



**CITY OF MORRO BAY
WATER RECLAMATION FACILITY
CITIZEN ADVISORY COMMITTEE (WRFCAC)
AGENDA**

The City of Morro Bay is dedicated to the preservation and enhancement of the quality of life. The City shall be committed to this purpose and will provide a level of municipal service and safety consistent with and responsive to the needs of the public.

**Regular Meeting
Wednesday, February 11, 2015
Community Center Multi-Purpose Room - 2:00 P.M. to 4:00 P.M.
(Note: Start Time is One Hour Earlier than normal, due to Ribbon Cutting for
Morro Creek Bridge and Trail Project at 4:30 P.M.)
1001 Kennedy Way, Morro Bay, CA**

John Diodati, Chairperson

Bill Woodson,
Vice Chairperson

Dale Guerra

Barbara Spagnola

Mary (Ginny) Garelick

Paul Donnelly

Valerie Levulett

Planning Commission
Member: Richard Sadowski

Public Works Advisory Board
Member: Steven Shively

ESTABLISH QUORUM AND CALL TO ORDER
MOMENT OF SILENCE/PLEDGE OF ALLEGIANCE
ANNOUNCEMENTS/PRESENTATIONS

PUBLIC COMMENT PERIOD

Members of the audience wishing to address the Board on City business matters other than scheduled items may do so at this time. To increase the effectiveness of the Public Comment Period, the following rules shall be followed:

- When recognized by the Chair, please come forward to the podium and state your name and address for the record. Board meetings are audio and video recorded and this information is voluntary and desired for the preparation of minutes.
- Comments are to be limited to three minutes.
- All remarks shall be addressed to the Board, as a whole, and not to any individual member thereof.
- The Board respectfully requests that you refrain from making slanderous, profane or personal remarks against any elected official, commission and/or staff.
- Please refrain from public displays or outbursts such as unsolicited applause, comments or cheering.
- Any disruptive activities that substantially interfere with the ability of the Board to carry out its meeting will not be permitted and offenders will be requested to leave the meeting.
- Your participation in Board meetings is welcome and your courtesy will be appreciated.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Public Works Department at (805) 772-6264. Notification 24 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

A. CONSENT CALENDAR

A-1 Approval of minutes from the Water Reclamation Facility Citizen Advisory Committee meeting of January 14, 2015

Staff Recommendation: Approve minutes as submitted.

B. OLD BUSINESS

B-1 WRFCAC Sub-Committee Updates and Recommendations

Finance, Environmental and Engineering Sub-Committees to present their analyses and findings to the entire committee.

Recommendation: Receive and consider updates.

C. NEW BUSINESS

C-1 Review of Draft Proposed Memorandum of Understanding between the City of Morro Bay and Cayucos Sanitary District

Recommendation: Review Draft MOU and provide comments to staff.

C-2 Presentation of Preliminary Water and Sewer Rate Study

Recommendation: Receive Presentation and provide comments to Staff prior to the February 24, 2015 City Council Study Session.

D. COMMITTEE MEMBER CLOSING COMMENTS

E. ADJOURNMENT

Adjourn to the Water Reclamation Facility Citizen Advisory Committee meeting at the Community Center Multi-Purpose Room, 1001 Kennedy Way, on March 11, 2015, at 3:00 p.m.

This agenda is subject to amendment up to 72 hours prior to the date and time set for the meeting. Please refer to the agenda posted at the Public Works Department, 955 Shasta Avenue, for any revisions or call the department at 772-6264 for further information.

Materials related to an item on this Agenda are available for public inspection during normal business hours in the Public Works Department, at Mill's/ASAP, 495 Morro Bay Boulevard, or the Morro Bay Library, 695 Harbor, Morro Bay, CA 93442, or online at www.morro-bay.ca.us/wrfcac. Materials related to an item on this Agenda submitted to the Committee after publication of the Agenda packet are available for inspection at the Public Works Department during normal business hours or at the scheduled meeting.

