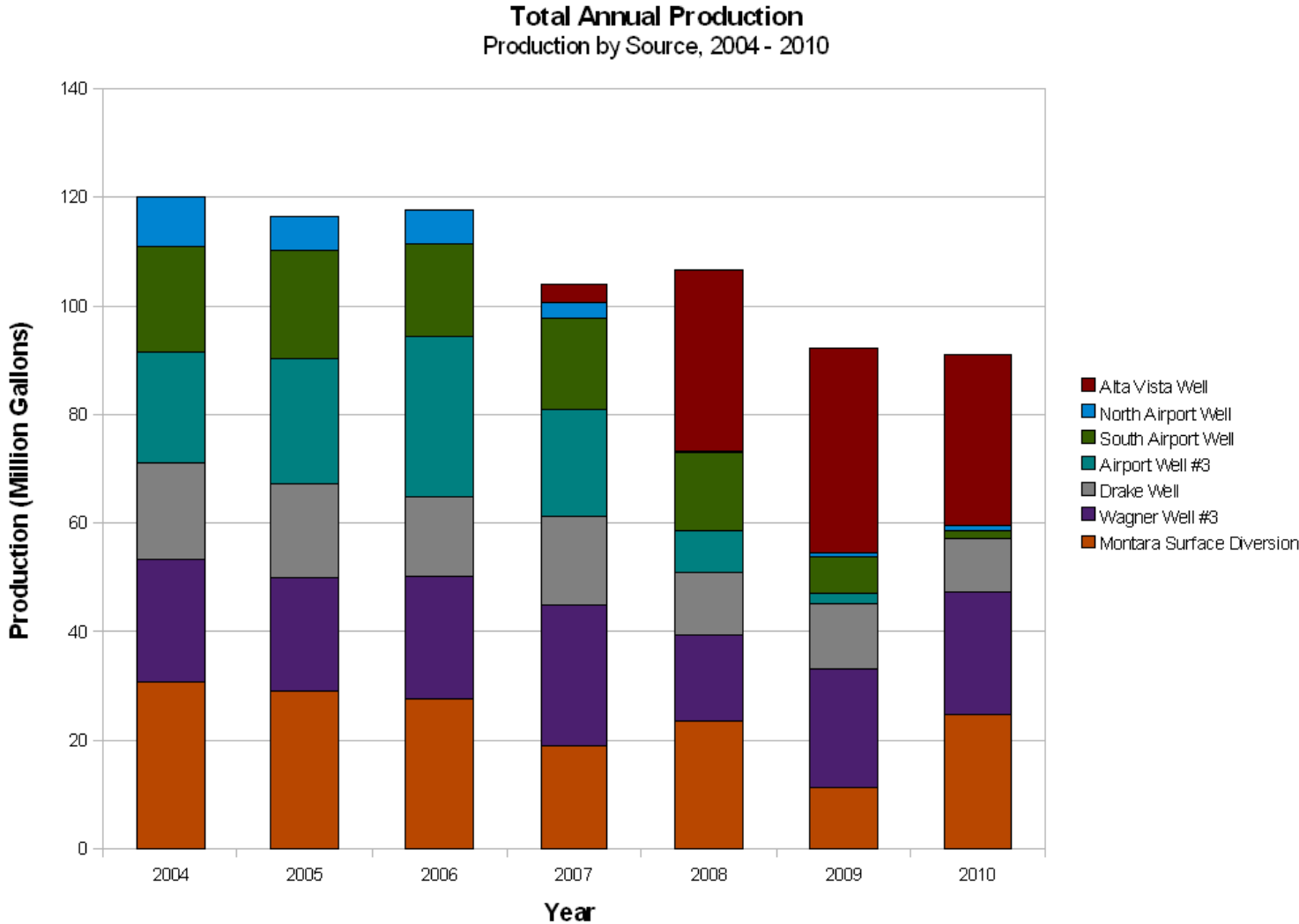
On average, MWSD water sources produced 318,418 gallons per day (gpd) over the past seven years, 2004 through 2010, with an annual average minimum production of 274,118 gpd in 2010 and an annual average maximum of 359,023 gpd in 2004. Figure 2.2 shows the total annual production for each source over the 2004 – 2010 time period.

The data trend generally indicates the production decreasing across the seven years, with relatively stable production from all sources, except for the Airport Well No. 3, the South Airport Well, and Alta Vista Well. Most notably, when the Alta Vista Well came on line in 2008 for the first full year of production, MWSD was able to lessen its dependence on the Airport Wells, thus realizing an important improvement in the water system reliability. The average daily production of the MWSD system was calculated from the 2004-2010 production data and is presented in Table 2.3, below. The detailed monthly production data and analysis is included as Appendix B.

The maximum daily rate of production was determined by reviewing production records and identifying the maximum day of each year (2006 through 2010). The maximum daily production was calculated as the average over the five years; results are summarized in Table 2.3 below.

<b>Table 2.3 Average and Maximum Daily Production</b>	
	<b>Total Production (GPD)</b>
<b>Average Daily (2004 -2010)</b>	318,418
<b>Maximum Day 2006</b>	534,360
<b>Maximum Day 2007</b>	511,980
<b>Maximum Day 2008</b>	437,440
<b>Maximum Day 2009</b>	406,780
<b>Maximum Day 2010</b>	478,230
<b>Maximum Day Production Average (2006 - 2010)</b>	473,758





**Figure 2.2 Total Annual Source Water Production 2004 – 2010**

## 2.2 Current Water Use

Current water use data for the MWSD service area are presented below. Average water use for 2004-2010 was calculated from consumption data. Unaccounted-for-water was established for 2004 through 2010 by calculating the difference between production and consumption data.

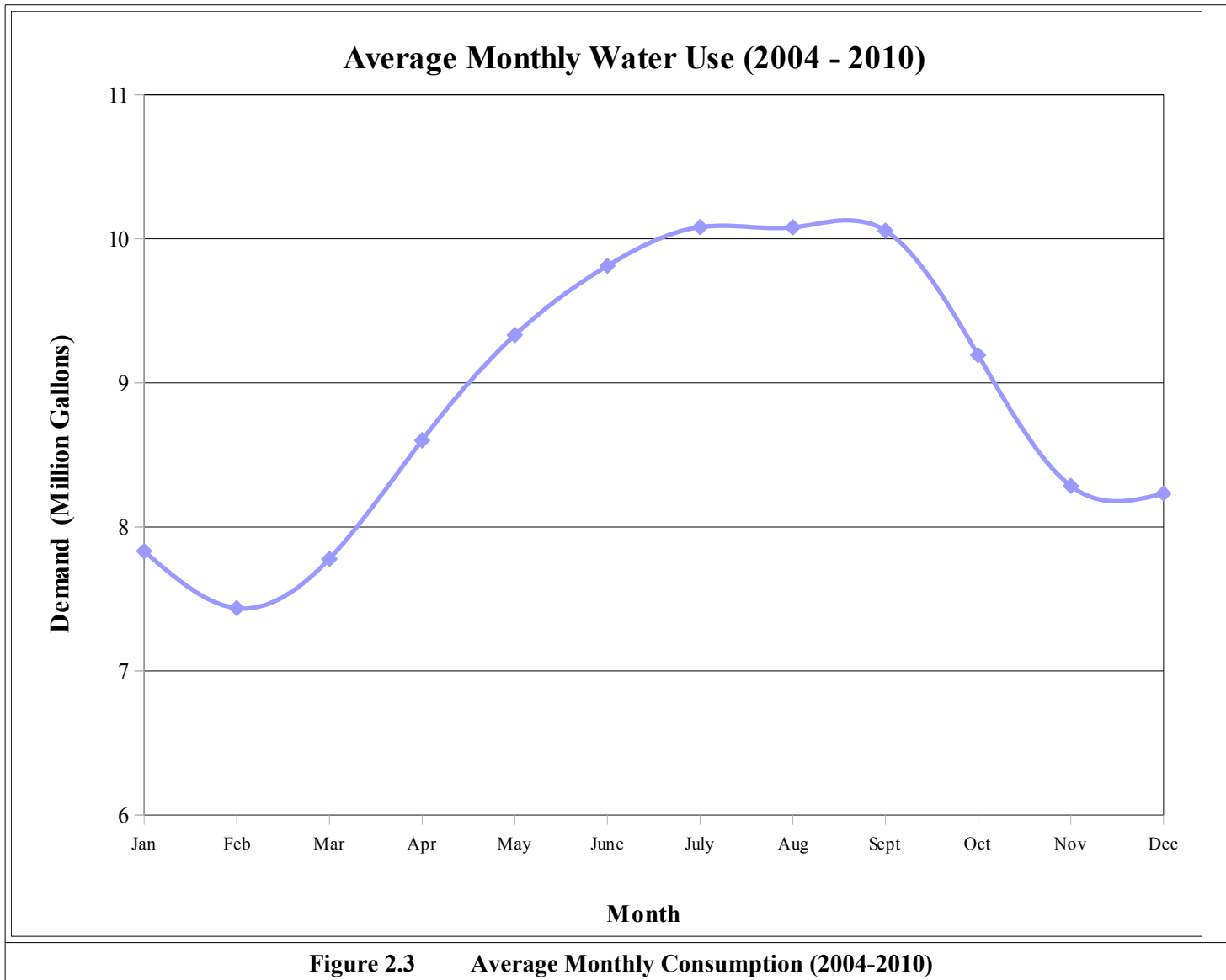
### 2.2.1 Consumption Data

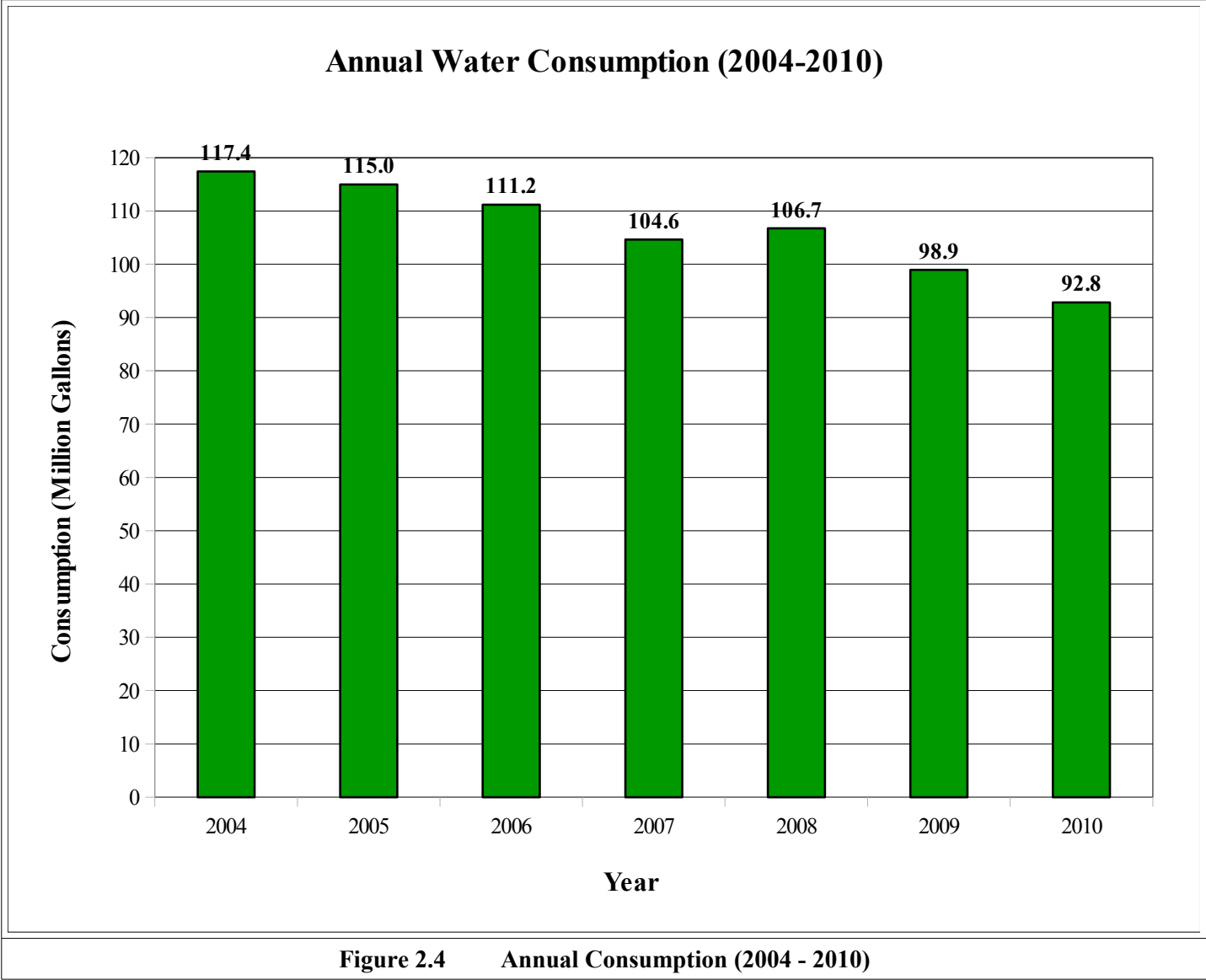
Data on the volume of water delivered to metered customers from 2004-2010 was used to calculate monthly and annual consumption values. Figure 2.3, on the following page, shows average monthly water use for 2004 through 2010. The driest months of the year, May through October, have the highest consumption volumes on average, most likely due to increases in water used for irrigation.

The consumption data was also analyzed to evaluate the annual trends in water use over the seven year time period (2004-2010). The water consumption generally declines each year, with the exception of a small increase in 2008. The general decrease in consumption can be attributed to the District's implementation of the main replacement program, meter replacement program, improved operational practices, and voluntary conservation by the District's customers. A summary of the consumption data analysis is presented in Table 2.4, below, and Figure 2.4, on page 2-10.

<b>Table 2.4 Water Use (2004 – 2010)</b>							
	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Total Consumption (MG)</b>	117.40	114.97	111.17	104.62	106.72	98.94	92.83
<b>Average Daily Water Use (gpd)</b>	321,649	314,983	304,574	286,642	292,393	271,066	254,318

From this data, average and per capita water use values were calculated. The average annual consumption is approximately 106.66 million gallons (MG) and the average daily consumption is approximately 292,232 gpd.





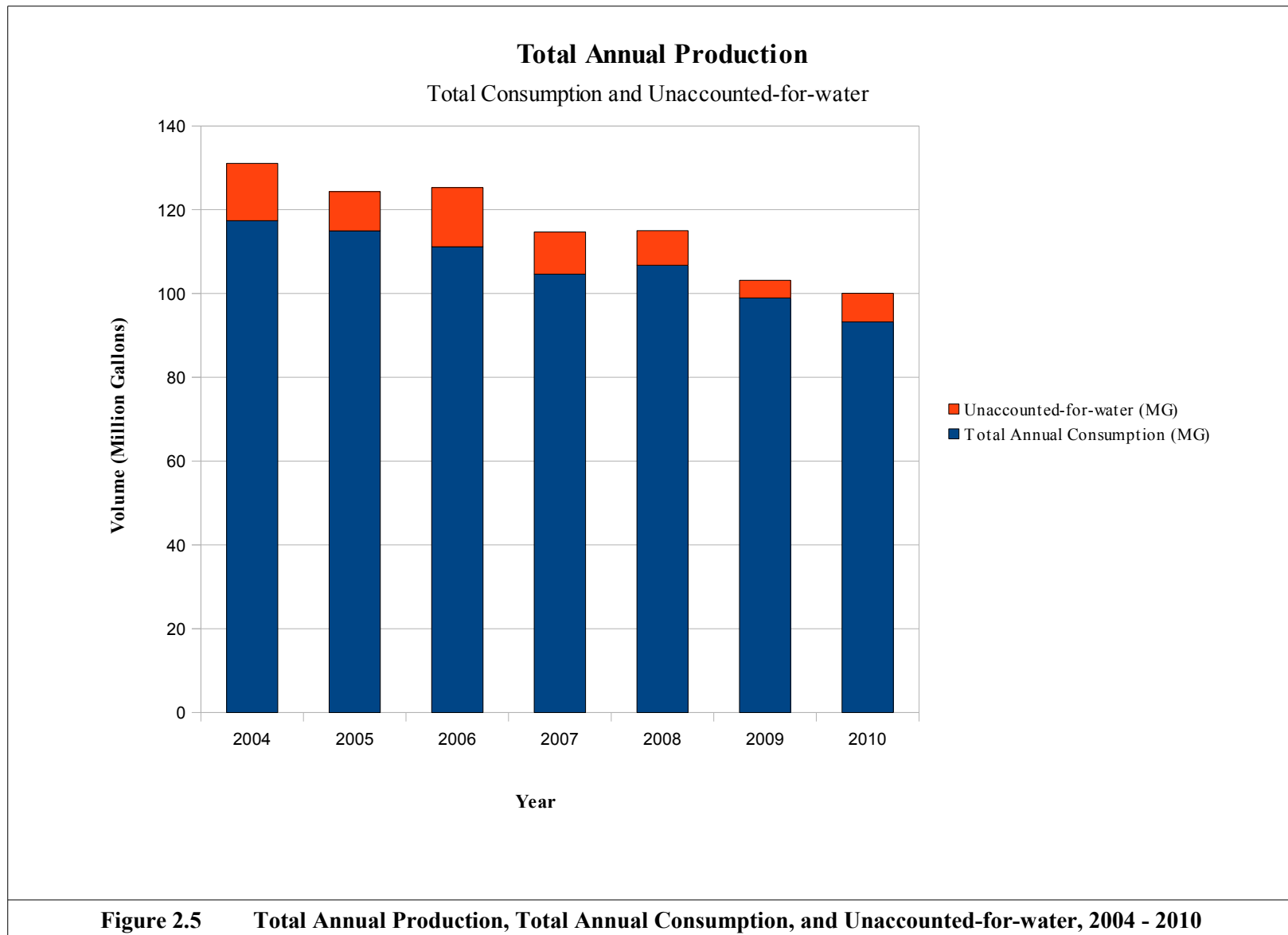
**2.2.2 Unaccounted-For-Water**

The MWSD source production is dependent upon customer consumption, as the sources only produce water in response to customer demands. The difference between the production and consumption represents system losses. These system losses, or unaccounted-for-water, represent water used for fire flow testing, water main flushing, repairs, filter backwash operations at the water treatment plant, and distribution system leaks. Table 2.5 and Figure 2.5 compare consumption and production volumes for the MWSD system and quantify system losses.

Unaccounted-for-water is significantly higher in 2004 and 2006 in comparison to the remaining years, most likely due to increased number of main replacement and hydrant replacement projects and increased flushing activities to address water quality issues. Unaccounted-for-water volume decreased significantly after 2006 following the implementation of the distribution system improvements program. For the purpose of estimating future demands, the system losses for the District have been assumed at 8 percent of total production, the average calculated from the 2004-2010 percentages presented in Table 2.5, below. This calculated figure is 6% lower than the planning figure used in the *2004 Water System Master Plan*, likely due to improvements made by the District to decrease system losses. In addition, this value is below the industry-wide standard for a well operated system of 10% unaccounted-for-water.

<b>Table 2.5 Unaccounted-For-Water</b>							
	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Total Annual Water Production (MG)</b>	131.04	124.30	125.31	114.69	114.99	103.17	100.05
<b>Total Annual Consumption (MG)</b>	117.40	114.97	111.17	104.62	106.72	98.94	92.83
<b>Unaccounted-for Water (MG)</b>	13.64	9.33	14.14	10.07	8.27	4.23	7.22
<b>Percent of Total Production</b>	10.41%	7.50%	11.28%	8.78%	7.19%	4.10%	7.22%







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## **SECTION THREE**

### **Current and Future Water Demands**

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### **3.0 Current and Future Water Demands**

Water demand projections provide the basis for sizing and prioritizing improvements to the water facilities and identifying the need for additional facilities. Location of demand and characteristic variations in demand are also important in selecting proper facilities for dependable water services for District customers.

Average, maximum daily, and peak hourly demands were calculated from 2004-2010 monthly production records. Since the 2010 U.S. Census data for the towns served by MWSD have not yet been reported, adjusted population data from 2000 were used to estimate per capita water demands. With the above calculations and data from the *Draft 2009 San Mateo County Local Coastal Program (LCP) Update*, estimates were determined for population growth through buildout, the demands at buildout, and the allocation of water among the various sectors in the community at buildout. The distribution of water use by pressure zone was also estimated based on the approximate number of service connections in each zone.

#### **3.1 Regulatory Framework**

Regulations pertaining to the quantity of water supplied by the District to meet customer demands include Sections 64562, 64564, and 64566 of Title 22, Chapter 16 of California Code of Regulations. These sections specify that the District has to deliver sufficient quantities of water to satisfy maximum day demand, and that system pressures have to remain at no less than 20 pounds per square inch (psi) under peak hour demand or average day demand plus design fire flow. CDPH administers the implementation and compliance with water quality regulations promulgated by the United States Environmental Protection Agency (USEPA).

The National Fire Code, Insurance Service Office, and local Fire Department identify storage requirements for fire fighting. The storage requirements are based on a fire flow of 2,000 gpm for a two-hour duration. The 2,000 gpm corresponds to a land use of multiple residential, one and two stories, and light commercial or light industrial development.

The geographic location of MWSD brings the District under the jurisdiction of the California Coastal Commission. A Coastal Development Permit (CDP) is required under the California Coastal Act for any new development in the coastal zone, including most activities associated with changes to the MWSD water infrastructure, such as a change in the intensity of water use or access to water; the placement of any solid material or structure; a change in land use density or intensity; and removal of major vegetation.

The San Mateo's LCP establishes the population growth limits by stipulating the land use and development density limits and maximum density of development, which ultimately establishes the buildout of an area. Additionally, the LCP limits expansion of public works facilities to serve the buildout population specified in the program. The LCP now in effect was certified by the Coastal Commission and approved by the Board of Supervisors of the County of San Mateo in June 1998. The proposed 2009 San Mateo County LCP update was undergoing the Coastal Commission review in the time of this report preparation.

### 3.2 Current Demands

The demand on the MWSD system can be determined from the production records, since the demand values must include unaccounted-for-water to accurately represent the supply required to support the customer water use. Table 3.1 presents MWSD’s average and peak water demands based on the production records from 2004-2010.

<b>Table 3.1 Current MWSD Water Use, 2004-2010</b>			
	<b>MWSD Production (gallons)</b>	<b>Water Use (gallons)</b>	<b>Peaking Ratio</b>
Average Daily Demand (ADD)	318,418	292,232	1.0
Maximum Daily Demand (MDD)	473,758 <sup>a</sup>	438,348 <sup>b</sup>	1.5 <sup>c</sup>
Maximum Hour	34,500 <sup>d</sup>	31,658 <sup>d</sup>	2.6
Design Fire (2 hours)	240,000	240,000	N/A

<sup>a</sup> Based on daily production data for maximum production months, 2005-2010. 2004 data was not used due to inaccessibility.

<sup>b</sup> Calculated from maximum daily production values, with an 8 percent reduction for unaccounted-for-water.

<sup>c</sup> Calculated empirically from system MDD and ADD values.

<sup>d</sup> Calculated utilizing a peaking ratio of 2.6, as used in previous MWSD Master Plans.

#### 3.2.1 Per Capita Demands

Water demand per person was calculated from 2000 U.S. Census population data, MWSD production records, and water connection records. 2000 Census data was used to estimate average household sizes, while water connection records determined the population that MWSD serves. The average household size of 2.74 persons was determined by calculating the weighted average of the Montara household size of 2.8 persons and the Moss Beach household size of 2.64 persons, based on the percentage of residences in each area. The number of residential water connections in the system was reported as 1,614 by MWSD, and a population of 4,422 people (2.74 ppl/household x 1,614 households) is served by the District. Calculated above, the average annual daily demand for 2004-2010 was 318,418 gallons per day (gpd). This daily consumption includes the 30 commercial water connections in the service area, so the population absorbs that demand in the per capita demand estimate.

Based on these calculations, the per capita daily water demand was established as approximately 72 gallons per capita per day (gpcd). This per capita demand is significantly lower than the 84 gpcd estimated for the years 2000-2003, as reported in the 2004 Master Plan Update. The per capita water use, which is based on the average annual daily consumption of 292,232 gpd and does not include unaccounted-for-water, is approximately 66 gpcd. As unaccounted-for-water volumes decrease, the per capita demand will also decrease and approach the per capita consumption value.

#### 3.3.2 Demands per Pressure Zone

Average daily demand per pressure zone is shown in Table 3.2. The distribution of water use per pressure zone is based on the estimated number of service connections in each zone and the



average annual daily demand presented in Table 3.1. The boundaries of individual pressure zones are shown in Figure 2.1.

<b>Pressure Zone</b>	<b>Percent of Connections in Zone</b>	<b>Water Demand (gallons per day)</b>
Alta Vista	52%	165,577
School House	17%	54,131
Moss Beach/Seal Cove	16%	50,947
Charthouse	5%	15,921
Portola	4%	12,737
Upper Moss Beach	3%	9,553
Regulated Zones	3%	9,552
<b>Totals</b>	<b>100%</b>	<b>318,418</b>

### **3.3 Future Water Demands**

Future demands on the MWSD water system were estimated for the all years through buildout. Future demand estimates are based on the following assumptions:

- The population already residing or owning property in the service area that is not connected to MWSD, will be connected to system, and
- The District will serve new homes being built in the service area in accordance with the current San Mateo County LCP Update.

#### **3.3.1 Existing Population Demands**

Current populations within the service area have been estimated for 2004-2010 based on average household size from 2000 U.S. Census data and records kept by MWSD regarding the number of sewer connections. Since every new house in the MWSD service area must be connected to the sewer system, the number of new sewer connections provides an accurate estimate of the number of new houses, and therefore, the approximate population. When 2010 census data becomes available, the Master Plan can be amended accordingly.

The following information, presented in Table 3.3, was provided by MWSD and utilized to estimate population growth in the service area. The number of residences not connected to the MWSD water system was determined by calculating the difference between the number of sewer connections and the number of water connections each year. The population was determined by multiplying the number of sewer connections by the average household size of 2.74 persons.