CITY OF MORRO BAY
WATER RECLAMATION FACILITY CITIZEN ADVISORY COMMITTEE (WRFCAC)

SYNOPSIS MINUTES

Regular Meeting – January 14, 2015

PRESENT: Bill Woodson Mary (Ginny) Garelick
Barbara Spagnola Dale Guerra
Paul Donnelly Richard Sadowski
Steven Shively

ABSENT: John Diodati
Valerie Levulett

STAFF: Rob Livick Public Services Director
Bruce Keogh Wastewater Treatment Manager
Kay Merrill Administrative Utilities Technician

CONSULTANT: John Rickenbach

ESTABLISH QUORUM AND CALL TO ORDER

Bill Woodson called the meeting to order at 3:05pm., stating all Committee Members were present with the exception of John Diodati and Valerie Levulett and there is a quorum. He asked for a moment of silence then led the Pledge of Allegiance.

ANNOUNCEMENTS

Rob Livick announced there is a downtown public parklet which will be evaluated for the next six months to see if it stays or goes and the City has a new Facebook page which will provide current news, events and breaking news for the Public to access.

PUBLIC COMMENT

Bill Woodson opened Public Comment period.

Betty Winholtz stated the parklet hurts businesses because it takes away parking spaces and encourages the public to provide feedback on the parklet quickly so a decision can be made if the parklet stays or goes. On the WRF appendices, there is \$75 million figure for the WRF, and she would like to know where is the justification for this amount of money?

Bob Keller stated there is a time line for Morro Bay to get the facility running and time is money. No more delays, Cayucos can be a customer and Morro Bay can be the lead agency and operator of the facility. Once the new facility is running, the old facility will be demolished.

Bill Woodson closed Public Comment period.

A. CONSENT CALENDAR

A-1 Approval of minutes from the WRFCAC meeting of December 3, 2014

MOTION: Steven Shively moved to approve the minutes with clarification brought forward by Richard Sadowski, Dale Guerra seconded and the motion passed unanimously. (7-0).

The *clarification* is on page 3 where Marla Jo Bruton Sadowski spoke. The following is amended for the minutes of December 3, 2014 to read as follows:

Marla Jo Bruton Sadowski stated water is very valuable to Morro Bay *and the Cayucos Sanitary District (CSD) might have to create a CSD if they are to be involved with the reclamation of water.*

B. OLD BUSINESS

B-1 WRFCAC Sub-Committee Updates and Recommendations

Finance, Environmental and Engineering Sub-Committees to present their analyses and findings to the entire committee.

Mary Garelick (Finance Sub-Committee) stated the committee has provided a presentation with questions regarding the cost of the project and are satisfied with the answers provided by John Rickenbach and Rob Livick. She suggested the Finance Sub-Committee could assist with grant research and community outreach.

Environmental and Engineering have no new analyses at this time.

C. NEW BUSINESS

C-1 Water Reclamation Facility (WRF) Project Update; Including Review of Proposed Next Steps

Rob Livick presented an update on the WRF:

Recommendation

- Receive Update
- Questions About the Process
- Provide any recommendations that will be forwarded on to City Council

Preferred Site Selection

- “Rancho Colina” selected by City Council as its preferred site to begin the Facilities Master Planning and Environmental Review 12-9-2014
- Confirmed by both City and CSD at the 12-11-2014 Joint Meeting
- Decision based on work by JFR, MKN and Carollo Engineers

Proposed Next Steps

- Agreement between the City and the CSD for project development on the Rancho Colina Site for the Facilities Master Planning and Environmental Review phases including:
 - Roles of the City and CSD in the review of the work of technical consultants
 - Cost sharing formula for the future expenditures
 - Reimbursement due to both parties for work performed since January 2013 based upon the formula established in Item B
 - Ultimate relationship is between the two agencies including consideration of a customer/service provider relationship