<b>Year</b>	<b>Number of Sewer Connections</b>	<b>Number of Residential Water Connections</b>	<b>Number of Houses Not Connected to MWSD Water System</b>	<b>Population not Connected to Water System</b>	<b>Estimated Population</b>
<b>2004</b>	1879	1614	265	726	<b>5,148</b>
<b>2005</b>	1892	1614	278	762	<b>5,184</b>
<b>2006</b>	1899	1614	285	781	<b>5,203</b>
<b>2007</b>	1907	1614	293	803	<b>5,225</b>
<b>2008</b>	1916	1614	302	827	<b>5,250</b>
<b>2009</b>	1926	1614	312	855	<b>5,277</b>
<b>2010</b>	1928	1614	314	860	<b>5,283</b>

Based on this analysis, there are an estimated 314 houses in the service area that are not connected to the system, housing an estimated population of 860. Based on the per capita demand of 72 gpcd, the average and maximum daily demands of this population were calculated as 380,376 gpd and 570,564 gpd, respectively. These demands represent the projected demand and supply necessary to serve the population already residing within the District's service area.

### **3.3.2 Future Population Demands**

If the entire population were to be served by MWSD through buildout, the projected demands on the system for future years would be based on the population growth rate of 1 percent established in the Draft 2009 San Mateo County LCP Update and the calculated per capita demand.

<b>Year</b>	<b>Total Population</b>	<b>Average Annual Rate of Growth, percent</b>	<b>Projected Average Daily Demand (gpd)<sup>e</sup></b>	<b>Projected Maximum Daily Demand (gpd)<sup>f</sup></b>
2000	4,903 <sup>a</sup>		--	--
2010	5,283 <sup>b</sup>	0.75	380,376	570,564
2020	5,836 <sup>c</sup>	1	420,192	630,288
2030	6,447 <sup>c</sup>	1	464,184	696,276
2040	7,121 <sup>c</sup>	1	512,712	769,068
2050	7,866 <sup>c</sup>	1	566,352	849,528
2060	8,689 <sup>c</sup>	1	625,608	938,412
Buildout (2066)	9,215 <sup>c,d</sup>	1	663,480	995,220

<sup>a</sup> From U.S. Census data

<sup>b</sup> From MWSD sewer and water connection records

<sup>c</sup> Assuming 1 percent annual rate of growth as per Draft 2009 San Mateo County LCP Update

<sup>d</sup> Calculated from household size and number of units presented in the Draft 2009 San Mateo County LCP Update

<sup>e</sup> Assumes 72 gpcd demand through buildout.

<sup>f</sup> Assumes 1.5 peaking ratio based on empirical analysis of MWSD system (Table 3.1)

### 3.3.3 Priority Uses

Priority uses must be considered in evaluating the supply available for additional connections to the MWSD system, as water must be reserved for these uses through buildout. These buildout volumes, which are dictated by the *Draft 2009 San Mateo County LCP Update*, are presented in Table 3.5, below.

<b>Table 3.5 Priority Uses</b>	
	<b>Requirements at Buildout (gpd)</b>
<b>Commercial Recreation</b>	1,230
<b>Public Recreation</b>	4,080
<b>Floriculture</b>	10,000
<b>Essential Public Services</b>	5,000
<b>Specific Developments of Designated Sites Containing Affordable Housing</b>	35,816 to 51,504
<b>Other Affordable Housing</b>	5,000
<b>Total Water Capacity for Priority Land Uses</b>	61,126 to 76,814

### 3.3.4 Supply and Demand Analysis

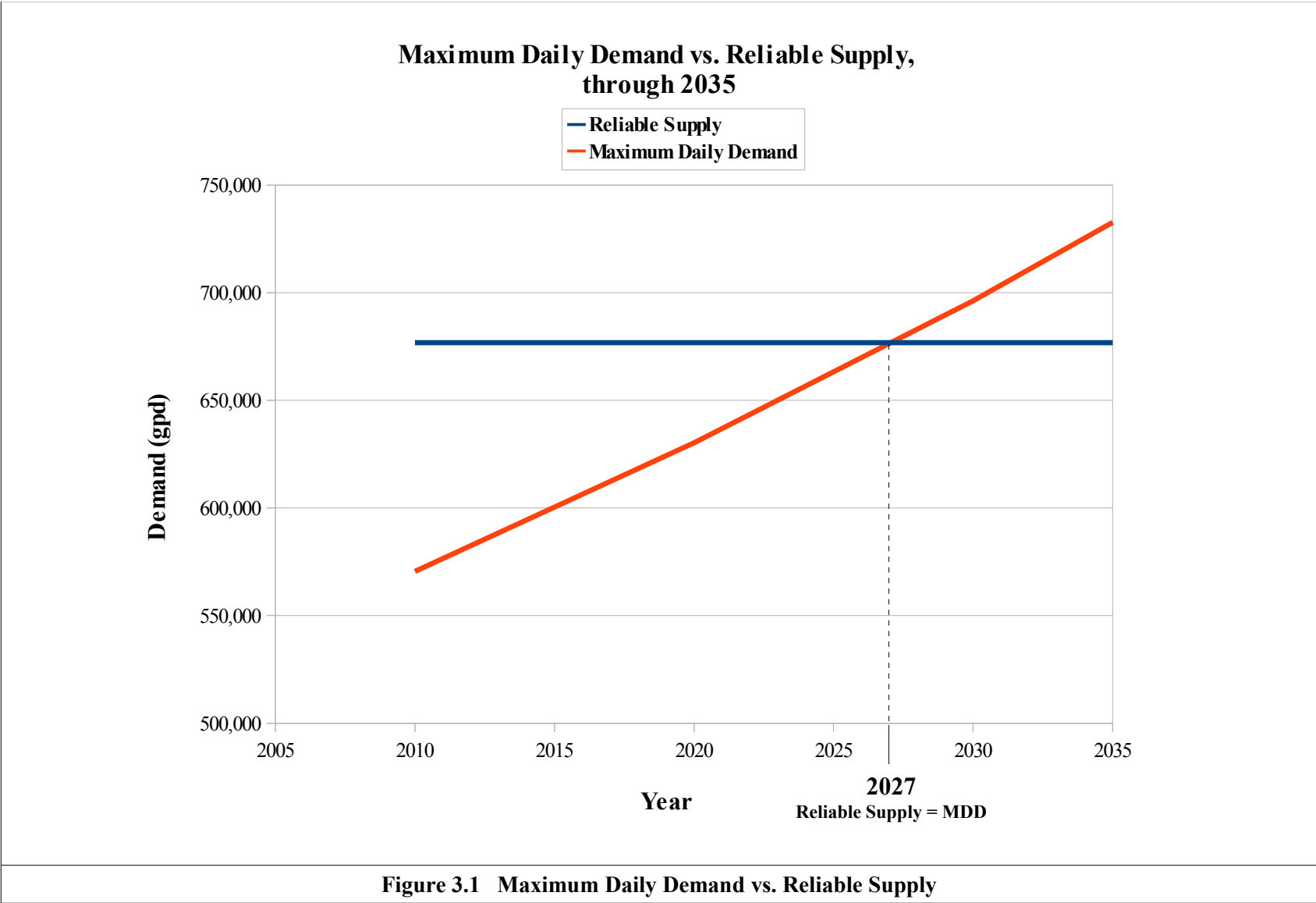
To determine the water system reliability, the MDD must be compared to the reliable supply capacity. Table 3.6, on the following page, shows the current available capacity of the system, and compares this volume of water to the MDD of the current population within the MWSD service area. If no improvements or additional sources are added to the MWSD system, the system will not be able to support the demands of the projected population through buildout, indicated in Table 3.6 as deficits in supply. Figure 3.1, on page 3-7, shows that the reliable supply of the District's system can support the demands through approximately 2027, which includes the population currently residing within the service area but not connected to the system.

<b>Year</b>	<b>Reliable System Capacity (gpd)<sup>a</sup></b>	<b>Maximum Daily Demand (gpd)</b>	<b>Excess or Deficit Supply (gpd)</b>
<b>2010</b>	676,800	570,564	106,236
<b>2020</b>	676,800	630,288	46,512
<b>2030</b>	676,800	696,276	-19,476
<b>2040</b>	676,800	769,068	-92,268
<b>2050</b>	676,800	849,528	-172,728
<b>2060</b>	676,800	938,412	-261,612
<b>2066</b>	676,800	995,220	-318,420

<sup>a</sup> Daily reliable system capacity excludes Alta Vista Well production, and is calculated assuming that the sources are operating at rated capacity for 24 hours.

In addition, the current MWSD projected supply and demand scenario was evaluated by comparing the current and future average daily demands with a more conservative available supply estimate. In determining the available supply, this methodology utilizes the rated capacity of all sources as the basis for determining the available supply and assumes that the sources are capable of sustainably producing only 50 percent of their rated capacity. Table 3.7 presents this analysis.

<b>Year</b>	<b>Sources Operating at 50% Rated Capacity (gpd)</b>	<b>Average Daily Demand (gpd)</b>	<b>Excess or Deficit Supply (gpd)</b>
<b>2010</b>	446,400	380,376	66,024
<b>2020</b>	446,400	420,192	26,208
<b>2030</b>	446,400	464,184	-17,784
<b>2040</b>	446,400	512,712	-66,312
<b>2050</b>	446,400	566,352	-119,952
<b>2060</b>	446,400	625,608	-179,208
<b>2066</b>	446,400	663,480	-217,080





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## **SECTION FOUR**

### **Water Quality**

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## **4.0 Water Quality**

The MWSD water quality is monitored and reported in compliance with all federal and state regulations. Approximately 1,200 analyses are conducted on the drinking water per year, and reported to the consumers in the annual Consumer Confidence Report (CCR).

### **4.1 Drinking Water Quality Monitoring and Reporting**

The following sections detail the water quality standards that MWSD must meet based on the characteristics of the community size and water supply sources.

#### ***4.1.1 State Drinking Water Quality and Monitoring Regulations***

The District must comply with regulations established at the federal and state levels. Regulations at the federal level are promulgated by the USEPA, which is responsible for setting standards and assuring compliance. Regulations at the state level are maintained by the California Department of Public Health (CDPH), which carries out similar responsibilities.

The Federal Safe Drinking Water Act is the primary legislation that directs the USEPA's regulatory control. Through its original charter and subsequent amendments, Maximum Contaminant Level (MCL) standards for a significant number of constituents have been established. California establishes its own standards and MCLs through Title 22 California Code of Regulations. These standards are at least as stringent as the federal levels and are administered by CDPH, Division of Drinking Water.

CDPH requires all public water systems (PWS) to monitor their potable water sources for chemical, biological, and radiological contaminants. Testing for these categories of constituents, including SOCs, VOCs, IOCs, and radionuclides, is required at each source in the system. Distribution systems must also be monitored for bacteriological constituents (total and fecal coliforms), disinfection residuals (chlorine), disinfection byproducts (total trihalomethanes and haloacetic acids), lead, and copper.

#### Primary Maximum Contaminant Levels

Primary MCLs have been established for constituents with known health effects provided that the USEPA has evaluated the technical and economical impacts of setting an MCL. The USEPA provides a list of regulated constituents and current MCLs adopted by the State of California. All public water systems are required to monitor these constituents at their raw water sources at frequencies set forth by the CDPH.

#### Secondary MCLs

Secondary MCLs (SMCLs) have been established for certain constituents without known health effects, but for which there are aesthetic or technical concerns such as color, taste, odor, or

corrosivity. The USEPA provides a list of the constituents with the current secondary MCLs adopted by the State of California. Currently, constituents with SMCLs must be tested for at least once every three years at all groundwater sources.

Iron and manganese are common metallic elements found in the earth's crust which are chemically similar and cause similar problems. When exposed to air, iron and manganese sediments oxidize and change from colorless, dissolved forms to colored, solid forms. Excessive amounts of these sediments are responsible for staining and may even plug water pipes. Iron and manganese can also affect the flavor and color of food and water. Finally, nonpathogenic bacteria, which feed on iron and manganese in water, can form slime in toilet tanks and clog water systems.

#### ***4.1.2 Disinfectant and Disinfection Byproduct Rule (D/DBPR)***

The D/DBPR Rule was created by the USEPA to protect public health from disinfectant chemicals and byproducts; the D/DBPR was developed in two stages, described below.

##### Stage 1 D/DBPR

During disinfection of drinking water, the disinfectants can react with naturally occurring materials in the water to form unintended organic and inorganic byproducts that may pose health risks. Amendments to the Safe Drinking Water Act (SDWA) in 1996 required the USEPA to develop rules to reduce disinfection byproducts (DBPs) in drinking water. The USEPA promulgated the Stage 1 D/DBPR on December 16, 1998. The Stage 1 D/DBPR applies to all public water systems with a chemical disinfectant added to the drinking water supply. Stage 1 D/DBPR reduces exposure to three disinfectants and many disinfection byproducts. The rule establishes maximum residual disinfectant level goals (MRDLGs) and maximum residual disinfectant levels (MRDLs) for three chemical disinfectants: chlorine, chloramines, and chlorine dioxide. It also establishes Maximum Contaminant Level Goals (MCLGs) and MCLs for the following DBPs: four total trihalomethanes (TTHM), five haloacetic acids (HAA5), chlorite, and bromate. Chlorite is monitored only in systems using chlorine dioxide as a disinfectant, whereas bromate is required to be monitored only in systems using ozone. TTHM and HAA5 monitoring is required for any water system using chlorine as a disinfectant.

Under the Stage 1 D/DBPR, the MCL for TTHM is 0.080 milligrams per liter (mg/L) and the MCL for HAA5 is 0.060 mg/L. Compliance is measured by the running annual average of the quarterly results taken from all of the sampling locations. Chlorite compliance is measured as a monthly average and the MCL is 1.0 mg/L.

##### Stage 2 D/DBPR

The USEPA published the final Stage 2 D/DBPR on January 4, 2006 and the final rule became effective on March 6, 2006. The Stage 2 D/DBPR applies to all public water systems with a chemical disinfectant added to the drinking water supply. The Stage 2 D/DBPR strengthens



public health protection for customers of systems that deliver disinfected water by requiring such systems to meet MCLs as an average at each compliance monitoring location (instead of as a system-wide average as in previous rules) for two groups of DBPs, TTHM and HAA5. The rule targets systems with the greatest risk and builds incrementally on existing rules. The rule also includes requirements for systems to investigate any “high DBP levels” under an Operational Evaluation. Under the Stage 2 D/DBPR, utilities must conduct an Initial Distribution System Evaluation (IDSE) to identify locations within their distribution systems representing maximum TTHM and HAA5 concentrations. Utilities can apply for an exemption if all previous samples have been below 40 micrograms per liter ( $\mu\text{g/L}$ ) and 30  $\mu\text{g/L}$  for TTHMs and HAA5s, respectively.

The major difference between the Stage 1 and the Stage 2 D/DBP Rules is the compliance calculation of TTHM and HAA5. Stage 1 D/DBPR compliance is based on a system-wide running annual average (RAA), while Stage 2 D/DBPR is based on running annual average at each location, called the locational running annual average (LRAA). Under the Stage 2 D/DBPR, the MCLs for TTHM and HAA5 remain the same as the Stage 1 D/DBPR.

#### **4.1.3 Radionuclide Rule**

The USEPA promulgated the final drinking water standard for radionuclides on December 7, 2000. The final rule includes the MCLs and monitoring requirements for gross alpha, radium-226, radium-228, uranium, and beta/photon emitters. The final rule became effective on December 8, 2003. The State was required to adopt or issue a radionuclide rule no less stringent than the final Federal rule.

Under the radionuclide rule, radium-226 and radium-228 must be analyzed and reported separately, in addition to gross alpha and uranium analysis. An initial round of four consecutive quarterly samples was required to be completed by December 31, 2007. The MCL for gross alpha remains 15 picocuries per liter (pCi/l) and the MCL for radium-226 and radium-228 remains as 5 pCi/l, as the sum of the two constituents. The MCL for uranium is 20 pCi/l. Subsequent gross alpha, radium-226, radium-228, and uranium monitoring frequencies are based on the initial round of analysis results. If the results are below the detection limit for the purpose of reporting (DLR), the monitoring requirement is one sample every nine years. If the results are below one half the MCL but above the DLR, the monitoring requirement is one sample every six years. If the results are above one half the MCL but below the MCL, the monitoring requirement is one sample every three years. If the results are over the MCL, the sources have to be monitored quarterly until the running annual average is below the MCL, or the owner must provide treatment at the State’s discretion.

#### **4.1.4 Arsenic Rule**

On January 22, 2001, the USEPA published the final Arsenic Rule revising the current MCL from 0.050 mg/L to 0.010 mg/L (or ten parts per billion). Drinking water systems were required

to comply with the revised MCL by January 2006. Groundwater systems were required to take an initial sample between 2005 and 2007 to measure compliance with the new revised MCL. If that sample was below the revised MCL, subsequent samples were required every three years. If the initial sample was above the revised MCL, quarterly samples were required until the system consistently sampled below the MCL.

#### **4.1.5 Groundwater Rule**

On October 12, 2006, USEPA promulgated the final Groundwater Rule (GWR) to reduce the risk of fecal contamination in public water systems. The GWR applies to all public water systems that use groundwater as the source of drinking water supply.

The GWR addresses microbiological contamination risks in drinking water through a risk targeting approach. The four major components of the GWR are described below:

##### I. Periodic Sanitary Survey

Under the GWR, states are required to conduct a sanitary survey for each public water system that uses groundwater. The survey requires evaluation of eight critical elements and identification of significant deficiencies therein: 1) source; 2) treatment; 3) distribution system; 4) finished water storage; 5) pumps, pump facilities, and controls; 6) monitoring, reporting, and data verification; 7) system management and operation; and 8) operator compliance with state requirements. States must complete the initial survey for most of the water systems by December 31, 2012 and update the survey every three years thereafter. For water systems that meet certain performance criteria, however, states may complete the initial survey by December 31, 2014 and update the survey every five years thereafter. The performance criteria are met if the system in question: 1) provides 4-log treatment of viruses before or at the first customer for all its groundwater sources; 2) has outstanding performance record as defined by the states; and 3) has no history of total coliform MCL or monitoring violations under the Total Coliform Rule (TCR).

##### II. Source Water Monitoring

For water systems that do not achieve at least 4-log of viruses inactivation or removal, triggered monitoring is required if any sample collected during the routine sampling under the TCR has a positive total coliform result. Subsequently, the water system is required to take one sample at each groundwater source and test it for a fecal indicator (E. Coli, enterococci or coliphage) within 24 hours of receiving the positive total coliform result. If any fecal indicator is detected, the system is required to take five more repeat samples and test for a fecal indicator within 24 hours. If one or more of the five repeat samples test positive for any fecal indicator, corrective action is required. The compliance date for triggered monitoring and associated corrective action was December 1, 2009.

As a complement to triggered monitoring, the GWR allows states to require water systems that do not provide at least 4-log virus inactivation or removal to conduct source water assessment monitoring at any time to help identify high-risk systems. The USEPA recommends that the following risk factors be considered by states in targeting high-risk systems: 1) high population density combined with on-site wastewater treatment systems; 2) aquifers with restricted geographic extent, 3) aquifers with thin karst, fractured bedrock and gravel; 4) shallow unconfined aquifer; 5) aquifers with thin or absent soil cover; and 6) groundwater wells previously identified as having fecal contamination.

### III. Corrective Actions

Corrective Actions are required for any water systems with a significant deficiency identified during the sanitary survey or fecal matter is detected and confirmed at a source. The water system must implement one or more of the following corrective actions: 1) correct all significant deficiencies, 2) eliminate the source of contamination, 3) provide an alternative source of water, and/or 4) provide treatment which reliably achieves 4-log virus inactivation or removal. The water system must complete the corrective action(s) within 120 days of a significant deficiency identified or a fecal indicator detected positive.

The most common and economic method to provide a 4-log virus inactivation is chlorination. To achieve inactivation, a certain CT (chlorine residual concentration in mg/L  $\times$  contact time in minutes) value is required, which is based on water temperature and pH. For example, at 15°C and a pH-level between 6 and 9, a CT of 4 mg-min/L is required to achieve 4-log virus inactivation. Therefore, if a water system has 1 mg/L of chlorine residual at the first customer and the contact time between the point of application and the first customer is 4 minutes, the CT value is 4 mg-min/L (1 mg/L  $\times$  4 min).

### VI. Compliance Monitoring

If a water system already treats groundwater to achieve at least 4-log virus inactivation or removal, GWR requires regular compliance monitoring to ensure that the treatment technology installed is reliable. For systems that use chlorine as a disinfectant and serve more than 3,300 people, continuous residual-chlorine monitoring is required. The water system must maintain the state-determined residual-chlorine level at all times. If the residual chlorine falls below the required level, the system must restore the residual chlorine to an appropriate level within four hours. If the continuous residual-chlorine monitor fails, the water system is required to take a grab sample every four hours, and the operator has 14 days to resume continuous monitoring. These regulations took effect on December 1, 2009.

#### **4.1.6 Lead and Copper Rule**

On January 12, 2000, the USEPA revised the Lead and Copper Rule, previously adopted on December 11, 1995. The revised rules clarify the lead and copper requirements, but do not substantially modify them.

Public Water Systems must monitor lead and copper levels at a number of residential taps based on the population served. The required number of lead and copper samples may be reduced depending on past results. Compliance is based on the 90th percentile concentration for all samples collected. The Action Level (AL) for lead is 0.015 mg/L and for copper is 1.3 mg/L.

#### **4.2 Consumer Confidence Report**

In 1996, Congress amended the Safe Drinking Water Act (SDWA), adding a requirement that water systems report water quality to their customers. The finalized rule, called the Consumer Confidence Report Rule, was published in the Federal Register on August 19, 1998 and requires every community water system to prepare an annual CCR on the quality of water delivered by the systems and deliver the CCR to its customers by July 1 of each year.

Every CCR must contain the following: 1) water system information, including the name and phone number of a contact person, information on public participation opportunities, a Spanish language section on important content, and information for other non-English speaking populations; 2) water source identification and the results of the source water vulnerability assessment; 3) summary of data on detected regulated and unregulated contaminants, including possible source(s) of each contaminant, and whether the water system received any violations; and 4) educational information on nitrate, arsenic, lead, radon, and Cryptosporidium, if applicable. A copy of the most recent CCR is found in Appendix C.

##### **4.2.1 MWSD Water Quality Concerns**

Based on the 2010 MWSD CCR, MWSD is in compliance with all water quality regulations. However, there are water quality concerns that the District mitigates to ensure safe drinking water:

- *Copper* was found at levels that exceeded the Regulatory Action Level (AL) of 1.3 ppm in the 2005 residential tap sampling. No exceedance was found in distribution system sampling. The potential source of copper contamination in the MWSD system is corrosive water at the Airport Wells coupled with internal corrosion of household plumbing systems. The corrosivity of the Airport Wells water is indicated by pH values below 7.0 and a Langelier Saturation Index (LSI) less than 0.

- *Nitrate* was detected at Airport Well 3 at levels above the MCL of 45 ppm. This well is currently kept offline.
- *Manganese* was found at levels that exceeded the secondary MCL of 50 ppb. Exceeding the secondary MCLs poses no health risks. The high manganese levels are most likely due to leaching of natural deposits in the soil where groundwater is in contact with naturally-occurring sediments.
- *Arsenic* was detected at the Alta Vista Well at levels *below* the MCL, but above 5 ppb. While the drinking water meets the federal and state standards for arsenic, the state CCR guidelines require utilities to report Arsenic above 5ppb and monitor the contaminant more frequently. This precautionary protocol is related to the potential health effects of arsenic, which the USEPA continues to research.

### **4.3 Water Treatment Facilities**

CDPH-approved treatment facilities and associated processes include a surface water treatment plant and several well-head treatment units.

#### ***4.3.1 Surface Water Treatment***

AVWTP uses coagulation, contact clarification, filtration, and chlorination to treat surface water from Montara Creek; the plant draws raw water from a 77,000-gallon concrete tank that is fed by a raw water pipeline replaced by MWSD from the Montara Creek diversion structure. The District has implemented a valve and control systems improvement project and baffle improvements at the AVWTP.

#### ***4.3.2 Well-Head Treatment***

##### Nitrate Treatment

Blending treatment of Airport Wells water with elevated nitrate levels has been discontinued and replaced with an ion-exchange well-head treatment for nitrate reduction at the North Airport Well. CDPH has approved an drinking water permit amendment for this treatment.

##### MBTE Treatment

Granular Activated Carbon (GAC) treatment and chlorination system to treat water from Drake Well and Wagner Well for methyl tertiary butyl ether (MBTE) removal has been discontinued due to proven MTBE absence, with approval from the CDPH.

##### Disinfection

Well-head liquid sodium hypochlorite disinfection systems are in use at all wells, except Portola Well #4; Wagner Well #3 and Drake Well are chlorinated with the same system, just downstream of Drake Well.



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## **SECTION FIVE**

### **Distribution System and Storage Requirements**

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## **5.0 Distribution System and Storage Requirements**

The capacities and deficiencies of the MWSD water system were evaluated based on current and projected demands. The distribution and storage system facilities and associated design criteria were utilized to evaluate the efficiency of the system at handling as range of demands. This section outlines the current facilities and design parameters for the current and projected demand scenarios. The results of the evaluation indicate the deficiencies of the system and inform the capital improvements plan (CIP), which is detailed in Section 6.0.

### **5.1 Existing Distribution System and Storage Facilities**

MWSD customers in seven different pressure zones are supplied through a distribution system that receives water from three storage tanks, nine groundwater wells, and the Alta Vista Water Treatment Plant (AVWTP). A layout of the water distribution system and the seven pressure zones is presented on Figure 2.1, Section 2. A schematic of the water system is included as Figure 5.1, on the following page.

#### ***5.1.1 Distribution System***

As of December 2010, the water system had a total of 1,644 metered service connections, with 1,614 connections serving residential customers, and 30 connections serving commercial and institutional customers. In addition, 133 private fire protection meters are connected to the system, however, those draw no water except in the event of a fire. Water is conveyed to customers through a network of pipes over 150,000 feet long, with pipes ranging in diameter from 2 to 16 inches.

Water from the higher pressure zones, those supplied by the Portola Estates and Alta Vista tanks, supplies areas at lower elevations through multiple pressure-regulating valve stations (PRVs). There are a total of 28 active PRVs in the water system, with the characteristics as presented in Table 5.1, on page 5-3.

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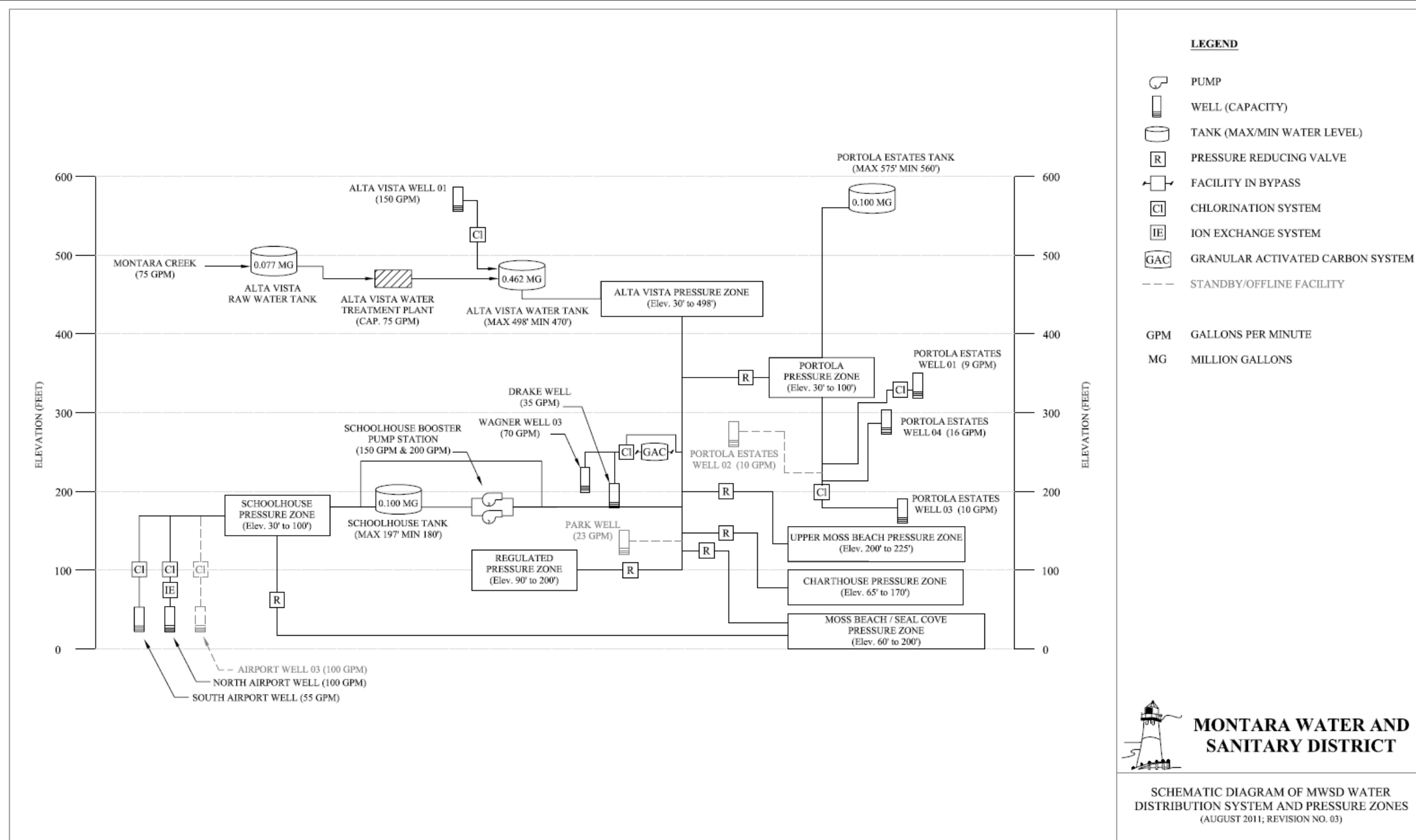


Figure 5.1 MWS Water System Schematic



**Table 5.1 Pressure Regulating Valve Stations <sup>1</sup>**

<b>Location</b>	<b>Manufacturer/ Model</b>	<b>Size (in)</b>	<b>Downstream Pressure Setting (psi)</b>	<b>Elevation (ft) <sup>2</sup></b>
Etheldore and Lancaster	Cla-Val 100	6	35	70
Etheldore and Lancaster	Bailey 30A	2	40	70
3 <sup>rd</sup> and East	Unknown	6	70	115
3 <sup>rd</sup> and East	Unknown	2	75	115
Farralone and 6 <sup>th</sup>	Bailey 400	6	65	156
Farralone and 6 <sup>th</sup>	Bailey 30A	3	70	156
6 <sup>th</sup> and Farralone	Unknown	4	65	133
6 <sup>th</sup> and Farralone	Baker	2	55	133
8 <sup>th</sup> and Main	Baker	6	79	116
8 <sup>th</sup> and Main	Unknown	3	83	116
11 <sup>th</sup> and Farralone	Cla-Val	6	70	140
11 <sup>th</sup> and Farralone	Bailey 30A	2	80	140
12 <sup>th</sup> and Farralone	Bailey 400	6	80	140
12 <sup>th</sup> and Farralone	Bailey 30A	2	85	140
13 <sup>th</sup> and Farralone	Bailey 400	6	80	103
13 <sup>th</sup> and Farralone	Bailey 30A	2	87	103
14 <sup>th</sup> and Farralone	Bailey 400	6	90	95
14 <sup>th</sup> and Farralone	Bailey 30A	2	85	95
Alamo and Cypress	Cla-Val	8	130	347
Alamo and Cypress <sup>3</sup>	Cla-Val	2	50	347
Sierra and Lincoln (Schoolhouse)	Bailey 400	8	68	165
Sierra and Lincoln (Schoolhouse)	Bailey 30A	3	75	165
Marine and Cabrillo	Unknown	8	40	69
Marine and Cabrillo	Unknown	2	45	69
Buena Vista and Lincoln	Unknown	6	75	192
Buena Vista and Lincoln	Unknown	2	85	192
Sunshine Valley Road	Unknown	6	30	246
Sunshine Valley Road	Unknown	2	35	246

<sup>1</sup> Inventory List provided by Jeff Page, Superintendent of Operations at MWSD

<sup>2</sup> Elevations obtained from Google Earth

<sup>3</sup> Pressure Sustaining Valve (PSV)

### 5.1.2 Storage Facilities

The MWSD system includes both raw, untreated water and treated water storage facilities. Raw water diverted from Montara Creek is stored in a 77,000-gallon concrete raw water storage tank, which serves for initial sediment settling and peaking upstream of the treatment plant. This tank provides about 15 hours of detention time. The District has replaced this tank's dilapidated roof with a new roof equipped with photovoltaic panels for energy savings and installed baffling inside the tank to improve solids settling capabilities. The MWSD water system also has three treated water storage tanks with a combined capacity of 662,000 gallons. Tank characteristics are summarized in Table 5.2, below.

<b>Tank</b>	<b>Material</b>	<b>Tank Diameter (ft)</b>	<b>Base Elev. (ft)<sup>1</sup></b>	<b>Overflow Elev. (ft)</b>	<b>Storage Capacity (Gallons)</b>	<b>Year Built</b>
Portola Estates	Wood	34	560	575	100,000	1981
Alta Vista	Steel	53	470	498	462,000	1976
Schoolhouse <sup>2</sup>	Concrete	32	180	197	100,000	1959

<sup>1</sup> Base elevations from Montara Water System Map prepared by Citizens Utility Company of California in February 1999. Datum is NGVD 1988 as presented in USGS Quadrangle "Moss Beach."

<sup>2</sup>This tank is being replaced as of this report writing.

The following necessary improvements were implemented at the storage tanks in the eight years of MWSD's ownership of the water system:

1. Alta Vista Tank Access Improvements: Access improvements were completed to bring the tank in compliance with the Occupational Safety and Health Administration (OSHA) requirements and improve worker and public safety;
2. Alta Vista Tank Controls Improvements: Controls improvements were completed to incorporate the new well source and increase efficiency of the Alta Vista Tank;
3. Portola Estates Tank Improvements: Access road and drainage improvements at the Portola Estates Tank were completed to improve worker and public safety and to protect the environment; and
4. Schoolhouse Tank Replacement: Design and construction of two new 100,000-gallon tanks at the current Schoolhouse water storage tank location is underway to improve supply reliability.

## 5.2 Distribution System and Storage Design Criteria

Planning and design criteria adopted by the District's Board of Directors at the December 18, 2003 meeting, have been utilized for the purpose of this Master Plan and are summarized in Tables 5.3 and 5.6. These design criteria are the main inputs for the distribution system analysis, and will help define the system deficiencies and guide the necessary system improvements.

### 5.2.1 Distribution Pipeline System Criteria

The water distribution system must sustain a minimum working pressure of 40 psi during peak hour demand (PHD) conditions and 20 psi during fire flow conditions. In addition, velocity can be no higher than 8 feet per second (fps) during PHD conditions, and 12 fps during fire flow conditions. The design criteria for all demand conditions are presented in Table 5.3, below.

<b>Table 5.3 Distribution Pipeline System Criteria<sup>1</sup></b>			
<b>Demand Condition</b>	<b>Minimum Pressure</b>	<b>Maximum Velocity</b>	<b>Maximum Headloss</b>
Average Day Demand	50 psi	5 fps	3 ft/1000 ft
Maximum Day Demand	50 psi	7 fps	5 ft/1000 ft
Peak Hour Demand	40 psi	8 fps	7ft/1000 ft
Fire Flow Demand	20 psi	12 fps	10 ft/1000 ft

<sup>1</sup> Criteria approved by MWSD Board of Directors, as part of the 2004 Master Plan submitted to CDPH

### 5.2.2 Storage Criteria

The total required volume of storage in a water system includes water for operational, emergency, and fire-fighting uses. Operational storage is directly related to the amount of water necessary to meet peak demands. The intent of operational storage is to provide the difference in quantity between the customer's peak demands and the system's available supply. The volume of water allocated for emergency uses is decided based on the historical record of emergencies experienced, and on the amount of time which is expected to lapse before the emergency can be corrected. Water storage for fighting fires is regulated in quantity by the National Fire Code, Insurance Service Office, and local Fire Department.

#### Operational Storage

Operational storage is the quantity of water that is required to moderate daily fluctuations in demand beyond the capabilities of the production facilities, based on maximum daily demand. Water must be stored to supply the peak flows that exceed the maximum day production rate. Operational storage is then replenished during off-peak hours when the demand is less than the production rate. Operational storage for a typical system is approximately equal to 25 percent of the MDD.

#### Emergency Storage

Determination of the volume of emergency storage is a policy decision based on the assessment of the risk of failures and the desired degree of system reliability. The amount of required emergency storage is a function of several factors including the diversity of the supply sources, redundancy, and reliability of the production facilities, and the anticipated length of the emergency outage. The vulnerability of the system is evaluated based on the susceptibility of the

system to varying degrees of emergencies and the ability of the utility to recover from these emergencies. An emergency is defined as an unforeseen or unplanned event that may degrade the quality or quantity of potable water supplies available to serve customers. There are three types of emergency events that a utility typically prepares for:

- *Minor emergency* - A fairly routine, normal, or localized event that affects few customers, such as a pipeline break, malfunctioning valve, hydrant break, or a brief power loss. Utilities plan for minor emergencies and typically have staff and materials available to correct them.
- *Major emergency* - A disaster that affects an entire, and/or large, portion of a water system, lowers the quality and quantity of the water, or places the health and safety of a community at risk. Examples include water treatment plant failures, raw water contamination, or major power grid outages. Water utilities infrequently experience major emergencies.
- *Natural disaster* - A disaster caused by natural forces or events that create water utility emergencies. Examples include earthquakes, forest or brush fires, hurricanes, tornadoes or high winds, floods, and other severe weather conditions.

For MWSD, the susceptibility of the system to these emergency situations have been evaluated based on the District's current equipment and approach to handling potential emergency situations. The evaluation is presented in Table 5.4, below.

<b>Table 5.4 MWSD Emergency Preparedness</b>	
<b>MWSD Emergency Situation</b>	<b>Current Mitigating Approaches</b>
<b><i>Minor Emergencies:</i></b> Brief Power Loss (2hr) Pipeline Break Valve Malfunction	- Emergency generators for potential power loss - Variable-Frequency Drives (VFDs) at pumps - Agreement with Coastside County Water District (CCWD) to deliver water to the District in the event of an emergency
<b><i>Major Emergencies:</i></b> Major Power Loss (8hr) WTP Failure Raw Water Contamination	- Emergency generators for potential power loss - VFDs at pumps - Agreement with CCWD to deliver water to the District in the event of an emergency
<b><i>Natural Disaster:</i></b> Earthquake Forest Fire	- Agreement with CCWD to deliver water to the District in the event of an emergency; the effectiveness of this is contingent upon the state of CCWD's water system, as an earthquake would be a regional natural disaster.

Upon initial evaluation of the MWSD system and system vulnerabilities, the volume of emergency storage should be calculated to provide enough water to sustain the needs of the

MWSD system in the most severe event: an earthquake. The system can recover from both minor and major emergencies in no more than 8 hrs. Minor and major emergencies would require less emergency water storage and are therefore included in the more conservative evaluation focused on earthquake preparedness. A general review was conducted of several other California water systems regarding the emergency storage calculation recommended for varying degrees of risk and types of water systems. Table 5.5 presents a range of emergency storage values for MWSD based on the reviewed methodologies and industry standards.

<b>Methodology</b>	<b>Formula</b>	<b>Current MWSD Emergency Storage Volume Required (gallons)</b>
AWWA Recommended Target	MDD for 8 hrs	157,916
50% of MDD	.5 x MDD	236,879
DHS Guidelines	ADD	318,418
Per Capita Estimate	2 Days (Time to restore normal water supply) x 50 gal/day x Population	442,200
AWWA Guidelines	2 x ADD	636,836

For the purpose of this analysis, the emergency storage requirement was based on the AWWA guidelines, the most conservative value. Required emergency storage for the current system demand is estimated to be 636,836 gallons.

Fire Protection Storage

Two hours of fire flow must be provided at 2,000 gpm, which corresponds to a land use of multiple residential, one and two stories, and light commercial or light industrial development. A 2,000 gpm fire for two hours would require 240,000 gallons of water. Therefore, MWSD requires 240,000 gallons of storage for fire fighting purposes.

Storage Summary

The storage volumes required to upgrade the current system, and to provide for the expected future and ultimate growth, are presented in Table 5.6, below. There is a current storage deficit of 333,276 gallons, and future growth at buildout would require an additional of 1,153,765 gallons of storage.

**Table 5.6 Summary of Required Storage Volume**

	<b>Current</b>	<b>2020</b>	<b>2040</b>	<b>Buildout</b>
<b>ADD</b>	318,418	420,192	512,712	663,480
<b>MDD</b>	473,758	630,288	769,068	995,220
<b>Operational Storage</b> (25% of MDD)	118,440	157,572	192,267	248,805
<b>Emergency Storage</b> (2 x ADD)	636,836	840,384	1,025,424	1,326,960
<b>Fire Fighting Storage</b> (2 hr @ 2,000 gpm)	240,000	240,000	240,000	240,000
<b>Total Storage Needed</b>	<b>995,276</b>	<b>1,237,956</b>	<b>1,457,691</b>	<b>1,815,765</b>
<b>Existing Storage</b>	662,000	662,000	662,000	662,000
<b>Current Storage Deficit</b>	<b>333,276</b>	<b>575,956</b>	<b>795,691</b>	<b>1,153,765</b>

The additional storage should be placed in locations where it can best meet the needs of multiple pressure zones. Storage placed in upper zones is also available to the lower zones. Water stored in lower zones would only be available to the upper zones by utilizing a booster pump. Various locations for storage facilities were evaluated based on their operational performance and flexibility, on their ability to provide water to multiple zones with minimal pumping, and on their expected costs. The CIP in the following section includes a storage project that meets these requirements.





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## **SECTION SIX**

### **Capital Improvements Program**

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## 6.0 Capital Improvements Program

The results of analysis presented in previous sections demonstrate that MWSD’s water system requires improvements to address system weaknesses, continue to improve water supply reliability, and ensure sufficient response under daily operational scenarios, fire flow, and emergency conditions. These potential improvements make up the District's Capital Improvements Program (CIP) and include the rehabilitation of the existing infrastructure, addition of new facilities, development of new sources of supply, implementation of repair and replacement, and preventive maintenance programs. The proposed improvements are categorized as near-term (*Priority Level 1*) or long-term (*Priority Level 2*), based on the District's CIP prioritization criteria.

In 2003, MWSD established CIP prioritization criteria that serve as the foundation for the District's capital improvements decision-making process to ensure a relevant implementation schedule and adequate funding for the improvements. The criteria provides a method to rate the relative importance of a particular project based upon factors such as protection of public health, employee safety, legal and regulatory requirements, and funding constraints. These criteria established which projects should be implemented in any given year and over the CIP planning horizon. The prioritization criteria used by MWSD are presented in Table 6.1, below, categorized into three project levels, listed from most to least critical for implementation.

Prioritization Level	Description	Examples
Level 1 Mandatory Projects	“Must do”, highest priority. District has little or no control to defer.	(1) Projects required by law/legislation, regulations; (2) Projects protecting health and safety of employees and the public; and (3) Project funded by others.
Level 2 Necessary Projects	Must be done. District has moderate level of control over the timing of implementation.	(1) Projects required for providing adequate emergency storage and meeting fire flow requirements; (2) Projects reducing water system losses and reducing pipeline leaks.
Level 3 Discretionary Projects	Should be done. District has significant level of control over the timing of implementation.	Projects that are required but can be deferred to a later date. Level 3 Projects could be completed as-needed, if Level 1 or Level 2 Projects are postponed.

## 6.1 Near-term Improvements

Near-term improvements are *Priority Level 1* projects that almost exclusively address the system deficiencies related to adding new customers to the system. Most of the identified system deficiencies are due to adding new connections to the system and increasing demand. The near-term improvements will be implemented in the next 15 years, a timeline that is based on new system connections, construction feasibility, and cash flow. The projects and actions described below would allow the District to address system deficiencies and continue to operate an efficient and reliable system. The proposed *Priority Level 1* near-term improvements continues the District’s progress toward sustainability through investments that: (1) diversify sources of water supply, (2) improve water quality, (3) encourage conservation of water and energy, and (4) meet current and future infrastructure needs. The near-term improvements will be almost entirely funded through the Water Capacity Charge (WCC).

Table 6.2, below, contains all *Priority Level 1* projects that have been formulated to provide benefit to, and be paid for by, new District customers. Two of the projects will provide some benefit to new and existing customers, and a percentage of these project costs will be funded through water rates. A detailed discussion of each of the projects follows.

<b>Table 6.2 Capital Projects Required to Connect New Customers</b>
1. Develop Additional Supply Reliability
2. Portola Tank Telemetry Upgrade
3. New and Upgraded PRV Stations
4. SCADA Improvements
5. Schoolhouse booster Pump Station - New
6. Treatment Upgrades
7. Phase I PWP Projects
8. PWP Phase II Development and Implementation
9. Valve Installation Program
10. New Water Storage Tank
11. Wagner Well Pump Upgrade
12. Water Main Upgrades

### **6.1.1            *Develop Additional Supply Reliability***

This project provides for planning, permitting, and implementation of water supply augmentation to ensure that the water system's reliability remains intact with the addition of the new water customers to the system. Currently, the District has about 20 percent reliability and redundancy in its water supply portfolio achieved by existing District's customers through adding new sources, implementing water system improvements, securing the existing Airport Wells for its water supply portfolio, and through conservation. This portion of the water supply portfolio will initially be utilized to add new customers to the system; however, the supply reliability needs to be replenished and paid for by the new customers to ensure consistent continued reliability of the water system. The project includes new groundwater source development, surface water supply augmentation, and restoration of existing wells' capacity.

- The estimated cost of this project is \$2,270,000 and will be paid by new customers through the WCC.

Specific potential supply enhancement projects are discussed below:

#### Portola Wells I, III, and IV Production Restoration

The Portola Wells I, III, and IV Production Restoration Project includes re-drilling Portola Wells I, III, and IV, rehabilitating the wells, and replacing the pumping equipment to restore the wells to their original design capacity. *Balance Hydrologics* estimated that re-drilling the three wells that would likely restore their production to the design levels:

- Portola I Well depth would be increased from 332 ft to 600 ft
- Portola III Well depth would be increased from 300 ft to 600 ft
- Portola IV Well depth would be increased from 500 ft to 800 ft

This increase in depth would potentially improve the rated capacity of each well by 5 to 10 gpm for a total capacity restoration potential of 15 to 30 gpm. Environmental compliance for the project may include obtaining a Categorical Exemption (CatEx) under the California Environmental Quality Act (CEQA) and a Coastal Development Exemption (CDX) or Coastal Development Permit (CDP).

#### New Park Well Development

The New Park Well Development Project includes drilling and developing a new well on District-owned "Park Well" property, potentially including a treatment system for iron and manganese removal, and connecting the new well to the distribution system. The New Park Well would be located on the same property as the existing Park Well, either on the existing Tennis Court/Asphalt Pavement or near George Street, outside the flood zone. Although no test drilling has taken place, potential well capacity has been estimated at 50 – 70 gpm, and high levels of iron and manganese are anticipated. Environmental compliance for the project will likely

include fulfilling CEQA and LCP requirements and amending the District's Public Works Plan (PWP).

#### Pillar Ridge Manufactured Home Community Water System Consolidation

The Pillar Ridge Manufactured Home Community Water System (Pillar Ridge) Consolidation Project is the consolidation of the Pillar Ridge water system, inclusive of the water sources, storage, and treatment, into the MWSD system. The distribution system and customer service is anticipated to remain with Pillar Ridge. With the consolidation, the following improvements would be made: incorporation of the Pillar Ridge water system controls into the MWSD Supervisory Control and Data Acquisition (SCADA) system, adjustments to the District's system to accommodate a new pressure zone, and other miscellaneous improvements. Currently, Pillar Ridge provides water to its customers from three groundwater wells and from MWSD. The average production per well is reported at 14 – 20 gpm, with a maximum combined production of 62 -72 gpm. The maximum demands on the system are approximately 70 gpm, and the difference between the well production and daily demand is met through the permanent metered connection from the MWSD system. MWSD reserves 35 gpm of its supply capacity for Pillar Ridge.

By consolidating Pillar Ridge water system with the MWSD water system, the combined water system would gain further supply reliability. MWSD will no longer have to reserve 35 gpm for Pillar Ridge to be available at a 24-hour notice. To evaluate the potential additional supply that could be acquired by MWSD, a more comprehensive analysis of the Pillar Ridge water system and the consolidation project would be necessary. There is also potential for additional source water supply to be acquired through the consolidation, as the Pillar Ridge system owns a fourth well that could be converted to a production well. Environmental compliance for the project will likely include obtaining a CDX and CatEx under CEQA. There is grant funding potential for this project.

#### **6.1.2 Portola Tank Telemetry Upgrade**

The existing Portola Tank currently operates with no telemetry link to the District's SCADA system. While this arrangement works to serve existing water customers, addition of new customers throughout the District's service area will require adding the tank to SCADA to ensure optimization of operations of the tank under new demand conditions.

- The estimated cost of this project is \$50,000 and will be paid by the new customers through the WCC.



### **6.1.3            *New PRV Stations and Upgrade Existing***

Due to the District's water system configuration and the terrain of the service area, the District operates over 20 existing pressure regulating stations (PRVs). With the addition of new customers throughout the service area, this project will install up to 5 new PRV stations and increase the capacity of up to 10 existing PRV stations.

- The estimated cost of this project is \$300,000 and will be paid by the new customers through the WCC.

### **6.1.4            *SCADA Improvements***

The District operates an existing SCADA that has been significantly improved during the years of public ownership of the water system. However, the system operates at capacity and it's expansion is required to accommodate addition of new water customers. This project will include the equipment and installation work required to expand the existing SCADA.

- The estimated cost of this project is \$50,000 and will be paid by the new customers through the WCC.

### **6.1.5            *Schoolhouse Booster Pump Station - New***

The District owns and operates the existing Schoolhouse Booster Pump Station. The addition of new water customers throughout the service area necessitates installation of a new set of booster pumps to accommodate the distribution system expansion for new customers and a new set of parameters under which the system would operate when demand increases. The existing booster pump station building has no room to house these new pumps, and has reached the end of its useful life, so a new building would also be required. This project will include a new set of pumps, rehabilitation and/or replacement of the existing pumps, and a new building to house two sets of pumps.

- The estimated cost of this project is \$600,000; 50 percent of which will be paid by water rate revenues and 50 percent by the new customers' WCC. The new customers will be responsible for \$300,000 of the total project cost.

### **6.1.6            *Treatment Upgrades***

The District's Airport Well No. 3 is currently off line and inoperable due to high levels of nitrate and manganese. The District does not need to operate the well for the existing customers, however, this well must be placed in operation once the new customers started being added to the water system.

- The estimated cost of the treatment upgrades required to return this well to an active status and gain the Department of Public Health approval is \$320,000 and will be paid by new customers through the WCC.

#### **6.1.7 Phase I PWP Storage Projects**

The District developed its Public Works Plan (PWP) and received approval of the Coastal Commission to design and construct various improvements to the water system to improve supply and delivery reliability. Initiated in 2004, the sizing of storage facilities was based on then current water demands and projections and on trends related to the average daily and maximum day demands. The PWP stated that additional storage volume of 1.088 MG was needed to supplement approximately 662,000 gallons of storage currently available. Due to a significant decrease in the customer water demand, lower unaccounted-for-water, and lower peaking factors, existing customers no longer require 1.75 MG of storage for emergency, operational, and fire protection needs. Based on current calculations, presented in Table 5.6, only 995,000 gallons are needed for existing customers, making the need for additional storage at 333,000 gallons (995,000 gallons less existing 662,000 gallons). The remaining storage capacity being developed (770,000 gallons; 1.1 MG less 330,000 gallons) will be utilized to accommodate new customers.