- Request a proposal from John F. Rickenbach Consulting for project management/facilitation, initial environmental and engineering work needed to fully develop the scope required for Facilities Master Planning and Environmental Review.
 - Engage the expertise of geotechnical/hydrogeological consultant that can further define any geotechnical site constraints and explore the details of groundwater recharge in the Morro Valley
 - Coordinate with Coastal Commission, LAFCO and San Luis Obispo County regarding the annexation of the WRF site and permit coordination
 - Engage consultant(s) to review cultural, biological and other environmental issues in advance of the formal environmental process to identify and mitigate or eliminate any unknown potentially fatal flaws
- Work with the project team to develop Request for Proposals for:
 - Development of a Facilities Master Plan for the proposed New WRF
 - The Environmental Review (pursuant to CEQA and potentially NEPA) for the proposed New WRF

The outcomes from the January 8, 2015 Joint Meeting are as follows:

1. “MOU for Now”: CMB and CSD Staffs will work cooperatively to develop a draft MOU (Agreement) that describes how CMB and CSD will work together and share costs through the Facilities Master Plan and Environmental Review phases.
2. Project Goals: Staffs will work cooperatively to bring to the Council and CSD Board a set of Joint Project Goals.
3. Future Governance: Staffs will work cooperatively to develop a proposed framework that will help determine the governance structure of the future WRF at Rancho Colina.
4. Property Negotiations: Staffs will work cooperatively to bring to the Council and CSD Board a framework describing the process for negotiating with the land owner.

At the January 13, 2015 City Council Meeting, Council directed the following:

- Direction to move forward with “fatal flaw” technical studies
- Direction for WRFCAC to provide Council with an evaluation of JFR/MKN work products
- Schedule a JPA Technical Sub-Committee meeting to discuss governance
- WRFCAC Sub-Committees to meet and weigh in
- Council consensus is to develop a Service Provider/Customer relationship with the CSD

Conclusions

- City’s Goal is to have the new WRF operational within the time frame established in Morro Bay City Council Resolution 17-14
- It’s critical the project team stays engaged in the process and continues to move forward with the items listed above as next steps
- The City should continue to work with its existing consultant management team JFR Consulting and MKN & Associates on project development and coordination in order to expedite moving forward in the process

Rob Livick asked the Committee if there were any questions or comments for John Rickenbach or himself.

The members of the committee stated John Rickenbach and Mike Nunley have done an excellent job in presenting the technical and planning side for this project.

Discussion amongst the committee, staff and the consultant included the need for a realistic budget for planning and technical services, to provide a fatal flaw analysis including cultural resources, biological

issues and geotechnical. If the WRF needs to be built at a different site, there are seventeen other sites that are ranked, however, Rancho Colina is the most likely site. The need to start meeting with various regulatory agencies, to have more complete RFP's, retain current consultants or hire new ones, the existing and future agreement between the City and Cayucos, Cayucos becoming a customer of the City, the need to have measuring devices for discharges into this facility, work on solving nitrate issues, applying for grants, develop a rough grading plan, contact the County to see if a land use permit is required, annexation and the City's "sphere of influence".

Bill Woodson summarized the comments and concerns from the discussion as follows:

- The need to define the relationship and roles of the City and the CSD
- Address the project – is it turnkey or should the design and construction have separate RFP's for engineering and construction
- Develop a community outreach plan
- Examine potential grants and financing, especially Prop 1
- Does the City have a right to sell a portion of the allocated State water
- Obtain a rate payer study

Bill Woodson would like to develop an outlined schedule displaying how the activities of the sub-committees are interrelated.

D. COMMITTEE MEMBER CLOSING COMMENTS

Paul Donnelly would like the sub-committees to convene prior to the next WRFCAC meeting and present a report at the next meeting.

Steven Shively asked if the committee is supposed to be giving a recommendation to have John Rickenbach prepare a scope of work for the facilities master plan. He stated he has no opinion at this time about the relationship between the City and the CSD, but does see a potential for lawsuits.