- The resulting 770,000-gallon surplus will be utilized and paid for by the new water customers, which constitutes about 70 percent of the storage cost, or  $\$2,600,000 \times 70\% = \$1,820,000$ . The cost of \$1.82 million will be paid by new customers through the WCC.

#### **6.1.8 PWP Phase II Development and Implementation**

To secure all necessary environmental permits and in compliance with the PWP approved by the Coastal Commission in 2009, the District will undertake the environmental review process under CEQA and the Coastal Act. This work will include permitting the improvements included in the *New Customer CIP*.

- The estimated total cost of this effort is \$1,450,000 and will be paid by new customers through the WCC.

#### **6.1.9 Valve Installation Program**

As part of the distribution system upgrade to accommodate addition of new customers to the water system, under this project, the District will install up to eight new isolation and control valves in strategic locations throughout the distribution system to allow flow improvements to serve new customers.

- The estimated cost of this program is \$165,000 and will be paid by the new customers through the WCC.

#### **6.1.10        *New Water Storage Tank***

The New Water Storage tank project will be in addition to the PWP Phase I storage volume and will be utilized for new customers beyond year 2020.

- The estimated cost of this new 200,000-gallon storage tank is \$550,000 and will be paid by new customers through the WCC.

#### **6.1.11        *Water Main Upgrades***

Under the water main upgrade program, the District will undertake the effort of designing and constructing new water main extensions in the urban areas where needed and upsizing the existing distribution system mains to accommodate increasing demands due to the addition of new water customers. This program includes an estimated additional 7,800 linear feet of 6 to 8-inch diameter mains designed and installed in the system.

- The estimated cost of these upgrades is \$1.56 million and will be paid by the new customers through the WCC.

#### **6.1.12        *Wagner Well Pump Upgrades***

The existing District's Wagner Well operates within its design parameters in the existing water system. Hydraulic analysis demonstrates, however, that with increased demands due to new water customers, Wagner Well pump would be unable to pump into the system. The pump and motor replacement is required to accommodate new customers.

- The estimated cost of this upgrade is \$25,000 and will be borne by the new customers through the WCC.

#### **6.1.13        *Near-Term Improvements Summary***

The costs associated with the near-term improvements are detailed in Table 6.3 on the following page. The total cost of all Priority Level 1 near-term improvements is approximately \$9.94 million. Projects that are for the benefit of new customers and to be wholly or partially funded by the new customer WCC are appropriately represented; these projects make up \$8.86 million of the near-term improvement costs. Projects that are for the benefit of existing customers and to be partially funded by existing customer water rates are appropriately represented; these projects make up \$1.08 million of the near-term improvement costs.

<b>Table 6.3 Near-Term Improvements Cost Summary</b>			
<b>Project</b>	<b>Total Project Cost</b>	<b>Covered through Water Rates</b>	<b>New Customer WCC</b>
Develop Additional Supply Reliability	\$2,270,000	-	\$2,270,000
Portola Tank Telemetry Upgrade	\$50,000	-	\$50,000
New and Upgraded PRV Stations	\$300,000	-	\$300,000
SCADA Improvements	\$50,000	-	\$50,000
Schoolhouse booster Pump Station	\$600,000	\$300,000	\$300,000
Treatment Upgrades	\$320,000	-	\$320,000
Phase I PWP Storage Projects	\$2,600,000	\$780,000	\$1,820,000
Phase II PWP Development and Implementation	\$1,450,000	-	\$1,450,000
Valve Installation Program	\$165,000	-	\$165,000
New Water Storage Tank	\$550,000	-	\$550,000
Wagner Well Pump Upgrade	\$25,000	-	\$25,000
Water Main Upgrades	\$1,560,000	-	\$1,560,000
<b>Total Cost Project Costs</b>	<b>\$9,940,000</b>	<b>\$1,080,000</b>	<b>\$8,860,000</b>

The near-term improvements are planned to be implemented from FY 2010/2011 through FY 2024/2025. A preliminary CIP expense budget has been developed and is included as Table 6.4, on the following page.

<b>Table 6.4 Near-Term Improvements Capital Improvement Program Budget Projection</b>																
<b>Project</b>	<b>Year 0</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>	<b>Year 7</b>	<b>Year 8</b>	<b>Year 9</b>	<b>Year 10</b>	<b>Year 11</b>	<b>Year 12</b>	<b>Year 13</b>	<b>Year 14</b>	<b>Total CIP Cost</b>
	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2016/2017</b>	<b>2017/2018</b>	<b>2018/2019</b>	<b>2019/2020</b>	<b>2020/2021</b>	<b>2021/2022</b>	<b>2022/2023</b>	<b>2023/2024</b>	<b>2024/2025</b>	
<i>Develop Additional Supply Reliability</i>	\$1,320,000	\$50,000	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$300,000	\$500,000	\$0	\$0	\$0	\$0	\$0	\$2,270,000
<i>Portola Tank Telemetry Upgrade</i>	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000
<i>New and Upgraded PRV Stations</i>	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$25,000	\$25,000	\$25,000	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$300,000
<i>SCADA Improvements</i>	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000
<i>Schoolhouse Booster Pump Station Upgrade</i>	\$0	\$150,000	\$300,000	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600,000
<i>Treatment Upgrades</i>	\$10,000	\$100,000	\$50,000	\$50,000	\$50,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$0	\$0	\$0	\$0	\$320,000
<i>Phase I PWP Projects</i>	\$2,600,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,600,000
<i>Phase II PWP Development and Implementation</i>	\$50,000	\$400,000	\$500,000	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,450,000
<i>Valve Installation Program</i>	\$0	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$0	\$0	\$0	\$15,000	\$15,000	\$15,000	\$15,000	\$165,000
<i>New Water Storage Tank</i>	\$0	\$0	\$0	\$50,000	\$200,000	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$550,000
<i>Wagner Well Pump Upgrade</i>	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,000
<i>Water Main Upgrades</i>	\$0	\$300,000	\$300,000	\$300,000	\$300,000	\$360,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,560,000
<b>Total Annual Cost</b>	<b>\$3,980,000</b>	<b>\$1,065,000</b>	<b>\$1,390,000</b>	<b>\$1,165,000</b>	<b>\$615,000</b>	<b>\$710,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$335,000</b>	<b>\$510,000</b>	<b>\$10,000</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$9,940,000</b>

## 6.2 Long-term Improvements

Long-term system improvements are *Priority Level 2* projects that are important for increasing system efficiency and reliability. The District has some flexibility regarding the implementation of the identified long-term improvements. The projects identified as *Priority Level 2* long-term improvement projects are described in detail below.

### 6.2.1 Airport Wells Water Treatment Facility

The proposed Airport Wells Water Treatment Facility (Facility) would be sited at the east side of the Half Moon Bay Airport, just northwest of the fence line surrounding the existing Half Moon Bay Airport Administration Building, and southwest of the Airport's frontage road. The new treatment system would be centrally located and serve all three airport wells. Water extracted from the three wells would first be blended to treat for manganese and then conveyed through the Airport Wells Water Treatment Facility's following components: two granulated activated carbon (GAC) tanks for 1,2,3-Trichloropropane removal, four ion exchange vessels for nitrate removal, and two air stripping towers for pH adjustment to treat for corrosion potential. Air stripping would also potentially be accomplished by (1) diffused aeration, (2) utilization of a spray nozzle and tray aerator, or (3) aeration by piping a diffuser down the wells and adding air directly into the groundwater.

The Airport Wells Water Treatment Facility would also include two fiberglass buildings that would house SCADA, controls, power systems, and a chlorination system. A new access road would be constructed off the Airport's frontage road. The centralized treatment facility would be connected with the three existing wells and the District's distribution system via existing and new buried pipelines. Electrical power supply to the Facility would be through buried electrical conduits or solar panels.

- The estimated cost of the Airport Wells Water Treatment Facility, including permitting and Department of Public Health approval, is \$1,514,000

### 6.2.2 Alta Vista Water Treatment Plant Upgrade

The raw water source for the AVWTP is an impoundment of the Montara Creek. During the winter months, AVWTP is typically shut down due to the raw water turbidity increase during heavy rains, resulting in shorter filter runs. Turbidity is the reduction of clarity in water due to the presence of suspended or colloidal particles. Turbidity is commonly used as an indicator for the general condition of the water. The increase in surface water turbidity occurs during spring runoff and seasonal precipitation events as a result of increased overland flow and erosion. A more robust treatment process train at AVWTP, including pre-treatment processes such as clarification (settling tank) and larger filtration units may potentially accommodate higher raw water turbidity with little reduction in filter performance. This would allow AVWTP to be used year round as a more reliable water supply source. A cost/benefit analysis of additional treatment



processes for both the Airport wells and the AVWTP should be performed to define the most cost effective alternatives.

- The estimated cost of the Alta Vista Water Treatment Plant upgrade, including permitting and Department of Public Health approval, is \$500,000.

### **6.2.3 Desalination**

Seawater desalination may be considered a long-term option, particularly if the opportunity arises to develop this resource on a regional basis. The capital, operating, and maintenance costs for this alternative may appear high at this time. Technological advancements, however, may make this option significantly more attractive in the near future. Desalination plants are available in small, portable setups that generate 100-200 gpm, and in large plants that generate several million gallons per day. Several issues need to be examined to assess the feasibility of seawater desalination as a source of potable water for the Montara area: location of desalination plant, brine disposal strategy, permitting, and cost of construction, operation, and maintenance.

- The estimated cost of planning, designing and implementing a desalination facility would be largely dependent upon the location and size of the facility. Preliminary investigations suggest that a desalination plant could cost between \$4,970,000 to \$6,000,000.



# **APPENDIX A**

## **Rates of Production**



**Average Rates of Production, All Sources, 2004 – October 2007**

Source	Rated Capacity (gpm)	Rates of Production (gpm)				Average Rate of Production
		2004	2005	2006	Jan-Oct 2007	
North Airport Well	100	77	51	46	49	56
South Airport well	55	44	43	40	41	42
Airport Well #3	100	62	65	90	77	73
Drake Well	35	37	40	34	37	37
Portola Well #1	9	7	6	5	5	6
Portola Well #3	10	7	7	6	7	7
Portola Well #4	16	8	3	5	9	6
Wagner Well #3	70	52	46	63	69	58
Montara Surface Diversion	75	66	67	69	51	63
<b>Total Monthly Rate of Production</b>	470	359	329	359	345	348
<b>Total Groundwater Rate of Production</b>	395	293	262	290	294	285

**Average Rates of Production, All Sources, November 2007 - 2010**

Source	Rated Capacity (gpm)	Rates of Production (gpm)				Average Rate of Production
		Nov-Dec 2007	2008	2009	2010	
Alta Vista Well	150	41	75	81	91	72
North Airport Well	100	53	55	64	62	58
South Airport well	55	48	37	32	25	35
Airport Well #3	100	67	54	60	38	55
Drake Well	35	37	38	36	37	37
Portola Well #1	9	8	5	6	5	6
Portola Well #3	10	7	7	6	6	6
Portola Well #4	16	10	6	8	7	8
Wagner Well #3	70	73	73	64	65	69
Montara Surface Diversion	75	22	51	55	67	49
<b>Total Monthly Rate of Production</b>	620	365	400	412	404	395
<b>Total Groundwater Rate of Production</b>	545	343	349	357	337	346

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# **APPENDIX B**

## **Production Data and Analysis**





### 2004 Monthly Production Data

	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04	Dec-04	Total Production
<b>N. Airport Well</b>	333,890	202,780	104,900	629,130	747,140	1,000,110	495,470	1,021,420	2,197,710	1,290,660	316,790	512,400	8,852,400
<b>S. Airport Well</b>	778,870	972,180	806,970	1,586,650	2,088,760	2,168,910	2,120,940	2,044,140	1,975,030	1,723,820	1,588,930	1,826,810	19,682,010
<b>Airport Well #3</b>	1,620,780	1,454,660	1,719,280	2,793,080	2,683,820	2,161,420	1,452,070	1,549,660	1,627,050	1,343,490	1,213,590	805,150	20,424,050
<b>Drake Well</b>	1,442,860	1,290,500	1,400,080	1,478,970	1,514,190	1,518,750	1,514,520	1,510,970	1,518,980	1,501,210	1,477,380	1,567,860	17,736,270
<b>Portola Well #1</b>	324,150	297,890	299,150	266,350	298,920	281,280	290,690	295,210	283,150	275,900	274,350	278,220	3,465,260
<b>Portola Well #3</b>	0	0	349,510	370,070	380,440	361,130	366,400	359,920	340,390	341,060	327,390	332,620	3,528,930
<b>Portola Well #4</b>	480,260	444,820	449,190	369,710	384,190	378,290	389,110	326,250	273,500	208,500	200,880	198,510	4,103,210
<b>Wagner Well #3</b>	1,862,870	1,691,330	1,805,780	2,072,960	2,020,630	2,025,650	1,955,640	1,952,410	1,935,590	1,796,320	1,680,480	1,904,810	22,704,470
<b>Montara Creek</b>	2,415,900	2,145,600	2,653,600	1,533,300	3,222,500	3,149,700	3,256,500	3,076,700	2,909,800	2,304,600	2,244,400	1,634,100	30,546,700
<b>Total Monthly 2004 Production</b>	9,259,580	8,499,760	9,588,460	11,100,220	13,340,590	13,045,240	11,841,340	12,136,680	13,061,200	10,785,560	9,324,190	9,060,480	131,043,300

### 2005 Monthly Production Data

	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Total Production
<b>N. Airport Well</b>	697,990	436,900	724,300	787,120	826,490	652,870	553,590	430,760	440,610	205,920	175,760	262,210	6,194,520
<b>S. Airport well</b>	1,782,830	1,696,510	1,745,200	1,616,180	1,760,140	1,738,970	1,757,000	1,672,860	1,450,600	1,589,260	1,528,950	1,514,370	19,852,870
<b>Airport Well #3</b>	1,003,250	661,070	1,155,800	788,230	1,382,530	1,894,540	2,863,070	3,216,770	2,578,360	2,741,550	2,471,900	2,379,800	23,136,870
<b>Drake Well</b>	1,522,410	1,281,320	1,407,460	1,302,600	1,461,330	1,496,440	1,631,360	1,495,540	1,354,460	1,377,150	1,373,900	1,467,190	17,171,160
<b>Portola Well #1</b>	277,090	245,500	267,160	263,670	256,990	232,630	241,010	240,510	241,620	240,040	231,250	237,660	2,975,130
<b>Portola Well #3</b>	335,720	298,800	329,600	319,980	327,750	308,100	314,870	311,260	300,280	304,520	291,200	296,510	3,738,590
<b>Portola Well #4</b>	194,940	165,460	119,110	195,870	179,040	152,120	87,990	12,110	59,260	59,260	32,650	0	1,257,810
<b>Wagner Well #3</b>	1,825,310	1,670,660	1,864,160	1,483,220	1,575,280	1,507,340	1,727,700	1,890,250	1,719,020	1,762,890	1,759,970	1,942,610	20,728,410
<b>Montara Creek</b>	1,667,000	1,819,100	1,827,700	2,773,200	2,679,900	2,797,700	3,057,500	3,068,800	2,891,700	2,778,200	2,259,300	1,621,400	29,241,500
<b>Total Monthly 2005 Production</b>	9,306,540	8,275,320	9,440,490	9,530,070	10,449,450	10,780,710	12,234,090	12,338,860	11,035,910	11,058,790	10,124,880	9,721,750	124,296,860

**2006 Monthly Production (Gallons)**

Source	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Total Production
<b>N. Airport Well</b>	346,600	183,430	443,990	229,040	575,860	1,464,560	1,252,640	296,090	245,790	190,270	421,940	224,410	5,874,620
<b>S. Airport well</b>	1,597,240	1,591,350	1,462,920	1,305,640	1,585,310	1,617,650	1,571,620	1,439,120	1,313,210	1,316,440	1,276,600	1,132,960	17,210,060
<b>Airport Well #3</b>	2,455,890	2,341,560	2,455,550	2,231,840	2,680,040	3,510,980	3,151,620	2,283,820	1,912,550	1,722,420	2,773,560	1,852,210	29,372,040
<b>Drake Well</b>	1,464,940	1,238,060	1,504,090	1,448,320	1,501,750	1,613,440	1,579,610	1,313,590	1,248,940	1,240,060	2,540	352,430	14,507,770
<b>Portola Well #1</b>	222,470	185,600	255,540	216,200	266,740	251,110	253,300	243,810	222,820	236,220	222,900	62,330	2,639,040
<b>Portola Well #3</b>	299,740	274,690	305,820	222,520	0	0	117,480	357,660	332,620	352,070	328,910	333,220	2,924,730
<b>Portola Well #4</b>	11,860	0	0	0	105,070	103,930	179,640	437,750	407,400	415,930	392,180	379,400	2,433,160
<b>Wagner Well #3</b>	2,200,610	1,865,420	2,191,810	2,142,380	1,609,710	0	838,190	2,515,570	2,279,220	2,069,980	2,576,510	2,313,460	22,602,860
<b>Montara Creek</b>	1,243,500	2,037,800	1,070,400	1,096,400	2,500,800	2,936,300	3,062,600	3,065,000	2,967,100	2,948,100	2,627,300	2,190,500	27,745,800
<b>Total Monthly 2006 Production</b>	9,842,850	9,717,910	9,690,120	8,892,340	10,825,280	11,497,970	12,006,700	11,952,410	10,929,650	10,491,490	10,622,440	8,840,920	125,310,080

**2007 Monthly Production (Gallons)**

Source	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Total Production
<b>Alta Vista Well</b>	-	-	-	-	-	-	-	-	-	3,970	1,572,300	1,798,500	3,374,770
<b>N. Airport Well</b>	32,120	175,270	62,490	70,960	223,640	551,580	290,400	456,910	407,850	321,440	226,100	173,520	2,992,280
<b>S. Airport well</b>	1,074,110	984,150	1,064,260	1,109,110	1,131,380	1,353,850	1,804,120	1,921,580	1,704,950	1,594,710	1,449,300	1,506,640	16,698,160
<b>Airport Well #3</b>	1,048,660	1,489,160	1,509,090	1,562,100	2,015,520	2,508,740	2,055,280	2,213,300	1,740,030	1,384,030	1,160,190	989,090	19,675,190
<b>Drake Well</b>	1,251,860	1,267,260	1,285,010	1,306,040	1,333,680	1,412,840	1,484,800	1,501,588	1,370,535	1,462,547	1,355,136	1,310,911	16,342,207
<b>Portola Well #1</b>	0	0	0	0	79,510	249,560	260,450	333,250	338,440	383,110	366,860	350,350	2,361,530
<b>Portola Well #3</b>	337,770	302,420	330,600	305,110	331,660	292,400	302,390	279,840	304,960	284,540	299,120	301,410	3,672,220
<b>Portola Well #4</b>	395,310	360,410	394,160	343,530	312,540	372,560	412,940	308,700	453,380	461,510	437,960	438,640	4,691,640
<b>Wagner Well #3</b>	1,805,090	1,805,090	2,123,710	2,259,830	2,292,980	2,264,760	2,334,470	2,407,530	2,162,290	2,268,860	2,130,670	1,936,720	25,792,000
<b>Montara Creek</b>	2,866,800	1,391,200	2,228,200	1,672,600	2,131,100	1,802,400	1,731,900	1,645,700	1,868,400	1,480,700	273,300	0	19,092,300
<b>Total Monthly 2007 Production</b>	8,811,720	7,774,960	8,997,520	8,629,280	9,852,010	10,808,690	10,676,750	11,068,398	10,350,835	9,645,417	9,270,936	8,805,781	114,692,297

### 2008 Monthly Production (Gallons)

Source	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Total Production
Alta Vista Well	1,863,000	2,957,400	2,519,000	2,707,300	2,867,200	2,935,500	2,853,100	2,994,200	2,891,000	2,737,100	2,987,000	2,965,900	33,277,700
N. Airport Well	101,070	21,700	8,960	5,460	72,890	142,060	16,240	14,110	7,120	0	10,610	32,970	433,190
S. Airport well	1,444,940	986,250	1,083,380	1,106,560	1,278,680	1,287,120	1,288,230	1,259,440	1,209,100	1,128,160	1,050,740	1,019,308	14,141,908
Airport Well #3	901,770	260,090	240,980	627,410	1,087,910	1,336,680	749,700	719,380	773,490	320,090	410,410	326,690	7,754,600
Drake Well	1,231,373	717,954	594,040	887,606	1,068,330	1,037,700	1,136,410	1,038,070	1,045,000	1,106,390	989,920	908,600	11,761,393
Portola Well #1	337,540	290,540	318,320	150,710	0	0	0	0	211,050	343,080	310,990	301,460	2,263,690
Portola Well #3	300,080	252,970	310,120	260,780	307,480	292,670	291,080	287,320	268,410	275,100	72,050	247,680	3,165,740
Portola Well #4	429,880	354,280	424,210	189,050	0	0	0	0	251,450	449,430	442,420	429,140	2,969,860
Wagner Well #3	2,001,170	875,730	507,500	1,042,300	1,479,970	1,466,100	1,668,970	1,548,080	1,417,980	1,594,360	1,279,410	996,108	15,877,678
Montara Creek	0	915,400	2,555,700	2,694,900	3,049,700	2,725,800	2,630,200	2,453,100	2,092,400	1,714,700	1,347,400	1,168,300	23,347,600
<b>Total Monthly 2008 Production</b>	<b>8,610,823</b>	<b>7,632,314</b>	<b>8,562,210</b>	<b>9,672,076</b>	<b>11,212,160</b>	<b>11,223,630</b>	<b>10,633,930</b>	<b>10,313,700</b>	<b>10,167,000</b>	<b>9,668,410</b>	<b>8,900,950</b>	<b>8,396,156</b>	<b>114,993,359</b>

### 2009 Monthly Production (Gallons)

Source	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Total Production
Alta Vista Well	2,842,100	2,648,100	2,970,300	2,737,500	3,036,900	2,985,600	3,728,700	3,430,400	3,273,000	3,411,900	3,418,400	3,335,300	37,818,200
N. Airport Well	27,400	25,550	19,330	66,080	99,280	62,830	17,800	12,700	122,280	130,250	167,840	89,620	840,960
S. Airport well	859,222	345,520	321,420	692,490	860,910	850,380	450,040	697,430	226,780	575,325	630,418	298,480	6,808,415
Airport Well #3	87,530	25,750	10,190	45,000	390,990	498,370	347,340	276,310	12,750	0	12,890	18,590	1,725,710
Drake Well	975,810	891,290	997,030	181,840	1,231,340	1,229,370	1,340,430	1,339,780	1,320,590	900,030	538,140	1,352,150	12,297,800
Portola Well #1	305,730	266,120	279,640	269,000	263,730	271,630	262,160	262,460	251,960	228,280	229,480	219,970	3,110,160
Portola Well #3	284,170	261,050	285,200	277,680	281,870	268,790	270,040	267,250	255,270	257,920	245,150	248,130	3,202,520
Portola Well #4	414,130	360,360	384,280	374,450	371,050	352,880	351,220	371,480	377,290	377,450	365,580	351,170	4,451,340
Wagner Well #3	1,189,262	1,229,290	1,332,140	1,543,580	1,251,770	1,303,040	1,626,730	2,564,660	2,616,810	2,329,980	2,571,270	2,088,880	21,647,412
Montara Creek	1,306,100	840,700	1,153,700	1,205,500	1,135,200	1,013,500	913,100	870,600	758,400	775,100	726,300	567,500	11,265,700
<b>Total Monthly 2009 Production</b>	<b>8,291,454</b>	<b>6,893,730</b>	<b>7,753,230</b>	<b>7,393,120</b>	<b>8,923,040</b>	<b>8,836,390</b>	<b>9,307,560</b>	<b>10,093,070</b>	<b>9,215,130</b>	<b>8,986,235</b>	<b>8,905,468</b>	<b>8,569,790</b>	<b>103,168,217</b>

**2010 Monthly Production Data (Gallons)**

Source	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Total Production
Alta Vista Well	3,032,400	2,737,600	2,177,700	2,184,700	1,491,500	2,016,400	2,510,800	2,479,400	2,908,300	3,189,400	3,323,500	3,724,000	31,775,700
N. Airport Well	90,140	11,650	119,720	33,950	83,180	65,930	231,700	39,350	4,580	7,140	26,170	8,300	721,810
S. Airport well	321,195	134,225	147,920	168,150	166,578	100,650	309,600	31,200	1,950	21,000	11,700	22,050	1,436,218
Airport Well #3	13,300	0	14,390	17,470	6,690	1,390	0	0	0	0	0	0	53,240
Drake Well	1,003,680	728,570	979,200	849,270	887,440	905,490	1,156,630	817,420	598,080	667,310	644,370	632,580	9,870,040
Portola Well #1	221,540	194,380	233,270	230,270	242,340	225,480	213,250	191,980	164,860	189,860	125,240	210,400	2,442,870
Portola Well #3	213,980	236,300	268,770	260,430	265,130	251,960	254,750	226,500	203,290	232,160	156,100	250,490	2,819,860
Portola Well #4	376,520	316,440	347,950	345,000	322,360	300,580	319,770	276,240	246,800	269,400	178,960	300,340	3,600,360
Wagner Well #3	2,201,070	1,806,940	2,017,440	1,881,970	1,948,590	1,975,200	2,256,990	2,001,180	1,822,410	1,584,150	1,552,710	1,595,070	22,643,720
Montara Surface Diversion	381,200	659,500	1,526,200	1,725,800	3,118,500	3,135,300	3,172,700	3,275,800	2,907,800	2,250,000	1,739,800	796,800	24,689,400
<b>Total Monthly 2010 Production</b>	<b>7,855,025</b>	<b>6,825,605</b>	<b>7,832,560</b>	<b>7,697,010</b>	<b>8,532,308</b>	<b>8,978,380</b>	<b>10,426,190</b>	<b>9,339,070</b>	<b>8,858,070</b>	<b>8,410,420</b>	<b>7,758,550</b>	<b>7,540,030</b>	<b>100,053,218</b>