Rob Livick clarified he is looking for a soft recommendation and what the Committee's general opinion is and City Council wants to hear from the Committee what their first initial thoughts are, more information will be presented to the committee in the near future.

Mary Garelick stated she has no preconceived notions about Cayucos joining the City as she does not know the history between the two communities. She would like to see a partnership and a sharing of the costs.

Barbara Spagnola stated she would like to keep an open mind about a partnership with the CSD and has concerns about sharing costs and liability. At this time, there is not enough information to give a recommendation.

Richard Sadowski asked about the facilities master plan, depending on the technology you could be looking at five acres or looking at one acre. When staff is looking at the next step, how will this be approached?

Rob Livick responded there will be a basic footprint for the treatment facilities and surrounding facilities. If the treatment facility moves out to Rancho Colina the corp yard will be moved, so there will be a fairly good size footprint and will probably err to the side of a little bit larger than what it will actually be.

Richard Sadowski reiterated the need to have measuring devices for discharges into this facility and developing and promoting a community outreach plan.

Rob Livick stated rate consultant, Bartle Wells, will present an initial rate analysis for water and sewer at the Public Works Advisory meeting on January 29, 2015 and then it will be presented to City Council on February 24, 2015 with anticipated new rates to be in place on July 1, 2015.

John Rickenbach stated he will be working with staff, Council and the Committee to provide a program including cultural resources, biological, geotechnical, financing and reclamation for short and long term issues.

E. ADJOURNMENT

The meeting adjourned at 4:25 p.m. to the next regular WRFCAC meeting at the Community Center, Multi-Purpose Room, 1001 Kennedy Way, on Wednesday, February 11, 2015 at 3:00pm.

Bill Woodson, Vice-Chairperson

ATTEST:

Rob Livick, Secretary



AGENDA NO: C-1

MEETING DATE: February 11, 2015

Staff Report

DATE: February 6, 2015
TO: Water Reclamation Facility Citizens Advisory Committee
FROM: Rob Livick, PE/PLS - Public Services Director/City Engineer
SUBJECT: Review of DRAFT Memorandum of Understanding between the City of Morro Bay and Cayucos Sanitary District

RECOMMENDATION

Staff recommends the WRFCAC review and provide any comments to staff regarding the DRAFT MOU that will be forwarded to Council prior to their discussions with the Cayucos Sanitary District at the March Joint Meeting.

ALTERNATIVES

No alternatives are recommended.

FISCAL IMPACT

The estimated cash flow needs are approximately \$2 million in 2015/2016 and \$2.7 million in 2016/2017 in order to complete the Facilities Master Plan, Environmental Review and preparation of the bridging documents (30-percent design) so the project that can be put out for an alternative delivery method, i.e. design build by late 2017. A water and sewer rate study is currently in progress in Morro Bay and to achieve success in the project, sewer rates will need to be increased to meet this cashflow need.

BACKGROUND/DISCUSSION

This item was discussed at the January 8, 2014 Joint meeting of the Morro Bay City Council and the Cayucos Sanitary District. The City Manager emphasized four key items for that need to be brought forward to the next joint meeting:

- Joint agency project goals
- Prepare the "Agreement for Now" between the City and CSD
- Prepare the framework and options for the future governance/relationship between the City and CSD
- Prepare a framework and outline of the MOU with the Rancho Colina property owner for potential property negotiations.

The attached DRAFT MOU addresses the "Agreement for Now" and sets the Stage for the future governance.

ATTACHMENTS

1. DRAFT MOU

Prepared by: RL Dept. Review: RL

City Manager Review: _____

City Attorney's Review: _____

**MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF MORRO BAY
AND
THE CAYUCOS SANITARY DISTRICT FOR THE PRELIMINARY DEVELOPMENT
OF A NEW WATER RECLAMATION FACILITY ON THE PROPOSED RANCHO
COLINA SITE**

This **MEMORANDUM OF UNDERSTANDING (this MOU)** is hereby made and entered into this 11th day of February, 2015 by and between the City of Morro Bay, a municipal corporation, (CMB) and the Cayucos Sanitary District (CSD) [formed and operating under the authority set forth in _____] (sometimes referred to individually as the Party and collectively as the Parties).