**Average Monthly Production Data (Gallons)**

Source	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Avg	
Alta Vista Well	2,579,167	2,781,033	2,555,667	2,543,167	2,465,200	2,645,833	3,030,867	2,968,000	3,024,100	3,112,800	2,825,300	2,955,925		
N. Airport Well	232,744	151,040	211,956	260,249	375,497	562,849	408,263	324,477	489,420	306,526	192,173	186,204		
S. Airport well	1,122,630	958,598	947,439	1,083,540	1,267,394	1,302,504	1,328,793	1,295,110	1,125,946	1,135,531	1,076,663	1,045,803		
Airport Well #3	1,018,740	890,327	1,015,040	1,152,161	1,463,929	1,701,731	1,517,011	1,465,606	1,234,890	1,073,083	1,148,934	910,219		
Drake Well	1,270,419	1,059,279	1,166,701	1,064,949	1,285,437	1,316,290	1,406,251	1,288,137	1,208,084	1,179,242	911,627	1,084,532		
Portola Well #1	241,217	211,433	236,154	199,457	201,176	215,956	217,266	223,889	244,843	270,927	251,581	237,199		
Portola Well #3	253,066	232,319	311,374	288,081	270,619	253,579	273,859	298,536	286,460	292,481	245,703	287,151		
Portola Well #4	328,986	285,967	302,700	259,659	239,179	237,194	248,667	247,504	295,583	320,211	292,947	299,600		
Wagner Well #3	1,869,340	1,563,494	1,691,791	1,775,177	1,739,847	1,506,013	1,772,670	2,125,669	1,993,331	1,915,220	1,935,860	1,825,380		
Montara Creek	1,411,500	1,401,329	1,859,357	1,814,529	2,548,243	2,508,671	2,546,357	2,493,671	2,342,229	2,035,914	1,602,543	1,139,800		
<b>Avg Monthly Production</b>	<b>8,853,999</b>	<b>7,945,657</b>	<b>8,837,799</b>	<b>8,987,731</b>	<b>10,447,834</b>	<b>10,738,716</b>	<b>11,018,080</b>	<b>11,034,598</b>	<b>10,516,828</b>	<b>9,863,760</b>	<b>9,272,488</b>	<b>8,704,987</b>		<b>116,222,476</b>

**Source Production, 2004 - 2010**

Source	Gallons Produced per Source						
	2004	2005	2006	2007	2008	2009	2010
Alta Vista Well				3,374,770	33,277,700	37,818,200	31,775,700
North Airport Well	8,852,400	6,194,520	5,874,620	2,992,280	433,190	840,960	721,810
South Airport well	19,682,010	19,852,870	17,210,060	16,698,160	14,141,908	6,808,415	1,436,218
Airport Well #3	20,424,050	23,136,870	29,372,040	19,675,190	7,754,600	1,725,710	53,240
Drake Well	17,736,270	17,171,160	14,507,770	16,342,207	11,761,393	12,297,800	9,870,040
Portola Wells	11,097,400	7,971,530	7,996,930	10,725,390	8,399,290	10,764,020	8,863,090
Wagner Well #3	22,704,470	20,728,410	22,602,860	25,792,000	15,877,678	21,647,412	22,643,720
Montara Creek	30,546,700	29,241,500	27,745,800	19,092,300	23,347,600	11,265,700	24,689,400

**Production, Consumption, and Unaccounted-for-Water Calculation**

	2004	2005	2006	2007	2008	2009	2010
<b>Total Production (MG)</b>	131.04	124.30	125.31	114.69	114.99	103.17	100.05
<b>Average Daily Production (gpd)</b>	359,023	340,539	343,315	314,225	315,050	282,653	274,118
<b>Total Annual Consumption (MG)</b>	117.4	114.97	111.17	104.62	106.72	98.94	92.83
<b>Average Daily Consumption (gpd)</b>	321,649	314,983	304,574	286,642	292,393	271,066	254,318
<b>Unaccounted-for-water (MG)</b>	13.64	9.33	14.14	10.07	8.27	4.23	7.22
<b>Unaccounted-for-water (gpd)</b>	37,374	25,556	38,741	27,583	22,657	11,587	19,800
<b>Percent of Unaccounted-for-water</b>	10.41	7.5	11.28	8.78	7.19	4.1	7.22

**Maximum Daily Demand Calculation**

Year	Maximum Daily Demand (gpd)	Month of MDD
2006	534,360	July
2007	511,980	August
2008	437,440	June
2009	406,780	July
2010	478,230	July
<b>Average MDD</b>	473,758	



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**APPENDIX C**  
**2011 MWSD Consumer**  
**Confidence Report**



# 2010 Consumer Confidence Report

## About Your Water

The Montara Water and Sanitary District is served by groundwater sources from local aquifers and surface water from the Montara Creek. Drinking water treatment technologies used in the water system include conventional coagulation, filtration, ion exchange and disinfection. The Drinking Water Source Assessment for all sources was completed in January 2003 and is on file with the California Department of Public Health (Department or CDPH).

We test the drinking water quality for many constituents as required by State and Federal regulations. This report shows the results of our monitoring for the period of January 1 through December 31, 2010.

## Substances Expected to be in Drinking Water

**The sources of drinking water** (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

### Contaminants that may be present in source water include:

*Microbial contaminants*, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

*Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

*Pesticides and herbicides* that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

*Organic chemical contaminants*, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

*Radioactive contaminants* that can be naturally-occurring or be the result of oil and gas production and mining activities.

**To ensure that tap water is safe to drink**, the U.S. Environmental Protection Agency (USEPA) and CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

## Our Mission Statement

*To sensitively manage the natural resources entrusted to our care, to provide the people of Montara and Moss Beach with reliable, high-quality water, wastewater, and trash disposal services at an equitable price, and to ensure the fiscal and environmental vitality of the district for future generations.*

## Message from the Board President

*Dear Customer,*

*We are pleased to report continued compliance of your local water with all federal and state drinking water regulations, as demonstrated by the Consumer Confidence Report for 2010. This Report summarizes the results of approximately 1,200 analyses conducted on your drinking water in the past year. Since the community acquired the water system in 2003, we have made significant improvements to the water system, which have resulted in water quality improvements in turbidity, iron, nitrates, and color.*

*In addition, the District's system improvements, conservation, and careful management of local water resources have resulted in increased supply reliability and additional water supply availability within the system. Conservation alone accounted for a 21% decrease in demands on the system since 2003, which significantly increased supply reliability within the system. This success speaks to your awareness and diligence regarding water efficiency and conservation, and the MWSD Board applauds these past and continued efforts.*

*For more information on the MWSD system and the quality of your drinking water, you can visit the District's office, the web site at [mwsd.montara.org](http://mwsd.montara.org), or by attending one of our Board meetings. District Staff and Board Members are always available to discuss issues with customers and constituents. Thank you for your continuing support of our efforts to improve your water system.*

*Sincerely,*

Kathryn Slater-Carter  
MWSD Board President



## Important Information about Your Drinking Water

**Copper** was found at levels that exceeded the Regulatory Action Level (AL) of 1.3 ppm in the 2005 residential tap sampling. No exceedance was found in the distribution system. The typical source for copper contamination is internal corrosion of household plumbing systems, erosion of natural deposits or leaching from wood preservatives.

**Nitrate** was detected at one District well at levels above the MCL of 45 ppm. This well is currently kept offline.

Nitrate in drinking water at levels above the MCL is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness;

symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

**Manganese** was found at levels that exceeded the secondary MCL of 50 ppb. Secondary MCLs were set to protect you against unpleasant aesthetic effects such as color, taste, odor, and the staining of plumbing fixtures (e.g., tubs and sinks), and clothing while washing. Exceeding the secondary MCLs poses no health risks. The high manganese levels are most likely due to leaching of natural deposits in the

soil where groundwater is in contact with naturally-occurring sediments.

**Arsenic** was detected at one District well at levels *below* the MCL but above 5 ppm. While this drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

## Terms Used in This Report

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

**Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking

water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants. **Secondary Maximum Contaminant Level (SMCL):** Secondary MCLs are set to protect the odor, taste, and appearance of drinking water. Exceeding the SMCLs poses no health risks.

**Primary Drinking Water Standards (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Secondary Drinking Water Standards (SDWS):** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**Regulatory Action Level (AL):** The concentration of a contaminant which, if

exceeded, triggers treatment or other requirements that a water system must follow.

**Variations and Exemptions:** Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**ND:** not detectable at testing limit

**ppm:** parts per million or milligrams per liter (mg/L)

**ppb:** parts per billion or micrograms per liter (ug/L)

**ppt:** parts per trillion or nanograms per liter (ng/L)

**ppq:** parts per quadrillion or picogram per liter (pg/L)

**pCi/L:** picocuries per liter (a measure of radiation)

**USEPA:** U.S. Environmental Protection Agency

**CDPH:** California Department of Public Health

Tables 1 through 7 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0 (In a mo.)	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	0 (In the year)	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

**TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER**

Lead and Copper	No. of samples collected	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	26 2005 Tap Sampling	6	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
*Copper (ppm)	26 2005 Tap Sampling	1.3	3	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	6/15, 8/18	33.33	18 - 59	none	none	Generally found in ground & surface water
Hardness (ppm)	6/15, 8/18	123.3	55 - 230	none	none	Generally found in ground & surface water

**TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Turbidity (NTU)	6/15, 8/18	1.5	ND - 1.5	TT	none	Soil runoff
Arsenic (ppb)	8/18, 11/30	6.7	6.2 – 7.2	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Fluoride (ppm)	6/15, 8/18	0.52	0.50 - 0.53	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
*Nitrate (ppm)	As Needed	11.09	ND - 48	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	6/15, 8/18	2	ND – 2.0	50	30	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Dibromochloropropane (DBCP) (ppt)	2/15, 6/15	14	ND – 14	200	1.7	Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit
TTHMs (ppb) (Total Trihalomethanes)	Annually	19.75	ND – 28	80	none	By-product of drinking water disinfection
Haloacetic Acids (ppb)	Annually	9.75	4.9 – 18	60	none	Byproduct of drinking water disinfection
Control of DBP precursors (TOC) (ppm)	Monthly	0.71	0.4 – 1.2	TT	none	Various natural and man-made sources

**TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Color	6/15, 8/18	5	ND - 5	15	none	Naturally-occurring organic materials
**Manganese (ppb)	Varies	362.55	ND – 2500	50	none	Leaching from natural deposits
Turbidity (NTU)	6/15, 8/18	1.5	ND – 1.5	5	none	Soil runoff
Total Dissolved Solids (TDS) (ppm)	6/15, 8/18	300	160 – 440	1000	none	Runoff/leaching from natural deposits
Specific Conductance (µS/cm)	6/15, 8/18	510	290 – 730	1600	none	Substances that form ions when in water; seawater influence
Chloride (ppm)	6/15, 8/18	66	40 – 92	500	none	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	6/15, 8/18	54.55	9.1 – 100	500	none	Runoff/leaching from natural deposits; industrial wastes

**TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Notification Level	Health Effects Language
***None				

\*Any exceedance or violation of an MCL, MRDL, or TT is asterisked. Additional information is provided in this report.

\*\*Any exceedance of an SMCL is asterisked. Exceeding the secondary MCLs poses **no** health risks. Additional information is provided in this report.

\*\*\*There was no detection of any State or Federal unregulated contaminants i.e. regulated contaminants with no MCL.



**TABLE 7 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCE**

<i>Treatment Technique</i> <sup>(a)</sup> (Type of approved filtration technology used)	Dual-media pressure filters, coagulation and contact clarifiers
<i>Turbidity Performance Standards</i> <sup>(b)</sup> (that must be met through the water treatment process)	<u>Turbidity of the filtered water must:</u> 1 – Be less than or equal to 0.3 NTU in 95% of measurements in a month. 2 – Not exceed 0.3 NTU for more than eight consecutive hours. 3 – Not exceed 1 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	0.28
Number of violations of any surface water treatment requirements	0

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results that meet performance standards are considered to be in compliance with filtration requirements.

## A Message from the USEPA and the California Department of Public Health

### A Note About Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

### A Note to the Immuno-Compromised

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).



### Montara Water and Sanitary District

P.O. Box 370131  
8888 Cabrillo Highway  
Montara, CA 94037

### MWSD Board of Directors

Kathryn Slater-Carter, President  
Jim Harvey, President pro tem  
Scott Boyd, Secretary  
Bob Ptacek, Treasurer  
Paul Perkovic, Director

### Continuing Our Commitment

The District Board Meetings for public participation are held on the first and third Thursday of each month at 7:30 p.m. at the District Office at 8888 Cabrillo Highway, Montara, CA 94037.

For more information about this report and with any questions related to your public water system, please contact the District at (650) 728-3545.

You may also fax to us at (650) 728-8556, or email to [mwsd@coastside.net](mailto:mwsd@coastside.net), or visit us online at [mwsd.montara.org](http://mwsd.montara.org)





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# MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: **March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager

**SUBJECT: Review and Possible Action Concerning Fiscal  
Year End Budget to Actual Review.**

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With the completion of the District's fiscal year end June 30, 2016 audit, District staff would like to present a comprehensive review of operations as compared to the adopted June 30, 2016 budget. This process will assist District staff with the up-coming budget preparation for fiscal year 2017-2018.

## RECOMMENDATION:

This is for Board information only.

Attachment



# **M MONTARA WATER AND SANITARY DISTRICT AGENDA**

**For Meeting Of: March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

## **SUBJECT: Executive Summary – June 30, 2016 fiscal year-end audit Budget vs. Actual**

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**Sewer Service Charges:** Total revenue of \$2,054,949 collected; \$19,006 above budget.

Budget was set to decrease 6.59% due to un-favorable flow distribution in the prior wet weather period. This 6.59% decrease was expected despite a 3% increase in residential rate from \$39.33 to \$40.51.

**Water Sales:** Total revenue of \$1,737,898 collected; \$58,164 above budget.

2015-2016 Water Rates were increased by 3% for all standard 5/8' connections across all 4 tiers.

**Sewer Fees:** Total revenue of \$13,471 collected; \$5,529 below budget.

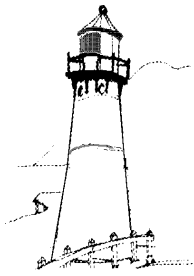
**Water Fees:** Total revenue of \$58,621 collected; \$48,171 above budget.

Sewer fees failed to meet projections. For the water system, mainline extension fees was the main reason for the over budget total, collection \$46K in fee revenue.

**Sewer Property Tax:** Total revenue of \$325,926 collected; \$95,926 above budget.

**Water Property Tax:** Total revenue of \$325,926 collected; \$95,926 above budget.

The District collected \$191K in ERAF revenues, which was split 50/50 between Sewer and Water. The District does not budget for the receipt of ERAF revenues, due to the fact we are not made aware of the revenues during the budget process. Without the receipt of ERAF, the District would have collected exactly \$230K in property tax revenues, meeting budget projections.



# **M MONTARA WATER AND SANITARY DISTRICT AGENDA**

**For Meeting Of: March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

**Sewer Personnel expense:** Total expense of \$288,107 incurred; \$23,559 below budget

**Water Personnel expenses:** Total expense of \$766,087 incurred; \$115,128 below budget

The main reason for the below budget figures is due to the GASB 68 & 71 adjustments which reclassified District PARS contributions to deferred assets. The amounts for sewer and water enterprises were \$13,495 and \$26,821 respectively.

**Sewer Professional Services:** Total expense of \$115,087 incurred; \$25,537 above budget.

**Water Professional Services:** Total expense of \$161,879 incurred; \$24,529 above budget.

Increases due to rising costs associated with accounting, auditing, data services, and consulting expenses.

**Sewer Engineering:** Total expense of \$31,924 incurred; \$20,076 below budget.

**Water Engineering:** Total expense of \$98,270 incurred; \$31,270 above budget.

Sewer general engineering expenses were mainly attributed to capital improvement projects.

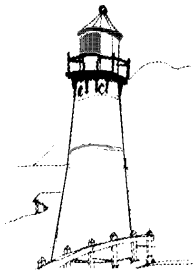
Water quality engineering expenses were more than double the budget in response to Pillar Ridge Water Treatment plant. The District and its engineers were also responsible for increased documentation to the State regarding updated regulations.

**Sewer Pumping:** Total expense of \$28,979 incurred; \$1,979 above budget.

**Water Pumping:** Total expense of \$102,493 incurred \$19,993 above budget.

Water fund budget over-runs are due to the increased PG&E costs to pump at the District's water sites.





# **M MONTARA WATER AND SANITARY DISTRICT AGENDA**

**For Meeting Of: March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

**Sewer Authority Mid-Coastside**: Total expense of \$1,068,396 incurred; \$89,996 below budget

Collections, Maintenance, and Capital assessments were all budgeted to the penny. The reason for the below budget is for items that are unknown during the budget process which include account number's 6940 and 6950 which is maintenance of the pumping and collection systems. The District is responsible for various costs of maintaining sewer lines and lift stations which SAM performs.

**Water Supply**: Total expense of \$61,144 incurred; \$16,144 above budget.

Unexpected costs incurred due to the required maintenance of District wells.

**Water Collection/Transmission**: Total expense of \$121,811; \$27,311 above budget.

Three accounts had budget overruns and all were due to the maintenance of Water Mains, Service Lines, and Tanks. All of these expenses did not meet the District's policy for capitalization.

**Water Treatment**: Total expense of \$81,752 incurred; \$22,752 above budget.

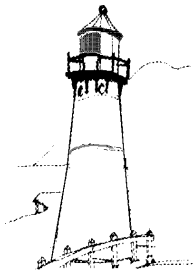
Costs associated with the purchase of chemicals and equipment as well as the analysis of water samples by BSK lab, CA laboratory services, as well as North Coast County Water District.

**All other Accounts Sewer**: Total expense of \$18,135 incurred; \$30,966 below budget.

**All other Accounts Water**: Total expense of \$123,825 incurred; \$3,275 below budget.

The Sewer enterprise benefitted greatly from the fact that the claims budget of \$10,000 which is also the District's deductible saw minimal activity. In addition, the District's collection system maintenance performed by District employees saw minimal activity.

The water enterprise accounts which were the main cause of the \$39,600 below budget were as follows:



# **M MONTARA WATER AND SANITARY DISTRICT AGENDA**

**For Meeting Of: March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

Equipment and tools \$2K below budget – multiple purchases, however, no items of significance.

Claims \$10K below budget – No activity

**Sewer Capital Improvement**: Total capitalized expense \$243,667; \$441,816 below budget.

\$147,350 was related to the Sewer Improvement program.

Major projects include road improvements at Del Mar, Madrone, and San Ramon in Seal Cove. In addition, a large project was undertaken at Cedar and George Street for a sewer replacement project.

The District also paid SAM \$96K for Lift Station Repairs.

**Water Capital Improvement**: Total capitalized expense \$1,588,836; \$140,164 below budget.

The Alta Vista Tank project makes up the lion's share of the total cost of capitalized expenditures with the majority of these costs going toward the payment of the District's general contractor, Western Water Constructors. Additional costs include Pillar Ridge, Portola Well, and other minor projects.

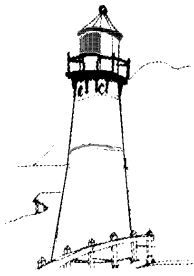
**Sewer Connection Fees**: Total revenue of \$100,597 collected; \$225,008 below budget.

A total of 2 new construction connections sold.

A total of 6 remodel connections sold.

**Water Connection Fees**: Total revenue of \$139,419 collected; \$17,582 below budget.

A total of 5 new construction connection fees sold.



**M**

# **MONTARA WATER AND SANITARY DISTRICT AGENDA**

**For Meeting Of: March 16, 2017**

**TO: BOARD OF DIRECTORS**

**FROM: Clemens H. Heldmaier, General Manager**

A total of 9 new construction PFP connection's sold.



# Montara Water & Sanitary

## Budgeted Cash Flow - Sewer

### Fiscal year 2015-2016

#### Operating Cash Flow

Operating income	<u>Actual</u>	<u>Budget</u>	<u>Variance</u>
Sewer Service Charges	\$ 2,054,949	\$ 2,035,943	\$ 19,006
Cell Tower Lease	\$ 33,500	\$ 32,000	\$ 1,500
Fees & Other	\$ 13,471	\$ 19,000	\$ (5,529)
Property Tax	\$ 325,926	\$ 230,000	\$ 95,926
Waste Collection Revenues	\$ 19,350	\$ 15,000	\$ 4,350
<b>Total operating income</b>	<b>\$ 2,447,196</b>	<b>\$ 2,331,943</b>	<b>\$ 115,253</b>
<b>Operating expenses</b>			
Personnel	\$ (288,107)	\$ (311,666)	\$ (23,559)
Professional Services	\$ (115,087)	\$ (89,550)	\$ 25,537
Facilities & Administration	\$ (44,472)	\$ (36,400)	\$ 8,072
Engineering	\$ (31,924)	\$ (52,000)	\$ (20,076)
Pumping	\$ (28,979)	\$ (27,000)	\$ 1,979
Sewer Authority Mid-Coastside	\$ (1,068,396)	\$ (1,158,392)	\$ (89,996)
All other Accounts	\$ (18,135)	\$ (49,101)	\$ (30,966)
<b>Total operating expenses</b>	<b>\$ (1,595,101)</b>	<b>\$ (1,724,109)</b>	<b>\$ (129,008)</b>
<b>Net Cash Flow Provided by Operations</b>	<b>\$ 852,095</b>	<b>\$ 607,834</b>	

#### Investment cash flow

<b>Investment income</b>			
Interest Revenue	\$ 19,079	\$ 11,281	\$ 7,798
<b>Total investment income</b>	<b>\$ 19,079</b>	<b>\$ 11,281</b>	<b>\$ 7,798</b>
<b>Investment expenses</b>			
Capital Improvement Program	\$ (243,667)	\$ (685,483)	\$ (441,816)
SAM Capital Assessment	\$ (160,668)	\$ (160,666)	\$ 2
<b>Total investment expenses</b>	<b>\$ (404,335)</b>	<b>\$ (846,149)</b>	<b>\$ (441,814)</b>
<b>Net Cash Flow Used by Investments</b>	<b>\$ (385,256)</b>	<b>\$ (834,868)</b>	

#### Financing cash flow

<b>Financing income</b>			
Connection Fees	\$ 100,597	\$ 325,604	\$ (225,008)
Employee Loan Program - Principal Received	\$ 19,904	\$ 20,692	\$ (788)
<b>Total financing income</b>	<b>\$ 120,501</b>	<b>\$ 346,296</b>	<b>\$ (225,796)</b>
<b>Financing expenses</b>			
Loan Interest Expense	\$ (49,027)	\$ (46,812)	\$ 2,215
Loan Principal Payment	\$ (65,027)	\$ (65,025)	\$ 2
<b>Total financing expenses</b>	<b>\$ (114,054)</b>	<b>\$ (111,837)</b>	<b>\$ 2,217</b>
<b>Net Cash Flow Provided by Financing Activities</b>	<b>\$ 6,446</b>	<b>\$ 234,459</b>	
<b>Total Cash Flow Provided by All Activities</b>	<b>\$ 473,286</b>	<b>\$ 7,425</b>	



# Montara Water & Sanitary

## Budgeted Cash Flow - Water

### Fiscal year 2015-2016

#### Operating Cash Flow

Operating income	Actual	Budget	Variance
Water Sales	\$ 1,737,898	\$ 1,679,734	\$ 58,164
Cell Tower Lease	\$ 33,500	\$ 32,000	\$ 1,500
Fees	\$ 58,621	\$ 10,450	\$ 48,171
Property Tax	\$ 325,926	\$ 230,000	\$ 95,926
Backflow Testing & Other	\$ 25,170	\$ 13,000	\$ 12,170
<b>Total operating income</b>	<b>\$ 2,181,114</b>	<b>\$ 1,965,184</b>	<b>\$ 215,930</b>
Operating expenses			
Personnel	\$ (654,291)	\$ (769,419)	\$ (115,128)
Professional Services	\$ (161,879)	\$ (137,350)	\$ 24,529
Facilities & Administration	\$ (52,788)	\$ (39,005)	\$ 13,783
Engineering	\$ (98,270)	\$ (67,000)	\$ 31,270
Pumping	\$ (102,493)	\$ (82,500)	\$ 19,993
Supply	\$ (61,144)	\$ (45,000)	\$ 16,144
Collection/Transmission	\$ (121,811)	\$ (94,500)	\$ 27,311
Treatment	\$ (81,752)	\$ (59,000)	\$ 22,752
All Other Accounts	\$ (123,825)	\$ (127,100)	\$ (3,275)
<b>Total operating expenses</b>	<b>\$ (1,458,253)</b>	<b>\$ (1,420,874)</b>	<b>\$ 37,379</b>
<b>Net Cash Flow Provided by Operations</b>	<b>\$ 722,861</b>	<b>\$ 544,310</b>	

#### Investment cash flow

Investment income			
GO Bonds, Assessment Receipts	\$ 1,215,941	\$ 1,150,436	\$ 65,505
<b>Total investment income</b>	<b>\$ 1,215,941</b>	<b>\$ 1,150,436</b>	<b>\$ 65,505</b>
Investment expenses			
Capital Improvement Program	\$ (1,588,836)	\$ (1,729,000)	\$ (140,164)
<b>Total investment expenses</b>	<b>\$ (1,588,836)</b>	<b>\$ (1,729,000)</b>	<b>\$ (140,164)</b>
<b>Net Cash Flow Used by Investments</b>	<b>\$ (372,895)</b>	<b>\$ (578,564)</b>	

#### Financing cash flow

Financing income			
Connection Fees	\$ 139,419	\$ 157,000	\$ (17,582)
SRF Loan 022	\$ 2,451,510	\$ 1,200,000	\$ 1,251,510
<b>Total financing income</b>	<b>\$ 2,590,929</b>	<b>\$ 1,357,000</b>	<b>\$ 1,233,929</b>
Financing expenses			
Long Term Debt - Interest Expense	\$ (394,634)	\$ (336,136)	\$ 58,498
Long Term Debt - Principal Payment	\$ (1,092,273)	\$ (873,575)	\$ 218,698
<b>Total financing expenses</b>	<b>\$ (1,486,907)</b>	<b>\$ (1,209,711)</b>	<b>\$ 277,196</b>
<b>Net Cash Flow Provided by Financing Activities</b>	<b>\$ 1,104,021</b>	<b>\$ 147,289</b>	
<b>Total Cash Flow Provided by All Activities</b>	<b>\$ 1,453,987</b>	<b>\$ 113,035</b>	

## Sewer Comparison - Actuals

### Revenue By Grouping - Sewer Enterprise

<u>Grouped Categories</u>	<u>Actual FY 2014-15</u>	<u>FY 2015-16 Budgeted Revenues</u>	<u>FY 2016 - 16 Actual</u>	<u>Positive/ (Negative)</u>
Sewer Service Charges	\$ 2,196,468	\$ 2,035,943	\$ 2,054,949	\$ 19,006
Cell Tower Lease	32,422	32,000	33,500	1,500
Fees & Other	31,587	19,000	13,471	(5,529)
Property Tax	214,220	230,000	325,926	95,926
Waste Collection Revenues	17,844	15,000	19,350	4,350
Total	\$ 2,492,541	\$ 2,331,943	\$ 2,447,196	\$ 115,253

### Sewer Expenditures by Grouping

#### General Operating Budget - Cost Center Roll-up

<u>Grouped Categories</u>	<u>Actual FY 2014-15</u>	<u>FY 2015-16 Budgeted Expenditures</u>	<u>FY 2015 - 16 Actual</u>	<u>Positive/ (Negative)</u>
Personnel	\$ 242,991	\$ 311,665	\$ 288,107	\$ 23,558
Professional Services	80,498	89,550	115,087	(25,537)
Facilities & Administration	35,449	36,400	44,472	(8,072)
Engineering	61,309	52,000	31,924	20,076
Pumping	26,888	27,000	28,979	(1,979)
Sewer Authority Mid-Coastside	954,339	1,158,392	1,068,396	89,996
Depreciation	468,119		508,067	(508,067)
All other Accounts	23,800	49,102	18,135	30,967
Total	\$ 1,893,393	\$ 1,724,109	\$ 2,103,168	\$ (379,059)



**Sewer Non Operating Revenues and Expenses**

<b><u>Grouped Categories</u></b>	<b><u>Actual FY 2014-15</u></b>	<b><u>FY 2015-16 Budgeted Expenditures</u></b>	<b><u>FY 2015 - 16 Actual</u></b>	<b><u>Positive/ (Negative)</u></b>
<b>Revenue</b>				
Connection Fees	\$ 166,355	\$ 325,604	\$ 100,597	\$ (225,008)
Employee Loans	4,070	3,281	895	(2,386)
LAIF interest	11,938	8,000	18,184	10,184
Total	\$ 182,363	\$ 336,885	\$ 119,676	\$ (217,209)
<b>Expense</b>				
PNC equipment Lease - Interest	\$ 21,819	\$ 20,790	\$ 20,743	\$ 47
I-Bank Loan - Interest	26,493	26,022	28,284	(2,262)
SAM Capital Assessment	63,360	160,666	160,668	(2)
Total	\$ 111,672	\$ 207,478	\$ 209,695	\$ (2,217)
<b><u>Capital Improvement</u></b>				
Sewer Capital Improvement Program	\$ 998,696	\$ 685,483	\$ 243,667	\$ 441,816

## Water Comparison - Actuals

### Revenue By Grouping - Water Enterprise

<u>Grouped Categories</u>	<u>Actual FY 2014-15</u>	<u>FY 2015-16</u> <u>Budgeted Revenues</u>	<u>FY 2016 - 16</u> <u>Actual</u>	<u>Positive/</u> <u>(Negative)</u>
Water Sales	\$ 1,666,975	\$ 1,679,734	\$ 1,737,898	\$ 58,164
Cell Tower Lease	32,422	32,000	33,500	1,500
Fees	22,428	10,450	58,621	48,171
Property Tax	424,451	230,000	325,926	95,926
Backflow Testing & Other	12,444	13,000	25,170	12,170
<b>Total</b>	<b>\$ 2,158,720</b>	<b>\$ 1,965,184</b>	<b>\$ 2,181,114</b>	<b>\$ 215,930</b>

### Water Expenditures by Grouping

#### General Operating Budget - Cost Center Roll-up

<u>Grouped Categories</u>	<u>Actual FY 2014-15</u>	<u>FY 2015-16</u> <u>Budgeted</u> <u>Expenditures</u>	<u>FY 2015 - 16</u> <u>Actual</u>	<u>Positive/</u> <u>(Negative)</u>
Personnel	\$ 587,358	\$ 769,420	\$ 654,291	\$ 115,129
Professional Services	184,344	137,350	161,879	(24,529)
Facilities & Administration	47,113	39,005	52,788	(13,783)
Engineering	80,781	67,000	98,270	(31,270)
Pumping	86,378	82,500	102,493	(19,993)
Supply	40,296	45,000	61,144	(16,144)
Collection/Transmission	101,585	94,500	121,811	(27,311)
Treatment	52,593	59,000	81,752	(22,752)
Depreciation & Amortization	835,206		910,397	(910,397)
All other Accounts	107,900	127,100	123,825	3,275
<b>Total</b>	<b>\$ 2,123,554</b>	<b>\$ 1,420,875</b>	<b>\$ 2,368,650</b>	<b>\$ (947,775)</b>

**Water Non Operating Revenues and Expenses**

<b><u>Grouped Categories</u></b>	<b><u>Actual FY 2014-15</u></b>	<b><u>FY 2015-16 Budgeted Expenditures</u></b>	<b><u>FY 2015 - 16 Actual</u></b>	<b><u>Positive/ (Negative)</u></b>
<b>Revenue</b>				
Connection Fees	\$ 172,493	\$ 157,000	\$ 139,419	\$ (17,582)
GO Bond - Assessment Receipts	1,265,893	1,150,436	1,215,941	65,505
Total	\$ 1,438,386	\$ 1,307,436	\$ 1,355,359	\$ 47,923
<b>Expense</b>				
PNC equipment Lease - Interest	\$ 21,819	\$ 20,790	\$ 20,743	\$ 47
GO Bonds - Interest	327,105	315,346	307,634	7,712
SRF - Interest	7,469	0	60,239	(60,239)
Conservation Program/Rebates			6,018	(6,018)
Total	\$ 356,393	\$ 336,136	\$ 394,634	\$ (58,498)
<b><u>Capital Improvement</u></b>				
Water Capital Improvement Program	\$ 2,316,163	\$ 1,729,000	\$ 1,588,836	\$ 140,164

Two-Year Comparative Income Statement

**Sewer Comparison - Actuals**  
6/30/2015 vs. 6/30/2016

	[Current Period]	[Prior Period]	Increase / (Decrease)	Percent Change
	July 1, 2015 - June 30, 2016	July 1, 2014 - June 30, 2015		
<b>Revenue</b>				
Sewer Service Charges	2,054,949	2,196,468	(141,519)	-6.44%
Cell Tower Lease	33,500	32,422	1,078	3.32%
Fees & Other	13,471	31,587	(18,116)	-57.35%
Property Tax	325,926	214,220	111,706	52.15%
Waste Collection Revenues	19,350	17,844	1,506	8.44%
<b>Net Sales</b>	<b>2,447,196</b>	<b>2,492,541</b>	<b>(45,345)</b>	<b>-1.82%</b>
<b>Expenses</b>				
Personnel	288,107	242,991	45,116	18.57%
Professional Services	115,087	80,498	34,589	42.97%
Facilities & Administration	44,472	35,449	9,023	25.45%
Engineering	31,924	61,309	(29,385)	-47.93%
Pumping	28,979	26,888	2,091	7.78%
Sewer Authority Mid-Coastside	1,068,396	954,339	114,057	11.95%
Depreciation	508,067	468,119	39,948	8.53%
All other Accounts	18,135	23,800	(5,665)	-23.80%
<b>Total Expenses</b>	<b>2,103,168</b>	<b>1,893,393</b>	<b>209,775</b>	<b>11.08%</b>
<b>Net Operating Income</b>	<b>344,028</b>	<b>599,148</b>	<b>(255,120)</b>	<b>-42.58%</b>
<b>Non-Operating</b>				
Connection Fees - Revenue	100,597	166,355	(65,759)	-39.53%
Employee Loans - Revenue	895	4,070	(3,175)	-78.00%
LAIF interest - Revenue	18,184	11,938	6,246	52.32%
PNC equipment lease - Expense	(20,743)	(21,819)	1,076	-4.93%
I-Bank Loan - Expense	(28,284)	(26,493)	(1,791)	6.76%
Sam Capital Assessment - Expense	(160,668)	(63,360)	(97,308)	153.58%
<b>Total Other Income (Expense)</b>	<b>(90,019)</b>	<b>70,691</b>	<b>(160,710)</b>	<b>-227.34%</b>

Two-Year Comparative Income Statement

**Water Comparison - Actuals**  
6/30/2015 vs. 6/30/2016

	[Current Period]	[Prior Period]	Increase / (Decrease)	Percent Change
	July 1, 2015 - June 30, 2016	July 1, 2014 - June 30, 2015		
<b>Revenue</b>				
Water Sales	1,737,898	1,666,975	70,923	4.25%
Cell Tower Lease	33,500	32,422	1,078	3.32%
Fees	58,621	22,428	36,193	161.37%
Property Tax	325,926	424,451	(98,525)	-23.21%
Backflow Testing & Other	25,170	12,444	12,726	102.27%
<b>Net Sales</b>	<b>2,181,114</b>	<b>2,158,720</b>	<b>22,394</b>	<b>1.04%</b>
<b>Expenses</b>				
Personnel	654,291	587,358	66,933	11.40%
Professional Services	161,879	184,344	(22,465)	-12.19%
Facilities & Administration	52,788	47,113	5,675	12.05%
Engineering	98,270	80,781	17,489	21.65%
Pumping	102,493	86,378	16,115	18.66%
Supply	61,144	40,296	20,848	51.74%
Collection/Transmission	121,811	101,585	20,226	19.91%
Treatment	81,752	52,593	29,159	55.44%
Depreciation	910,397	835,206	75,191	9.00%
All other Accounts	123,825	107,900	15,925	14.76%
<b>Total Expenses</b>	<b>2,368,650</b>	<b>2,123,554</b>	<b>245,096</b>	<b>11.54%</b>
<b>Net Operating Income</b>	<b>(187,536)</b>	<b>35,166</b>	<b>(222,702)</b>	<b>-633.29%</b>
<b>Non-Operating</b>				
Connection Fees - Revenue	139,419	172,493	(33,075)	-19.17%
GO Bonds Assessment - Revenue	1,215,941	1,265,893	(49,952)	-3.95%
PNC equipment lease - Expense	(20,743)	(21,819)	1,076	-4.93%
GO Bonds Interest - Expense	(307,634)	(327,105)	19,471	-5.95%
SRF Interest - Expense	(60,239)	(7,469)	(52,770)	706.52%
Conservation Program - Expense	(6,018)		(6,018)	
<b>Total Other Income (Expense)</b>	<b>960,725</b>	<b>1,081,993</b>	<b>(121,268)</b>	<b>-11.21%</b>



## MWSD – Fiscal Year 2015-2016 budget actual - SEWER ENTERPRISE

<u>Operating Revenue</u>	<u>GL Codes</u>	<u>2013-14 Actual</u>	<u>2014-15 Actual</u>	<u>Approved Budget 2015-16</u>	<u>2015-16 Actual</u>	<u>Positive/ (Negative)</u>
Cell Tower Lease:	4220	32,270	32,422	32,000	33,500	1,500
Administrative Fees (New Construction):	4410	1,800	1,852	2,500	3,318	818
Administrative Fees (Remodel):	4420	2,250	3,241	3,000	1,422	(1,578)
Inspection Fees (New Construction):	4430	1,700	1,748	2,000	3,136	1,136
Inspection Fees (Remodel):	4440	5,060	4,969	4,500	3,219	(1,281)
Remodel Fees:	4460	3,667	19,777	7,000	2,222	(4,778)
Property Tax Receipts:	4610	301,852	214,220	230,000	325,926	95,926
Sewer Service Charges:	4710	2,018,016	2,203,383	2,039,943	2,063,335	23,392
Sewer Service Refunds, Customer:	4720	(344)	(6,915)	(4,000)	(8,386)	(4,386)
Waste Collection Revenues:	4760	13,191	17,844	15,000	19,350	4,350
Other Revenue:	4990				154	154
<b>Total Operating Revenue:</b>		<b>2,379,462</b>	<b>2,492,541</b>	<b>2,331,943</b>	<b>2,447,196</b>	<b>115,253</b>
<b>Operating Expenses</b>						
Bank Fees:	5190	4,022	6,709	4,000	3,363	637
Board Meetings:	5210	2,586	4,850	2,500	3,282	(782)
Director Fees:	5220	3,788	1,269	3,300	2,363	938
Election Expenses:	5230	3,897				
Conference Attendance:	5250	397		2,000		2,000
Information Systems:	5270	2,786	3,069	6,000	3,888	2,112
Fidelity Bond:	5310		438			
Property & Liability Insurance:	5320	1,583	1,667	1,755	1,688	67
LAFCO Assessment:	5350	1,548	1,754	1,987	1,718	269
Meeting Attendance, Legal:	5420	11,350	6,770	9,500	7,139	2,362
General Legal:	5430	18,077	9,375	15,000	31,865	(16,865)
Litigation:	5440					
Maintenance, Office:	5510	4,283	5,337	6,000	7,619	(1,619)
Meetings, Local:	5520	189				
Office Supplies:	5540	6,872	9,319	9,000	7,366	1,634
Postage:	5550	2,366	1,214	2,000	2,668	(668)
Printing & Publishing:	5560	1,538	2,786	3,000	3,478	(478)
Accounting:	5610	35,955	24,483	30,000	38,555	(8,555)
Audit:	5620	12,050	10,050	13,000	12,050	950
Consulting:	5630	2,962	18,979	13,000	16,886	(3,886)
Data Services:	5640	5,533	5,792	6,000	5,504	496
Labor & HR Support:	5650		4,286	2,250	1,875	375
Payroll Services:	5660	279	753	800	839	(39)
Other Professional Services:	5690	30	10		375	(375)





## MWSD — Fiscal Year 2015-2016 budget actual - SEWER ENTERPRISE

<u>Operating Revenue</u>	<u>GL Codes</u>	<u>2013-14 Actual</u>	<u>2014-15 Actual</u>	<u>Approved Budget 2015-16</u>	<u>2015-16 Actual</u>	<u>Positive/ (Negative)</u>
San Mateo County Tax Roll Charges:	5710	2,453		2,500	116	2,385
Telephone & Internet:	5720	10,557	9,812	9,000	13,742	(4,742)
Mileage Reimbursement:	5730	1,426	1,137	1,500	682	818
Reference Materials:	5740			200		200
Other Administrative:	5790	143				
CalPERS 457 Deferred Plan:	5810	11,993	13,303	13,709	13,954	(245)
Employee Benefits:	5820	38,540	34,993	36,497	47,890	(11,393)
Disability Benefits:	5830	1,177	1,206	1,450	1,397	53
Payroll Taxes:	5840	13,276	12,920	14,983	14,577	406
Worker's Compensation Insurance:	5960	6,322	2,558	3,891	491	3,400
Management:	5910	78,465	71,501	86,041	92,434	(6,393)
Staff :	5920	95,376	100,302	103,090	112,648	(9,558)
Staff Certification:	5930	1,800	1,800	1,854	1,800	54
Staff Overtime:	5940	3,225	3,480	3,718	2,888	830
Staff Standby:	5950	830	928	1,147	29	1,118
District sponsored Defined Benefit Plan:				45,285		45,285
Claims, Property Damage:	6170	9,944	2,139	10,000		10,000
Education & Training:	6195			1,000		1,000
Meeting Attendance, Engineering:	6210			2,000		2,000
General Engineering:	6220	47,743	61,309	50,000	31,924	18,076
Equipment & Tools, Expensed:	6320			1,000		1,000
Alarm Services:	6335	5,431	4,701	5,000	5,896	(896)
Landscaping:	6337	2,280	2,280	2,400	3,702	(1,302)
Pumping Fuel & Electricity:	6410	27,293	26,888	27,000	25,454	1,546
Pumping Maintenance, General:					3,525	(3,525)
Maintenance, Collection System:	6660			10,000		10,000
Fuel:	6810		511	800	792	8
Truck Equipment, Expensed:	6820		87	160	89	71
Truck Repairs:	6830		51	400	153	247
Total Other Operations:	6890		119			
SAM Collections:	6910	332,868	305,856	360,500	360,504	(4)
SAM Operations:	6920	657,192	624,024	707,892	707,892	
SAM Prior-Year Adjustment:	6930		(3,190)			
SAM Maintenance, Collection System:	6940	15,550	27,649	40,000		40,000
SAM Maintenance, Pumping:	6950	46,632		50,000		50,000
Depreciation:	5260		468,119		508,067	(508,067)
<b>Total Operations Expense:</b>		<b>1,532,607</b>	<b>1,893,393</b>	<b>1,724,109</b>	<b>2,103,168</b>	<b>(379,059)</b>



## MWSD — Fiscal Year 2015-2016 budget actual - SEWER ENTERPRISE

<u>Operating Revenue</u>	<u>GL Codes</u>	<u>2013-14 Actual</u>	<u>2014-15 Actual</u>	<u>Approved Budget 2015-16</u>	<u>2015-16 Actual</u>	<u>Positive/ (Negative)</u>
<b>Net Change in position from Operations:</b>		<b>846,855</b>	<b>599,148</b>	<b>607,834</b>	<b>344,028</b>	<b>494,312</b>
<b><u>Non Operating Revenue / Expense</u></b>						
Connection Fees, Residential New Const:	7110		142,923	275,604	53,363	(222,241)
Connection Fees, Residential Remodel:	7120	66,970	23,432	50,000	47,234	(2,767)
Connection Fees - Other:	7100					
Employee Loans:	7700	8,995	4,070	3,281	895	(2,386)
LAIF, Interest:	7200	4,828	11,938	8,000	18,184	10,184
<b>Total Non Operating Revenue:</b>		<b>80,793</b>	<b>182,363</b>	<b>336,885</b>	<b>119,676</b>	<b>(217,209)</b>
<b><u>Financing Expense</u></b>						
PNC Equipment Lease:	9125	23,747	21,819	20,790	20,743	47
Capital Assessment, SAM:	9175		63,360	160,666	160,668	(2)
I-Bank Loan:	9200	38,933	26,493	26,022	28,284	(2,262)
<b>Total Financing Expense:</b>		<b>62,680</b>	<b>111,672</b>	<b>207,478</b>	<b>209,695</b>	<b>(2,217)</b>



## MWSD — Fiscal Year 2015-2016 budget actual - WATER ENTERPRISE

<u>Operating Revenue</u>	<u>GL Codes</u>	<u>2013-14</u>		<u>Approved Budget</u>		<u>2015-16 Actual</u>	<u>Positive/ (Negative)</u>
		<u>Actual</u>	<u>2014-15 Actual</u>	<u>2015-16</u>			
Cell Tower Lease:	4220	32,270	32,422	32,000		33,500	1,500
Administrative Fees (New Construction):	4410	4,050	5,067	4,500		6,349	1,849
Administrative Fees (Remodel):	4420	450	985	900		0	(900)
Inspection Fees (New Construction):	4430	3,825	4,833	4,250		5,813	1,563
Inspection Fees (Remodel):	4440	425	929	800		0	(800)
Mainline Extension Fees:	4450		10,290			46,459	46,459
Remodel Fees:	4460		324				0
Property Tax Receipts:	4610	301,852	424,451	230,000		325,926	95,926
Testing, Backflow:	4740	14,001	9,589	13,000		16,377	3,377
Water Sales:	4810	1,614,283	1,667,370	1,682,734		1,739,386	56,652
Water Sales Refunds, Customer:	4850	(1,855)	(395)	(3,000)		(1,488)	1,512
Other Revenue:	4990	2,501	2,855			8,793	8,793
<b>Total Operating Revenue:</b>		<b>1,971,802</b>	<b>2,158,720</b>	<b>1,965,184</b>		<b>2,181,114</b>	<b>215,930</b>
<b><u>Operating Expenses</u></b>							
Bank Fees:	5190	5,864	5,874	9,000		6,907	2,093
Board Meetings:	5210	2,586	2,931	2,500		3,282	(782)
Director Fees:	5220	3,788	3,188	3,300		2,363	938
Election Expenses:	5230	3,897					0
CDPH Fees:	5240	7,191	14,535	15,000		18,086	(3,086)
Conference Attendance:	5250	1,852	3,442	4,000		5,267	(1,267)
Information Systems:	5270	2,786	3,069	3,200		3,888	(688)
Fidelity Bond:	5310		438				0
Property & Liability Insurance:	5320	1,583	1,667	1,755		1,688	67
LAFCO Assessment:	5350	2,026	2,376	2,800		2,328	472
Meeting Attendance, Legal:	5420	9,955	6,768	8,500		7,700	801
General Legal:	5430	60,840	58,623	60,000		43,625	16,376
Litigation:	5440						0
Maintenance, Office:	5510	4,333	5,337	6,000		8,122	(2,122)
Meetings, Local:	5520	189	298				0
Memberships:	5530	18,050	16,945	18,000		17,225	775
Office Supplies:	5540	6,872	9,319	9,000		7,366	1,634
Postage:	5550	5,876	9,909	6,000		7,578	(1,578)
Printing & Publishing:	5560	1,538	2,681	2,000		1,650	350
Accounting:	5610	35,955	24,483	30,000		38,555	(8,555)



## MWSD — Fiscal Year 2015-2016 budget actual - WATER ENTERPRISE

<u>Operating Revenue</u>	<u>GL Codes</u>	<u>2013-14</u>		<u>Approved Budget</u>		<u>2015-16 Actual</u>	<u>Positive/ (Negative)</u>
		<u>Actual</u>	<u>2014-15 Actual</u>	<u>2015-16</u>			
Audit:	5620	12,050	10,050	13,000		20,950	(7,950)
Consulting:	5630	16,055	50,273	25,000		28,560	(3,560)
Data Services:	5640	2,410	9,044			18,773	(18,773)
Labor & HR Support:	5650	9,750	4,661			2,651	(2,651)
Payroll Services:	5660	471	1,017	850		839	11
Other Professional Services:	5690	30	19,425			227	(227)
San Mateo Co. Tax Roll Charges:	5710					122	(122)
Telephone & Internet:	5720	7,050	13,491	9,000		19,391	(10,391)
Mileage Reimbursement:	5730	1,592	2,326	2,000		2,157	(157)
Reference Materials:	5740			800		0	800
Other Administrative:	5790	1,340	248			127	(127)
CalPERS 457 Deferred Plan:	5810	27,351	29,503	35,154		31,571	3,583
Employee Benefits:	5820	68,114	55,586	61,277		75,196	(13,919)
Disability Benefits:	5830	2,371	2,605	3,549		3,329	220
Payroll Taxes:	5840	31,704	32,426	38,419		36,932	1,487
Worker's Compensation Insurance:	5960	23,902	12,461	17,019		4,788	12,231



## MWSD — Fiscal Year 2015-2016 budget actual - WATER ENTERPRISE

Operating Revenue	GL Codes	2013-14		Approved Budget		2015-16 Actual	Positive/ (Negative)
		Actual	2014-15 Actual	2015-16			
Management:	5910	80,855	93,691	86,041	92,434	(6,393)	
Staff :	5920	280,425	286,814	338,785	329,764	9,021	
Staff Certification:	5930	8,815	9,000	9,167	9,440	(273)	
Staff Overtime:	5940	29,202	47,530	49,918	48,214	1,704	
Staff Standby:	5950	10,739	17,742	18,295	22,621	(4,326)	
District sponsored Defined Benefit Plan:				111,796		111,796	
Backflow Prevention:	6160	3,635	4,682	4,000	800	3,200	
Claims, Property Damage:	6170			10,000	0	10,000	
SCADA Maintenance:	6185	395	11,177	15,000	28,817	(13,817)	
Internet & Telephone, Communications:	6187	1,693				0	
Education & Training:	6195	7,422	4,278	6,000	2,574	3,426	
Meeting Attendance, Engineering:	6210	1,716		2,000	0	2,000	
General Engineering:	6220	30,145	3,780	30,000	15,406	14,594	
Water Quality Engineering:	6230	25,653	77,001	35,000	82,864	(47,864)	
Equipment & Tools, Expensed:	6320	6,527	5,186	6,000	4,008	1,992	
Alarm Services:	6335	758	715	750	640	110	
Landscaping:	6337	3,600	3,746	4,500	6,226	(1,726)	
Lab Supplies & Equipment:	6370	842	39	1,000	818	182	
Meter Reading:	6380	5,787				0	
Pumping Fuel & Electricity:	6410	55,704	72,500	65,000	89,652	(24,652)	
Pumping Maintenance, Generators:	6420	8,624	9,581	13,000	4,771	8,229	
Pumping Maintenance, General:	6430		4,297	2,500	6,284	(3,784)	
Pumping Equipment, Expensed:	6440	3,386		2,000	1,786	214	
Maintenance, Raw Water Mains:	6510	1,164			2,478	(2,478)	
Maintenance, Wells:	6520	5,295	4,853	5,000	20,657	(15,657)	
Water Purchases:	6530	25,949	35,443	40,000	38,009	1,991	
Hydrants:	6610	438		1,000	0	1,000	
Maintenance, Water Mains:	6620	51,771	68,976	55,000	71,575	(16,575)	
Maintenance, Water Service Lines:	6630	12,582	16,458	25,000	33,705	(8,705)	
Maintenance, Tanks:	6640	769	690	1,000	8,741	(7,741)	
Maintenance, Distribution General:	6650	12,114	10,656	10,000	2,406	7,594	
Meters:	6670		4,805	2,500	5,382	(2,882)	
Chemicals & Filtering:	6710	7,013	27,289	30,000	40,896	(10,896)	
Maintenance, Treatment Equipment:	6720	5,640	2,949	4,000	11,965	(7,965)	
Treatment Analysis:	6730	20,628	22,355	25,000	28,890	(3,890)	



## MWSD — Fiscal Year 2015-2016 budget actual - WATER ENTERPRISE

<u>Operating Revenue</u>	<u>GL Codes</u>	<u>2013-14</u>		<u>Approved Budget</u>		<u>2015-16 Actual</u>	<u>Positive/ (Negative)</u>
		<u>Actual</u>	<u>2014-15 Actual</u>	<u>2015-16</u>			
Uniforms:	6770	10,421	10,435	9,000		14,530	(5,530)
Fuel:	6810	9,006	7,129	8,500		6,117	2,383
Truck Equipment, Expensed:	6820	3,553	1,098	2,000		651	1,349
Truck Repairs:	6830	10,071	5,752	5,000		1,074	3,926
Other Operations:	6890	1,468	2,702	0		2,811	(2,811)
Depreciation:	5260		835,206			881,848	(881,848)
Amortization:	5265					28,549	(28,549)
<b>Total Operations Expense:</b>		<b>1,123,176</b>	<b>2,123,554</b>	<b>1,420,875</b>		<b>2,368,650</b>	<b>(947,775)</b>
<b>Net Change in position from Operations:</b>		<b>848,626</b>	<b>35,166</b>	<b>544,309</b>		<b>(187,536)</b>	<b>1,163,706</b>
<b><u>Non Operating Revenue / Expense</u></b>							
Connection Fees, Residential New Const:	7110	92,038	104,344	101,000		77,695	(23,306)
Connection Fees, Residential Remodel:	7120		2,757	3,000			(3,000)
Connection Fees, Residential Fire:	7130	15,632	65,392	53,000		61,724	8,724
Connection Fees, Residential Remodel Fire:	7140	(150)					0
Connection Fees, Well Conversion:	7150						0
General Obligation Bonds, Assessment Receipts:	7600	1,239,066	1,265,893	1,150,436		1,215,941	65,505
<b>Total Non Operating Revenue:</b>		<b>1,346,586</b>	<b>1,438,386</b>	<b>1,307,436</b>		<b>1,355,359</b>	<b>47,923</b>
<b><u>Financing Expenses</u></b>							
PFP Connection Expenses:	9075						
General Obligation Bonds:	9100	413,602	327,105	315,346		307,634	7,712
PNC Equipment Lease:	9125	23,747	21,819	20,790		20,743	47
State Revolving Fund Loan:	9150	9,975	7,469			60,239	(60,239)
Conservation Program/Rebates:	9210					6,018	(6,018)
<b>Total Financing Expense:</b>		<b>447,324</b>	<b>356,393</b>	<b>336,136</b>		<b>394,634</b>	<b>(58,498)</b>



# Fiscal year 2015-2016 Budget Operating Reserves

## WATER

**Operating Reserve:**

The District's Water Operating Reserve target is two months of operating expenses. Based on fiscal year 2015-16 budget the amount of operating reserves is as follows:

**Target calculation**

\$	1,307,436	12	Budgeted FY15/16 expenditures Months
<hr/>			
\$	108,953	x 2	Monthly budgeted operating expenses Two months expenditures
<hr/>			
\$	217,906		Target Reserve
<hr/> <hr/>			

**Actual reserve at fiscal year June 30, 2016**

**\$190,251.00**

**Actual Operating Funds @ June 30, 2016**

**\$596,617.72**

## SEWER

**Operating Reserve:**

For the District's Sewer Operating Reserve, the **maximum** target amount shall equal ten months' of operating expenses and the **minimum** target amount shall equal two months' of operating expenses.