WHEREAS, CMB has completed and approved a New (Regional) Water Reclamation Facility (WRF) Preliminary Planning and Siting Study for the replacement of the existing wastewater treatment plant located in the City of Morro Bay with a New WRF initially proposed to be located at the site known as Rancho Colina (sometimes referred to as the Project); and

WHEREAS, the State of California Water Board desires entities to cooperate regionally where feasible for the beneficial treatment of wastewater to effect economies of scale and reduce discharge of waste materials into the waters of the State; and

WHEREAS, on February 25, 2014, the CMB City Council resolved to have a WRF operational prior to the expiration of the discharge permit for the existing Waste Water Treatment Plant (WWTP), being five years more or less;

WHEREAS, the Parties currently share the capacity of the WWTP with CMB using 72% and CSD using 28% (the Current Capacities); and

WHEREAS, the Morro Bay community has provided input on the New WRF project through goal setting designating project goals, including, but not limited to:

- Produce tertiary, disinfected wastewater in accordance with Title 22 requirements for unrestricted urban irrigation in a cost effective manner for all ratepayers.
- Design to be able to produce reclaimed wastewater for potential users, which could include public and private landscape areas, agriculture, or groundwater recharge. A master reclamation plan should include a construction schedule and for bringing on customers in a cost effective manner.
- Allow for onsite composting
- Design for energy recovery
- Design to treat contaminants of emerging concern in the future
- Design to allow for other possible municipal functions
- Ensure compatibility with neighboring land uses; and

WHEREAS, CMB and CSD have been operating under a Joint Powers Agreement (JPA) for the operation of the existing WWTP located in the City of Morro Bay on Atascadero Road

since June 16, 1953, as amended by letters on May 9, 1969 and June 26, 1973; and cancelled and replaced with the current agreement on October 25, 1982; and

WHEREAS, the existing JPA agreement does not consider, outline, or guide, CMB and CSD in their relationship, obligation, or responsibility to develop a plan for the proposed construction of a New WRF at the Rancho Colina site to the benefit of both communities; and

WHEREAS, CMB and CSD have come together to collaborate and to make and develop a plan for the proposed construction of a New WRF at the Rancho Colina site to the benefit of both communities; and

WHEREAS, CMB and CSD believe wastewater generated in both communities will be more advantageously treated at the New WRF proposed to be located at the Rancho Colina site that ultimately will be owned and operated by CMB; and,

WHEREAS, prior to making a final decision to proceed with the New WRF, including making a final determination as to the location of the New WRF, CMB, the lead agency for purposes of California Environmental Quality Act (CEQA) must first complete and approve or certify all legally required environmental analysis under CEQA; and,

WHEREAS, CMB and CSD anticipate at least some of the funding for this project will be provided through federal grants or other federal financing programs and one or more federal permits may be required for this project, which shall constitute federal undertakings requiring environmental review in compliance with the National Environmental Policy Act prior to release of federal funding and/or issuance of federal permits.

NOW THEREFORE, in consideration of the mutual covenants herein contained, the Parties agree as follows:

- 1) **Description of the Project.** The Project is proposed to include the New WRF and related infrastructure to convey (i) municipal sewage to the new WRF from the terminus of CMB's and CSD's existing facilities, including a new raw wastewater pumping station and (ii) treated wastewater to points of discharge into the waters of the State or for beneficial reuse within legally authorized areas. Conveyance infrastructure and facilities may be located within existing or future rights-of-way.
- 2) **Components of the New WRF Project subject to this MOU.** Immediately following execution of this MOU the project team shall commence with the following tasks:
 - Preparation of an RFP and selection of consultant(s) to act as Project Manager
 - Selection of consultants to perform fatal flaws analysis for the following areas:
Biological Resources, Cultural Resources, Geotechnical and Groundwater
 - Application for a State Revolving Fund Planning Loan
 - Preparation of an RFP for the Facility Master Plan (FMP)
 - Preparation of an RFP for Environmental Review (ER) (CEQA/NEPA)
 - Selection of FMP and ER consultants