Based on fiscal year 2015-16 budget the amount of operating reserves is as follows:

**Minimum Target**

\$	1,724,110	12	Budgeted FY15/16 expenditures Months
<hr/>			
\$	143,676	x 2	Monthly budgeted operating expenses Monthly budgeted operating expenses
<hr/>			
\$	287,352		Minimum Target Reserve
<hr/> <hr/>			

**Maximum Target**

\$	1,724,110	12	Budgeted FY15/16 expenditures Months
<hr/>			
\$	143,676	x 10	Monthly budgeted operating expenses Monthly budgeted operating expenses
<hr/>			
\$	1,436,758		Maximum Target Reserve
<hr/> <hr/>			

**Actual reserve at fiscal year June 30, 2016**

**\$ 158,079.00**

**Actual Operating Funds @ June 30, 2016**

**\$3,386,703.79**

# Fiscal year 2015-2016 Budget

## Capital Reserve Connection Fee Reserve

### Capital Reserve:

For the Water and Sewer capital reserves, the target amounts are based on district engineers' estimates of the annual costs to replace water and sewer facilities and the five year capital improvement plans (CIP). Each Utility enterprise shall have a separate capital reserve. The maximum target amount shall equal the highest total annual amount shown in the CIP applicable to existing customers plus the district engineer's estimate of annual replacement capital project costs. The minimum target amount shall equal the lowest total annual amount shown in the CIP applicable to existing customers plus the district engineers' estimate of annual replacement capital project costs.

### WATER

#### Minimum Target

\$	457,180	Lowest year CIP existing customers (fiscal year 2016-17)
\$	750,000	Engineer estimate
<hr/>		
\$	1,207,180	Minimum target

#### Maximum Target

\$	1,729,000	Highest year CIP existing customers (fiscal year 2015-16)
\$	750,000	Engineer estimate
<hr/>		
\$	2,479,000	Maximum target

#### Actual reserve at fiscal year June 30, 2016

**\$ 398,249.00**

### SEWER

#### Minimum Target

\$	1,573,446	Lowest year CIP existing customers (fiscal year 2015-16)
\$	1,177,000	Engineer estimate
<hr/>		
\$	2,750,446	Minimum target

#### Maximum Target

\$	2,470,250	Highest year CIP existing customers (fiscal year 2019-20)
\$	1,177,000	Engineer estimate
<hr/>		
\$	3,647,250	Maximum target

#### Actual reserve at fiscal year June 30, 2016

**\$ 3,804,933.15**

# Fiscal year 2015-2016 Budget

## Capital Reserve Connection Fee Reserve

### CONNECTION FEE RESERVE

#### Connection Fees:

Provides funds for expansion-related capital projects caused by increases in new water and sewer customers. The connection fee reserves are restricted pursuant to Government Code Section 66013.

The water and sewer connection fee reserves shall equal one year's revenue.

#### WATER

At the beginning of the fiscal year, the budgeted amounts will be set aside as a reserve.

Fiscal year 2014-15 amount to be reserved is \$122,900.

#### Actual reserve at fiscal year June 30, 2015

\$ 122,488.00

#### SEWER

At the beginning of the fiscal year, the budgeted amounts will be set aside as a reserve.

Fiscal year 2014-15 amount to be reserved is \$228,488.

#### Actual reserve at fiscal year June 30, 2015

\$ 228,488.00

# **Sewer**

## **Personnel**

CalPERS 457 Deferred Plan:	5810
Employee Benefits:	5820
Disability Benefits:	5830
Payroll Taxes:	5840
Worker's Compensation Insurance:	5960
Management:	5910
Staff :	5920
Staff Certification:	5930
Staff Overtime:	5940
Staff Standby:	5950

## **Professional Services**

Accounting:	5610
Audit:	5620
Consulting:	5630
Data Services:	5640
Labor & HR Support:	5650
Payroll Services:	5660
Other Professional Services:	5690
Meeting Attendance, Legal:	5420
General Legal:	5430
Litigation:	5440

## **Facilities & Administration**

Alarm Services:	6335
Landscaping:	6337
Office Supplies:	5540
Postage:	5550
Printing & Publishing:	5560
Telephone & Internet:	5720
Other Administrative:	5790
Maintenance, Office:	5510

## **Engineering**

Meeting Attendance, Engineering:	6210
General Engineering:	6220

## **Pumping**

Pumping Fuel & Electricity:	6410
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## **Sewer Authority Mid-Coastside**

SAM Collections:	6910
SAM Operations:	6920
SAM Prior-Year Adjustment:	6930
SAM Maintenance, Collection System:	6940
SAM Maintenance, Pumping:	6950

## **All other Accounts**

Bank Fees:	5190
Board Meetings:	5210
Director Fees:	5220
Election Expenses:	5230
Conference Attendance:	5250
Information Systems:	5270
Fidelity Bond:	5310
Property & Liability Insurance:	5320
LAFCO Assessment:	5350
Meetings, Local:	5520
San Mateo County Tax Roll Charges:	5710
Mileage Reimbursement:	5730
Reference Materials:	5740
Claims, Property Damage:	6170
Education & Training:	6195
Equipment & Tools, Expensed:	6320
Pumping Fuel & Electricity:	6410
Maintenance, Collection System:	6660
Fuel:	6810
Truck Equipment, Expensed:	6820
Truck Repairs:	6830
Total Other Operations:	6890

# Water

## **Personnel**

CalPERS 457 Deferred Plan:	5810
Employee Benefits:	5820
Disability Benefits:	5830
Payroll Taxes:	5840
Worker's Compensation Insurance:	5960
Management:	5910
Staff :	5920
Staff Certification:	5930
Staff Overtime:	5940
Staff Standby:	5950

## **Professional Services**

Accounting:	5610
Audit:	5620
Consulting:	5630
<b>Data Services:</b>	<b>5640</b>
Labor & HR Support:	5650
Payroll Services:	5660
Other Professional Services:	5690
Meeting Attendance, Legal:	5420
General Legal:	5430
Litigation:	5440

## **Facilities & Administration**

Alarm Services:	6335
Landscaping:	6337
Office Supplies:	5540
Postage:	5550
Printing & Publishing:	5560
Fidelity Bond:	5310
Maintenance, Office:	5510
Telephone & Internet:	5720
Other Administrative:	5790

## **Engineering**

Meeting Attendance, Engineering:	6210
General Engineering:	6220
Water Quality Engineering:	6230

## **Pumping**

Pumping Fuel & Electricity:	6410
Pumping Maintenance, Generators:	6420
Pumping Maintenance, General:	6430
Pumping Equipment, Expensed:	6440

## **Supply**

Maintenance, Raw Water Mains:	6510
Maintenance, Wells:	6520
Water Purchases:	6530

## **Collection/Transmission**

Hydrants:	6610
Maintenance, Water Mains:	6620
Maintenance, Water Service Lines:	6630
Maintenance, Tanks:	6640
Maintenance, Distribution General:	6650
Meters:	6670

## **Treatment**

Chemicals & Filtering:	6710
Maintenance, Treatment Equipment:	6720
Treatment Analysis:	6730

## **All other Accounts**

Bank Fees:	5190
Board Meetings:	5210
Director Fees:	5220
Election Expenses:	5230
CDPH Fees:	5240
Conference Attendance:	5250
Information Systems:	5270
Property & Liability Insurance:	5320
LAFCO Assessment:	5350
Meetings, Local:	5520
Memberships:	5530
Mileage Reimbursement:	5730
Reference Materials:	5740
Backflow Prevention:	6160
Claims, Property Damage:	6170
SCADA Maintenance:	6185
Internet & Telephone, Communications:	6187
Education & Training:	6195
Equipment & Tools, Expensed:	6320
Lab Supplies & Equipment:	6370
Meter Reading:	6380
Uniforms:	6770
Fuel:	6810
Truck Equipment, Expensed:	6820
Truck Repairs:	6830
<b>Other Operations:</b>	<b>6890</b>



# MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: **March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager 

**SUBJECT: Review and Possible Action Concerning Mid-Year Budget Review.**

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To allow the Board and public to be as well informed as possible regarding the District's financial reporting; a number of steps have been taken over the past 3 years. The Funds Balance Sheet and Revenue & Expenditures Budget vs. Actual line items were renamed and grouped with the intent to make the reports understandable for everyone in the District. In addition a 12 month Revenue & Expenditures Budget vs. Actual was introduced as well as an executive summary that highlight's variances in the Budget line items.

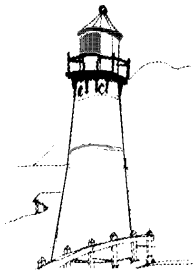
Peter Medina with Maze & Associates has prepared documents that illustrate the comparison of the District's financial position for the period ended December 31, 2016.

## RECOMMENDATION:

This is for Board information only.

Attachment





# **M MONTARA WATER AND SANITARY DISTRICT AGENDA**

**For Meeting Of: March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

## **SUBJECT: Executive Summary – December 31, 2016 Mid-Year Budget vs. Actual**

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**Sewer Service Charges:** Total revenue of \$994,951 collected; 50.62% of budget.

1<sup>st</sup> Sewer Service assessment received in December.

**Water Sales:** Total revenue of \$909,911 collected; 50.64% of budget.

No additional developments to report, outside of monthly flow report analysis.

**Sewer Fees:** Total revenue of \$10,579 collected; 60.45% of budget.

Remodel fees are the particular line item which has seen the most activity.

**Water Fees:** Total revenue of \$6,142 collected; 58.78% of budget.

Administrative and Inspection fees for new construction are both over \$600 over budget.

**Sewer Property Tax:** Total revenue of \$123,780 collected; 52.67% of budget.

**Water Property Tax:** Total revenue of \$123,780 collected; 52.67% of budget.

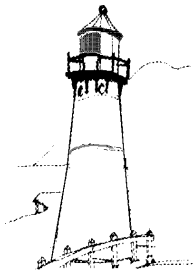
Property tax receipts from the 1<sup>st</sup> roll were collected in December.

**Sewer Personnel expense:** Total expense of \$150,834 incurred; 50.13% of budget

No issues to report, expenditures are tracking as expected.

**Water Personnel expenses:** Total expense of \$357,256 incurred; 49.387% of budget

No issues to report, expenditures are tracking as expected.



**M**

## **MONTARA WATER AND SANITARY DISTRICT AGENDA**

**For Meeting Of: March 16, 2017**

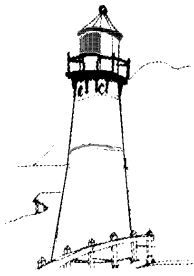
TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

**Sewer Professional Services**: Total expense of \$52,666 incurred; 48.08% of budget.

**Water Professional Services**: Total expense of \$63,761 incurred; 43.42% of budget.

Please refer to individual account line items for a distinct performance indication.



# **M MONTARA WATER AND SANITARY DISTRICT AGENDA**

**For Meeting Of: March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

**Sewer Engineering**: Total expense of \$18,034 incurred; 34.03% of budget.

**Water Engineering**: Total expense of \$36,678 incurred; 42.16% of budget.

Minimal activity to date in terms of Sewer activity.

Water Quality Engineering expenses is the main driver of the Water Engineering account group.

**Sewer Pumping**: Total expense of \$12,384 incurred; 45.87% of budget.

**Water Pumping**: Total expense of \$30,567 incurred; 27.17% of budget.

All costs associated with this line item are from PG&E. The District has yet to receive and pay for the PG&E catch-up bill.

**Sewer Authority Mid-Coastside**: Total expense of \$563,326 incurred; 50.93% of budget

Collections, Maintenance, and Capital assessments were all budgeted to the penny. The District paid \$55K for a Sewer Lift station repair in December 2016.

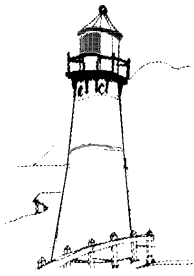
**Water Supply**: Total expense of \$16,825 incurred; 33.65% of budget.

One purchase of Water made to the County in October for \$14K.

**Water Collection/Transmission**: Total expense of \$37,856 incurred; 40.06% of budget.

Majority of costs are contracted services from Andreini Brothers, Moss Excavation, and R & B Company for maintenance of water mains, service mains, and other services for District customers.

**Water Treatment**: Total expense of \$22,254 incurred; 34.77% of budget.



**M**

## **MONTARA WATER AND SANITARY DISTRICT AGENDA**

**For Meeting Of: March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

Costs associated with the purchase of chemicals and equipment as well as the analysis of water samples by BSK lab, CA laboratory services, as well as North Coast County Water District.

**All other Accounts Sewer**: Total expense of \$13,073 incurred; 24.41% of budget.

**All other Accounts Water**: Total expense of \$60,332 incurred; 47.85% of budget.



# **M MONTARA WATER AND SANITARY DISTRICT AGENDA**

**For Meeting Of: March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

**Sewer Capital Improvement**: Total expense of \$805,196 incurred; 46.12% of budget.

Major projects include the following:

Sanitary Sewer Improvement project and spot repairs by D'arcy & Harty.

25% recycle water feasibility study paid to SAM.

**Water Capital Improvement**: Total expense of \$528,782 incurred; 85.43% of budget.

Major projects include the following:

7<sup>th</sup> street service line

4<sup>th</sup> street water main replacement

**Sewer Connection Fees**: Total revenue of \$104,872 collected; 55.12% of budget.

A total of 3 new construction connections sold.

A total of 11 remodel connections sold.

**Water Connection Fees**: Total revenue of \$85,614 collected; 43.68% of budget.

A total of 4 new construction connections sold.

A total of 4 new construction PFP connections sold.

# SEWER ENTERPRISE

## Montara Water and Sanitary District

### Revenue By Grouping - Sewer Enterprise

<u>Grouped Categories</u>	<u>FY 2016-17</u>	<u>FY 2016-17</u>		<u>FY 2016-17</u>	<u>Difference between</u>
	<u>Budgeted Revenues</u>	<u>Revenues as of</u>	<u>% To date</u>	<u>Projected</u>	<u>Budgeted vs.</u>
		<u>Dec. 31, 2016</u>		<u>Revenues</u>	<u>Projected</u>
Sewer Service Charges	1,965,726	994,951	50.62%	1,989,903	24,177
Cell Tower Lease	33,500	17,144	51.18%	34,288	788
Fees	17,500	10,579	60.45%	21,158	3,658
Property Tax	235,000	123,780	52.67%	247,560	12,560
Waste Collection Revenues	21,000	11,992	57.10%	23,424	2,424
<b>Total</b>	<b>2,272,726</b>	<b>1,158,446</b>	<b>50.97%</b>	<b>2,316,332</b>	<b>43,606</b>

### Expenditures by Grouping

#### General Operating Budget - Cost Center Roll-up

<u>Grouped Categories</u>	<u>FY 2016-17</u>	<u>FY 2016-17</u>		<u>FY 2016-17</u>	<u>Difference between</u>
	<u>Budgeted</u>	<u>Expenditures as of</u>	<u>% To date</u>	<u>Projected</u>	<u>Budgeted vs.</u>
	<u>Expenditures</u>	<u>Dec. 31, 2016</u>		<u>Expenditures</u>	<u>Projected</u>
Personnel	300,871	150,834	50.13%	301,667	796
Professional Services	109,550	52,666	48.08%	92,333	(17,217)
Facilities & Administration	41,240	20,643	50.06%	41,287	47
Engineering	53,000	18,034	34.03%	36,068	(16,932)
Pumping	27,000	12,384	45.87%	24,768	(2,232)
Sewer Authority Mid-Coastside	1,106,139	563,326	50.93%	1,126,652	20,513
All other Accounts	53,560	13,073	24.41%	22,930	(30,630)
<b>Total</b>	<b>1,691,360</b>	<b>830,960</b>	<b>49.13%</b>	<b>1,645,704</b>	<b>(45,656)</b>

# SEWER ENTERPRISE

## Non Operating Revenue By Grouping - Sewer Enterprise

<u>Grouped Categories</u>	<u>FY 2016-17 Budgeted Revenues</u>	<u>FY 2016-17 Revenues as of Dec. 31, 2016</u>	<u>% To date</u>	<u>FY 2016-17 Projected Revenues</u>	<u>Difference between Budgeted vs. Projected</u>
Connection Fees	190,256	104,872	55.12%	209,744	19,488
Interest Earnings	10,000	0	0.00%	0	(10,000)
<b>Total</b>	<b>200,256</b>	<b>104,872</b>	<b>52.37%</b>	<b>209,744</b>	<b>9,488</b>

## General Operating Budget - Cost Center Roll-up

<u>Grouped Categories</u>	<u>FY 2016-17 Budgeted Expenditures</u>	<u>FY 2016-17 Expenditures as of Dec. 31, 2016</u>	<u>% To date</u>	<u>FY 2016-17 Projected Expenditures</u>	<u>Difference between Budgeted vs. Projected</u>
Interest Expense	44,798	11,251	25.12%	46,812	2,014
SAM Capital Assessment	153,710	76,855	50.00%	153,710	0
<b>Total</b>	<b>198,508</b>	<b>88,106</b>	<b>44.38%</b>	<b>200,522</b>	<b>2,014</b>

## Capital Improvement Program - Sewer Enterprise

<u>Grouped Categories</u>	<u>FY 2016-17 Budgeted Expenditures</u>	<u>FY 2016-17 Expenditures as of Dec. 31, 2016</u>	<u>% To date</u>	<u>FY 2016-17 Projected Expenditures</u>	<u>Difference between Budgeted vs. Projected</u>
Capital Improvement Program	\$ 1,745,750	805,196	46.12%	1,610,393	135,357



# WATER ENTERPRISE

## Montara Water and Sanitary District

### Revenue By Grouping - Water Enterprise

<u>Grouped Categories</u>	<u>FY 2016-17</u>	<u>FY 2016-17</u>		<u>FY 2016-17</u>	<u>Difference between</u>
	<u>Budgeted Revenues</u>	<u>Revenues as of Dec.</u>	<u>31, 2016</u>	<u>% To date</u>	<u>Projected Revenues</u>
Water Sales	1,797,000	909,911	50.64%	1,819,822	22,822
Cell Tower Lease	33,500	17,144	51.18%	34,287	787
Fees	10,450	6,142	58.78%	12,284	1,834
Property Tax	235,000	123,780	52.67%	247,560	12,560
Backflow Testing & Other	13,000	18,674	143.64%	37,347	24,347
<b>Total</b>	<b>2,088,950</b>	<b>1,075,650</b>	<b>51.49%</b>	<b>2,151,300</b>	<b>62,350</b>

### Expenditures by Grouping

#### General Operating Budget - Cost Center Roll-up

<u>Grouped Categories</u>	<u>FY 2016-17</u>	<u>FY 2016-17</u>		<u>FY 2016-17</u>	<u>Difference between</u>
	<u>Budgeted</u>	<u>Expenditures as of</u>	<u>Dec. 31, 2016</u>	<u>% To date</u>	<u>Projected</u>
Personnel	723,522	357,256	49.38%	714,511	(9,011)
Professional Services	146,850	63,761	43.42%	114,523	(32,327)
Facilities & Administration	50,450	28,393	56.28%	55,948	5,498
Engineering	87,000	36,678	42.16%	73,356	(13,644)
Pumping	112,500	30,567	27.17%	61,134	(51,366)
Supply	50,000	16,825	33.65%	33,650	(16,350)
Collection/Transmission	94,500	37,856	40.06%	66,622	(27,878)
Treatment	64,000	22,254	34.77%	44,508	(19,492)
All other Accounts	126,100	60,332	47.85%	102,953	(23,147)
<b>Total</b>	<b>1,454,922</b>	<b>653,922</b>	<b>44.95%</b>	<b>1,267,205</b>	<b>(187,717)</b>

# WATER ENTERPRISE

## Non Operating Revenue By Grouping - Water

<u>Grouped Categories</u>	<u>FY 2016-17</u>			<u>FY 2016-17</u>	<u>Difference between</u>
	<u>Budgeted Revenues</u>	<u>Revenues as of Dec. 31, 2016</u>	<u>% To date</u>		
Connection Fees	196,000	85,614	43.68%	171,228	(24,772)
GO Bonds, Assessment Receipts	1,150,436	638,866	55.53%	1,150,436	0
<b>Total</b>	<b>1,346,436</b>	<b>724,480</b>	<b>53.81%</b>	<b>1,321,664</b>	<b>(24,772)</b>

## General Operating Budget - Cost Center Roll-up

<u>Grouped Categories</u>	<u>FY 2016-17</u>		<u>% To date</u>	<u>FY 2016-17</u>	
	<u>Budgeted Expenditures</u>	<u>Expenditures as of Dec. 31, 2016</u>		<u>Projected Expenditures</u>	<u>Difference between Budgeted vs. Projected</u>
Interest Expense	352,580	79,847	22.65%	355,016	2,437
<b>Total</b>	<b>352,580</b>	<b>79,847</b>		<b>355,016</b>	<b>2,437</b>

## Capital Improvement Program - Water Enterprise

<u>Grouped Categories</u>	<u>FY 2016-17</u>		<u>% To date</u>	<u>FY 2016-17</u>	
	<u>Budgeted Expenditures</u>	<u>Expenditures as of Dec. 31, 2016</u>		<u>Projected Expenditures</u>	<u>Difference between Budgeted vs. Projected</u>
Capital Improvement Program	\$ 619,000	528,782	85.43%	1,057,564	(438,564)

## Two-Year Comparative Income Statement

### Sewer Comparison 12/31/2015 vs. 12/31/2016

	[Current Period]	[Prior Period]	Increase / (Decrease)	Percent Change
	July 1, 2015 - December 31, 2016	July 1, 2015 - December 31, 2015		
<b>Revenue</b>				
Sewer Service Charges	994,951	1,056,939	(61,988)	-5.86%
Cell Tower Lease	17,144	16,669	475	2.85%
Fees	10,579	34,668	(24,089)	-69.49%
Property Tax	123,780	117,061	6,719	5.74%
Other	11,992	8,151	3,841	47.12%
<b>Net Sales</b>	<b>1,158,446</b>	<b>1,233,488</b>	<b>(75,042)</b>	<b>-6.08%</b>
<b>Expenses</b>				
Personnel	150,834	124,596	26,238	21.06%
Professional Services	52,666	57,566	(4,900)	-8.51%
Facilities	20,643	20,162	481	2.39%
Engineering	18,034	9,251	8,783	94.94%
Pumping	12,384	8,310	4,074	49.02%
SAM	563,326	555,299	8,027	1.45%
All other accounts	13,073	9,763	3,310	33.91%
<b>Total Expenses</b>	<b>830,960</b>	<b>784,947</b>	<b>46,013</b>	<b>5.86%</b>
<b>Net Operating Income</b>	<b>327,485</b>	<b>448,541</b>	<b>(121,056)</b>	<b>-26.99%</b>
<b>Non-Operating</b>				
Connection Fees	104,872	62,929	41,943	66.65%
Loan and Interest Revenue	0	895	(895)	-100.00%
SAM Capital Assessment	(76,855)	(80,334)	3,479	-4.33%
Interest expense	(11,251)	(14,452)	3,201	-22.15%
Capital Program	(805,196)	(37,554)	(767,642)	2044.10%
<b>Total Other Income (Expense)</b>	<b>(788,431)</b>	<b>(68,516)</b>	<b>(719,915)</b>	<b>1050.73%</b>
<b>Net Income (Loss)</b>	<b>(460,946)</b>	<b>380,025</b>	<b>(840,971)</b>	<b>-221.29%</b>

## Two-Year Comparative Income Statement

### Water Comparison 12/31/2015 vs. 12/31/2016

	[Current Period]	[Prior Period]	Increase / (Decrease)	Percent Change
	July 1, 2015 - December 31, 2016	July 1, 2015 - December 31, 2015		
<b>Revenue</b>				
Water Sales	909,911	890,472	19,439	2.18%
Cell Tower Lease	17,144	16,669	475	2.85%
Fees	6,142	23,639	(17,497)	-74.02%
Property Tax	123,780	117,060	6,720	5.74%
Backflow Testing & Other	18,674	10,711	7,963	74.34%
<b>Net Sales</b>	<b>1,075,650</b>	<b>1,058,551</b>	<b>17,099</b>	<b>1.62%</b>
<b>Expenses</b>				
Personnel	357,256	300,597	56,659	18.85%
Professional Services	63,761	68,183	(4,422)	-6.48%
Facilities & Administration	28,393	25,494	2,899	11.37%
Engineering	36,678	37,646	(968)	-2.57%
Pumping	30,567	32,490	(1,923)	-5.92%
Supply	16,825	29,411	(12,586)	-42.79%
Collection/Transmission Treatment	37,856	49,745	(11,889)	-23.90%
All other Accounts	22,254	25,559	(3,305)	-12.93%
<b>Total Expenses</b>	<b>653,922</b>	<b>666,382</b>	<b>(12,460)</b>	<b>-1.87%</b>
<b>Net Operating Income</b>	<b>421,728</b>	<b>392,169</b>	<b>29,559</b>	<b>7.54%</b>
<b>Non-Operating</b>				
Connection Fees	85,614	89,398	(3,784)	-4.23%
GO Bond Assessment	638,866	583,711	55,155	9.45%
Interest Expense	(79,847)	(150,784)	70,937	-47.05%
Capital Program	(528,782)	(1,109,199)	580,417	-52.33%
<b>Total Other Income (Expense)</b>	<b>115,851</b>	<b>(586,874)</b>	<b>702,725</b>	<b>-119.74%</b>
<b>Net Income (Loss)</b>	<b>537,579</b>	<b>(194,705)</b>	<b>732,284</b>	<b>-376.10%</b>



## MWSD — Fiscal Year 2016-2017 budget review as of December 31, 2016 - SEWER ENTERPRISE

<u>Operating Revenue</u>	<u>GL Codes</u>	<u>Budgeted</u> <u>amounts 2016-17</u>	<u>Income/Expenditure</u> <u>s to date</u>	<u>% To date</u>	<u>Projected</u>	<u>Projected as</u> <u>% of Budget</u>	<u>Budget Remarks</u>
Cell Tower Lease:	4220	33,500	17,144	51.18%	34,288	102.35%	
Administrative Fees (New Construction):	4410	3,000	1,461	48.70%	2,922	97.40%	
Administrative Fees (Remodel):	4420	1,500	1,448	96.53%	2,896	193.07%	
Inspection Fees (New Construction):	4430	2,500	1,380	55.20%	2,760	110.40%	
Inspection Fees (Remodel):	4440	3,500	2,894	82.69%	5,788	165.37%	
Remodel Fees:	4460	7,000	3,396	48.51%	6,792	97.03%	
Property Tax Receipts:	4610	235,000	123,780	52.67%	247,560	105.35%	
Sewer Service Charges:	4710	1,969,726	1,002,503	50.90%	2,005,006	101.79%	
Sewer Service Refunds, Customer:	4720	(4,000)	(7,551)	188.79%	(15,103)	377.57%	
Waste Collection Revenues:	4760	21,000	11,712	55.77%	23,424	111.54%	
Other Revenue:	4990		280	100.00%	560	100.00%	
<b>Total Operating Revenue:</b>		<b>2,272,726</b>	<b>1,158,446</b>	<b>50.97%</b>	<b>2,316,892</b>	<b>101.94%</b>	
<b><u>Operating Expenses</u></b>							
Bank Fees:	5190	5,500	4,353	79.14%	8,705	158.28%	
Board Meetings:	5210	3,000	1,672	55.72%	3,343	111.44%	
Director Fees:	5220	3,300	1,463	44.32%	2,925	88.64%	
Election Expenses:	5230	4,000	820	20.49%	1,639	40.98%	
Conference Attendance:	5250	2,000					
Information Systems:	5270	6,000	667	11.12%	1,334	22.23%	
Fidelity Bond:	5310	500					
Property & Liability Insurance:	5320	1,700	1,918	112.85%	1,918	112.82%	
LAFCO Assessment:	5350	2,000	1,526	76.30%	1,754	87.70%	
Meeting Attendance, Legal:	5420	9,500	2,613	27.50%	5,225	55.00%	
General Legal:	5430	20,000	16,295	81.48%	32,590	162.95%	
Litigation:	5440						
Maintenance, Office:	5510	8,000	4,733	59.16%	9,465	118.32%	
Meetings, Local:	5520						
Memberships:	5530		708	100.00%	1,416	100.00%	
Office Supplies:	5540	8,000	4,023	50.29%	8,046	100.58%	
Postage:	5550	2,500	278	11.11%	556	22.23%	
Printing & Publishing:	5560	3,000	182	6.06%	364	12.12%	
Accounting:	5610	30,000	9,450	31.50%	18,900	63.00%	
Audit:	5620	13,000	13,000	100.00%	13,000	100.00%	
Consulting:	5630	28,000	9,733	34.76%	19,466	69.52%	
Data Services:	5640	6,000					
Labor & HR Support:	5650	2,250	1,125	50.00%	2,250	100.00%	
Payroll Services:	5660	800	451	56.33%	901	112.67%	
Other Professional Services:	5690						
San Mateo County Tax Roll Charges:	5710	2,500	119	4.76%	238	9.52%	
Telephone & Internet:	5720	11,000	7,060	64.18%	14,120	128.37%	



## MWSD — Fiscal Year 2016-2017 budget review as of December 31, 2016 - SEWER ENTERPRISE

<u>Operating Revenue</u>	<u>GL Codes</u>	<u>Budgeted</u> <u>amounts 2016-17</u>	<u>Income/Expenditure</u> <u>s to date</u>	<u>% To date</u>	<u>Projected</u>	<u>Projected as</u> <u>% of Budget</u>	<u>Budget Remarks</u>
Mileage Reimbursement:	5730	1,500	537	35.78%	1,073	71.57%	
Reference Materials:	5740	200					
Other Administrative:	5790						
CalPERS 457 Deferred Plan:	5810	15,117	7,739	51.19%	15,478	102.39%	
Employee Benefits:	5820	34,382	17,191	50.00%	34,382	100.00%	
Disability Insurance:	5830	1,479	567	38.33%	1,134	76.65%	
Payroll Taxes:	5840	16,521	5,920	35.84%	11,841	71.67%	
Worker's Compensation Insurance:	5960	3,649	604	16.57%	1,209	33.14%	
Management:	5910	93,373	50,544	54.13%	101,087	108.26%	
Staff :	5920	118,444	58,855	49.69%	117,709	99.38%	
Staff Certification:	5930	1,800	900	50.00%	1,800	100.00%	
Staff Overtime:	5940	2,339	1,404	60.02%	2,808	120.04%	
Staff Standby:	5950						
District sponsored Defined Benefit Plan (PARS):	5850	13,768	7,110	51.64%	14,220	103.28%	
Claims, Property Damage:	6170	10,000					
Education & Training:	6195	1,000					
Meeting Attendance, Engineering:	6210	2,000					
General Engineering:	6220	50,000	18,034	36.07%	36,068	72.14%	
Equipment & Tools, Expensed:	6320	1,000					
Alarm Services:	6335	5,340	2,710	50.75%	5,420	101.49%	
Landscaping:	6337	2,400	950	39.58%	1,900	79.17%	
Pumping Fuel & Electricity:	6410	27,000	12,384	45.87%	24,768	91.73%	
Maintenance, Collection System:	6660	10,000					
Fuel:	6810	800					
Truck Equipment, Expensed:	6820	160					
Truck Repairs:	6830	400					
Total Other Operations:	6890						
SAM Collections:	6910	321,608	160,804	50.00%	321,608	100.00%	
SAM Operations:	6920	694,531	347,265	50.00%	694,531	100.00%	
SAM Prior-Year Adjustment:	6930						
SAM Maintenance, Collection System:	6940	40,000	55,257	138.14%	110,513	276.28%	
SAM Maintenance, Pumping:	6950	50,000					
<b>Total Operations Expense:</b>		<b>1,691,360</b>	<b>830,960</b>	<b>49.13%</b>	<b>1,645,704</b>	<b>97.30%</b>	
<b>Net Change in position from Operations:</b>		<b>581,366</b>	<b>327,485</b>	<b>56.33%</b>	<b>671,188</b>	<b>115.45%</b>	
<b>Non Operating Revenue / Expense</b>							
Connection Fees, Residential New Const:	7110	140,256	78,394	55.89%	156,789	111.79%	
Connection Fees, Residential Remodel:	7120	50,000	26,478	52.96%	52,955	105.91%	
Connection Fees - Other:	7100						
Employee Loans:	7700						



## MWSD — Fiscal Year 2016-2017 budget review as of December 31, 2016 - SEWER ENTERPRISE

<u>Operating Revenue</u>	<u>GL Codes</u>	<u>Budgeted</u> <u>amounts 2016-17</u>	<u>Income/Expenditure</u> <u>s to date</u>	<u>% To date</u>	<u>Projected</u>	<u>Projected as</u> <u>% of Budget</u>	<u>Budget Remarks</u>
LAIF, Interest:	7200	10,000					
<b>Total Non Operating Revenue:</b>		<b>200,256</b>	<b>104,872</b>	52.37%	<b>209,744</b>	104.74%	
<b>Financing Expense</b>							
PNC Equipment Lease:	9125	19,598	9,117	46.52%	20,790	106.08%	
Capital Assessment, SAM:	9175	153,710	76,855	50.00%	153,710	100.00%	
I-Bank Loan:	9200	25,201	2,135	8.47%	26,022	103.26%	
<b>Total Financing Expense:</b>		<b>198,508</b>	<b>88,106</b>	44.38%	<b>200,522</b>	101.01%	
<b>Net Change in position from Non Operating activities:</b>		<b>1,748</b>	<b>16,765</b>		<b>9,222</b>		
<b>Continued for CIP and Contingency Reserve:</b>		<b>583,113</b>	<b>344,251</b>		<b>680,409</b>		
<b>Transfer to CIP:</b>		<b>(583,113)</b>	<b>(344,251)</b>		<b>(680,409)</b>		
<b>Total Net Position Changes/Transfer to reserves:</b>		<b>\$ -</b>	<b>\$ -</b>		<b>\$ -</b>		





## MWSD — Fiscal Year 2016-2017 budget review as of December 31, 2016 - WATER ENTERPR

<u>Operating Revenue</u>	<u>GL Codes</u>	<u>Budgeted</u> <u>amounts 2016-</u>	<u>Income/Expenditures</u>	<u>% To date</u>	<u>Projected</u>	<u>Projected as %</u>	<u>Budget</u>	<u>Remarks</u>
		<u>17</u>	<u>to date</u>			<u>of Budget</u>		
Cell Tower Lease:	4220	33,500	17,144	51.18%	34,287	102.35%		
Administrative Fees (New Construction):	4410	4,500	2,922	64.93%	5,844	129.87%		
Administrative Fees (Remodel):	4420	900	0	0.00%	0	0.00%		
Inspection Fees (New Construction):	4430	4,250	2,760	64.94%	5,520	129.88%		
Inspection Fees (Remodel):	4440	800	460	57.50%	920	115.00%		
Mainline Extension Fees:	4450		0	0.00%	0	0.00%		
Remodel Fees:	4460			0.00%	0	0.00%		
Grants:	4510			0.00%	0	0.00%		
Remodel Fees:	4460			0.00%	0	0.00%		
Property Tax Receipts:	4610	235,000	123,780	52.67%	247,560	105.35%		
Testing, Backflow:	4740	13,000	12,166	93.59%	24,332	187.17%		
Water Sales:	4810	1,800,000	910,411	50.58%	1,820,821	101.16%		
Water Sales, Fire Protection:	4820	0		0.00%	0	0.00%		
Water Sales Refunds, Customer:	4850	(3,000)	(500)	16.65%	(999)	33.30%		
Other Revenue:	4990		6,508	100.00%	13,015	100.00%		
<b>Total Operating Revenue:</b>		<b>2,088,950</b>	<b>1,075,650</b>	<b>51.49%</b>	<b>2,151,300</b>	<b>102.99%</b>		
<b><u>Operating Expenses</u></b>								
Bank Fees:	5190	10,000	3,565	35.66%	7,131	71.31%		
Board Meetings:	5210	3,000	1,672	55.72%	3,343	111.44%		
Director Fees:	5220	3,300	1,463	44.32%	2,925	88.64%		
Election Expenses:	5230	4,000	820	20.49%	1,639	40.98%		
CDPH Fees:	5240	15,500	0	0.00%	11,417	73.66%		
Conference Attendance:	5250	4,000	0	0.00%	0	0.00%		
Information Systems:	5270	1,500	667	44.46%	1,334	88.92%		
Fidelity Bond:	5310	500	0	0.00%	0	0.00%		
Property & Liability Insurance:	5320	2,700	1,918	71.05%	3,000	111.11%		
LAFCO Assessment:	5350	2,500	2,048	81.92%	2,376	95.04%		
Meeting Attendance, Legal:	5420	8,500	2,613	30.74%	5,225	61.47%		
General Legal:	5430	60,000	18,230	30.38%	36,460	60.77%		
Litigation:	5440			0.00%	0	0.00%		
Maintenance, Office:	5510	8,000	6,478	80.97%	12,956	161.95%		
Meetings, Local:	5520	0	0	0.00%	0	0.00%		
Memberships:	5530	18,000	22,964	127.58%	23,000	127.78%		
Office Supplies:	5540	8,000	4,023	50.29%	8,046	100.57%		
Postage:	5550	6,000	2,578	42.97%	5,157	85.95%		
Printing & Publishing:	5560	2,000	255	12.76%	511	25.53%		
Accounting:	5610	30,000	9,450	31.50%	18,900	63.00%		
Audit:	5620	20,500	13,000	63.42%	13,000	63.42%		
Consulting:	5630	25,000	18,774	75.10%	37,549	150.19%		



## MWSD — Fiscal Year 2016-2017 budget review as of December 31, 2016 - WATER ENTERPR

<u>Operating Revenue</u>	<u>GL Codes</u>	<u>Budgeted amounts 2016- 17</u>	<u>Income/Expenditures to date</u>	<u>% To date</u>	<u>Projected</u>	<u>Projected as % of Budget</u>	<u>Budget Remarks</u>
Data Services:	5640		0	0.00%	0	0.00%	
Labor & HR Support:	5650	2,000	1,125	56.25%	2,250	112.50%	
Payroll Services:	5660	850	451	53.02%	901	106.04%	
Other Professional Services:	5690		0	0.00%	0	0.00%	
San Mateo Co. Tax Roll Charges:	5710	0	119	100.00%	238	100.00%	
Telephone & Internet:	5720	17,000	9,485	55.79%	18,970	111.59%	
Mileage Reimbursement:	5730	2,000	916	45.79%	1,832	91.58%	
Reference Materials:	5740	800	0	0.00%	0	0.00%	
Other Administrative:	5790		1,112	100.00%	2,224	100.00%	
CalPERS 457 Deferred Plan:	5810	33,970	16,972	49.96%	33,944	99.92%	
Employee Benefits:	5820	69,368	34,684	50.00%	69,369	100.00%	
Disability Benefits:	5830	2,921	1,403	48.01%	2,805	96.03%	
Payroll Taxes:	5840	40,574	17,849	43.99%	35,697	87.98%	
Worker's Compensation Insurance:	5960	19,312	4,999	25.89%	9,997	51.77%	



## MWSD — Fiscal Year 2016-2017 budget review as of December 31, 2016 - WATER ENTERPR

Operating Revenue	GL Codes	Budgeted amounts 2016-		Income/Expenditures		Projected	Projected as % of Budget	Budget Remarks
		17	to date	% To date				
Management:	5910	93,373	50,546	54.13%	101,091	108.27%		
Staff :	5920	350,791	177,139	50.50%	354,278	100.99%		
Staff Certification:	5930	9,000	4,500	50.00%	9,000	100.00%		
Staff Overtime:	5940	52,353	23,602	45.08%	47,204	90.16%		
Staff Standby:	5950	24,857	11,869	47.75%	23,738	95.50%		
District sponsored Defined Benefit Plan (PARS):	5850	27,005	13,694	50.71%	27,389	101.42%		
Backflow Prevention:	6160	1,000	0	0.00%	0	0.00%		
Claims, Property Damage:	6170	10,000	175	1.75%	350	3.50%		
SCADA Maintenance:	6185	15,000	9,939	66.26%	19,878	132.52%		
Internet & Telephone, Communications:	6187		399	100.00%	798	100.00%		
Education & Training:	6195	6,000	3,661	61.02%	7,323	122.05%		
Meeting Attendance, Engineering:	6210	2,000	0	0.00%	0	0.00%		
General Engineering:	6220	20,000	2,678	13.39%	5,355	26.78%		
Water Quality Engineering:	6230	65,000	34,001	52.31%	68,001	104.62%		
Equipment & Tools, Expensed:	6320	5,000	1,312	26.24%	2,624	52.48%		
Alarm Services:	6335	750	359	47.87%	718	95.74%		
Landscaping:	6337	6,000	2,184	36.39%	4,367	72.78%		
Facilities other:	6330			0.00%	0	0.00%		
Lab Supplies & Equipment:	6370	1,000	12	1.20%	24	2.39%		
Meter Reading:	6380	0		0.00%	0	0.00%		
Pumping Fuel & Electricity:	6410	100,000	25,166	25.17%	50,332	50.33%		
Pumping Maintenance, Generators:	6420	8,000	4,934	61.68%	9,869	123.36%		
Pumping Maintenance, General:	6430	2,500	467	18.67%	933	37.33%		
Pumping Equipment, Expensed:	6440	2,000	0	0.00%	0	0.00%		
Maintenance, Raw Water Mains:	6510		1,351	100.00%	2,701	100.00%		
Maintenance, Wells:	6520	10,000	1,392	13.92%	2,783	27.83%		
Water Purchases:	6530	40,000	14,083	35.21%	28,166	70.41%		
Hydrants:	6610	1,000	3,819	381.90%	7,638	763.79%		
Maintenance, Water Mains:	6620	55,000	24,050	43.73%	48,099	87.45%		
Maintenance, Water Service Lines:	6630	25,000	177	0.71%	353	1.41%		
Maintenance, Tanks:	6640	1,000	3	0.28%	6	0.56%		
Maintenance, Distribution General:	6650	10,000	717	7.17%	1,435	14.35%		
Maintenance, Collection System:	6660		0		0			
Meters:	6670	2,500	9,091	363.63%	9,091	363.64%		
Chemicals & Filtering:	6710	30,000	7,812	26.04%	15,625	52.08%		
Maintenance, Treatment Equipment:	6720	4,000	708	17.69%	1,415	35.38%		
Treatment Analysis:	6730	30,000	13,734	45.78%	27,468	91.56%		
Uniforms:	6770	9,000	6,740	74.89%	9,000	100.00%		
Fuel:	6810	8,000	2,748	34.35%	5,495	68.69%		
Truck Equipment, Expensed:	6820	1,000	272	27.25%	545	54.50%		



## MWSD — Fiscal Year 2016-2017 budget review as of December 31, 2016 - WATER ENTERPR

Operating Revenue	GL Codes	Budgeted		Income/Expenditures		Projected	Projected as % of Budget	Budget Remarks
		amounts 2016- 17		to date	% To date			
Truck Repairs:	6830	5,000		853	17.07%	1,707	34.14%	
Other Operations:	6890			106	100.00%	212	100.00%	
<b>Total Operations Expense:</b>		<b>1,454,922</b>		<b>653,922</b>	<b>44.95%</b>	<b>1,267,205</b>	87.10%	
<b>Net Change in position from Operations:</b>		<b>634,028</b>		<b>421,728</b>	<b>66.52%</b>	<b>884,095</b>	139.44%	
<b>Non Operating Revenue / Expense</b>								
Connection Fees, Residential New Const:	7110	128,000		55,311	43.21%	110,622	86.42%	
Connection Fees, Residential Remodel:	7120	3,000		106	3.53%	212	7.07%	
Connection Fees, Residential Fire:	7130	65,000		30,197	46.46%	60,394	92.91%	
Connection Fees, Residential Remodel Fire:	7140				0.00%	0	0.00%	
Connection Fees, Well Conversion:	7150				0.00%	0	0.00%	
General Obligation Bonds, Assessment Receipts:	7600	1,150,436		638,866	55.53%	1,150,436	100.00%	
<b>Total Non Operating Revenue:</b>		<b>1,346,436</b>		<b>724,480</b>	<b>53.81%</b>	<b>1,321,664</b>	98.16%	
<b>Financing Expenses</b>								
PFP Connection Expenses:	9075				0.00%	0	0.00%	
General Obligation Bonds:	9100	295,734		24,943	8.43%	295,734	100.00%	
PNC Equipment Lease:	9125	19,598		9,117	46.52%	19,598	100.00%	
State Revolving Fund Loan:	9150	37,247		45,288	121.59%	39,684	106.54%	
Conservation Program/Rebates:	9210			500				
<b>Total Financing Expense:</b>		<b>352,580</b>		<b>79,847</b>	<b>22.65%</b>	<b>355,016</b>	100.69%	
<b>Net Change in position from Non Operating</b>		<b>993,856</b>		<b>644,633</b>		<b>966,648</b>		
<b>Continued for CIP and Contingency Reserve:</b>		<b>1,627,884</b>		<b>1,066,361</b>		<b>1,850,742</b>		
<b>Transfer to CIP:</b>		<b>(1,627,884)</b>		<b>(1,066,361)</b>		<b>(1,850,742)</b>		
<b>Total Net Position Changes/Transfer to reserves:</b>		<b>\$ -</b>		<b>\$ -</b>				



# MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: **March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager

A handwritten signature in black ink, appearing to be 'CH'.

**SUBJECT: Review and Possible Action Concerning Nomination of Representative on the CSDA Board of Directors**

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The California Special Districts Association (CSDA) is conducting a call for nominations for Seat C for the 2018-2020 term and fill vacancy for remainder of Term A, which expires 2018. Our district is part of Region 3 which includes the greater Bay Area (from Mendocino to Monterey Counties). A board member is expected to attend all Board meetings, usually eight per year, but is reimbursed for travel by CSDA. Any independent special district with current membership in CSDA is eligible to designate one person, such as a board member or managerial employee, for election as a director of CSDA. A copy of the District's resolution or minute action must accompany the nomination form. The deadline for receiving nominations is May 19, 2017.

CSDA will mail ballots on June 2. The ballots must be received by CSDA on August 4, 2017 and successful candidates will be notified before August 8.

In the past Director Slater-Carter has expressed interest in serving on the CSDA Board, therefore staff prepared an according resolution. Any Director serving on the MWSD Board is eligible to serve on CSDA Board as well.

## RECOMMENDATION:

Adopt Resolution No. \_\_\_\_\_, Resolution of the Montara Water and Sanitary District Authorizing the Nomination of Kathryn Slater-Carter as Region 3 Representative to the CSDA Board of Directors.

Attachment

**RESOLUTION NO. \_\_\_\_\_**

**RESOLUTION OF THE MONTARA WATER AND SANITARY DISTRICT  
AUTHORIZING THE NOMINATION OF KATHRYN SLATER-CARTER AS REGION  
3 REPRESENTATIVE TO THE CSDA BOARD OF DIRECTORS**

WHEREAS, the California Special Districts Association (CSDA) is soliciting nominations for Seat "C" on the Board of Directors; and

WHEREAS, any nominations of this District may be appointed by resolution; and

WHEREAS, District Board Member and Director Kathryn Slater-Carter is interested in serving on the CSDA Board of Directors and possesses all the skills and background necessary to perform in an exemplary manner;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF THE MONTARA WATER AND SANITARY DISTRICT, A PUBLIC AGENCY IN THE COUNTY OF SAN MATEO, CALIFORNIA, AS FOLLOWS:

1. Director Kathryn Slater-Carter is hereby nominated by this Board to serve on Seat C of Region 3 representative on the California Special District Association Board of Directors for a term which expires in 2020.
2. A copy of this resolution shall be presented to CSDA as a record of the Board's nomination.

\_\_\_\_\_  
President, Montara Water and Sanitary District

COUNTERSIGNED:

\_\_\_\_\_  
Secretary, Montara Water and Sanitary District

\* \* \* \*

I HEREBY CERTIFY that the foregoing Resolution No. \_\_\_\_\_ was duly and regularly adopted and passed by the Board of the Montara Water and Sanitary District, San Mateo County, California, at a meeting thereof held on the 16<sup>th</sup> day of March 2017, by the following vote:

AYES, Directors:

NOES, Directors:

ABSENT, Directors:


\_\_\_\_\_  
Secretary, Montara Water and Sanitary District



# MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: **March 16, 2017**

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager 

**SUBJECT: Review and Possible Action Concerning  
Cancellation of Next Regular Scheduled  
Meeting, April 6, 2017.**

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The manager will be out of the office from March 27 through April 14, 2017.

## RECOMMENDATION:

Cancel the regular scheduled meeting, April 6, 2017.