- Preparation of the FMP
- Preparation and circulation of the Initial Study for the project based on the results of the FMP

3) Development of Initial Stage (Reclamation Ready). The Project shall be developed in stages and the initial stage (Reclamation Ready) shall be developed on a timeline necessary to meet the goal of CMB. The design capacity of the New WRF and necessary conveyance infrastructure and facilities shall accommodate the peak wet weather build-out wastewater flows from both communities with CMB owning 100% of the capacity and CSD having rights to a capacity equal of its share of the Current Capacity.

4) Roles and Responsibilities

- a) CSD and CMB shall reimburse each other for all expenses incurred for the development of the New WRF facilities incurred since January 8, 2013 proportional to their respective anticipated capacity (72%CMB share/28% CSD share basis) in the new WRF.
- b) The CSD agrees to support and not oppose grant or loan applications, permit amendments or applications, including land use entitlements or annexation requests, in conjunction with the Project.
- c) The CMB Public Works Director/City Engineer with the assistance of CMB planning, engineering and operations staff will oversee the FMP, ER and preliminary property acquisition process. The CMB Public Works Director/City Engineer shall consult with CSD General Manager for review and to provide opportunity for CSD's input into the process. CMB and CSD staff will hold monthly meetings to review the progress of the Project.
- d) CMB City Council and CSD Board of Directors shall provide policy direction for the Project and shall meet at least quarterly to review the status of the Project, and provide any necessary policy direction, as well as needed to ensure CSD's concerns have been heard and considered prior to CMB making any final decisions as to all matters related to the development and construction of the New WRF. Council/Board of Directors meetings related to this MOU shall be separate and distinct meetings from the existing joint meetings.
- e) The ultimate operation and ownership of facilities shall be the responsibility of CMB. CSD shall be a wholesale wastewater customer. The details and terms of that relationship is beyond the scope of this MOU and shall be negotiated, in good faith, by the Parties to this MOU with the goal of achieving an agreement executed on behalf of both Parties prior to the execution of a construction or Design/Build contract by CMB for the new WRF and ancillary infrastructure and facilities.
- f) CSD shall share the cost with CMB for the items listed in section 2 for the Project. That cost sharing shall be based on the Current Capacities. At a minimum, the Facilities Master Plan report shall address project phasing, treatment methodology and anticipated project costs.
- g) Consultant Selection process shall follow all policies of CMB. CSD shall have the express right to participate and provide input in selection process of consultant firm(s) required to fulfill the items in paragraph 2 and possible final design phases of the Project.

- h) CMB and CSD agree to disseminate information to the public regarding this MOU and the Project jointly, whenever feasible, and will support and assist each other in developing and implementing their respective public information programs.
- i) For purposes of environmental review under the CEQA, CMB shall be the lead agency and CSD shall be a responsible agency. Furthermore, for purposes of any environmental review required for federal funding or permits, CMB shall be the primary contact with any federal agencies conducting any environmental review under the National Environmental Policy Act or any other federal laws or regulations.
- 5) **Termination of this MOU.** This MOU shall expire at the earliest of (i) when the Parties enter into the agreement as discussed in subparagraph 4e, or (ii) June 30, 2016. Notwithstanding the above, this MOU may be extended by written agreement of CMB and CSD. If the time needed for the study of the Project extends beyond the expected timeline set forth herein, then the Parties agree to reasonably negotiate an amendment to this MOU.
- 6) **Modifications.** Modifications within the scope of this MOU shall be made by mutual consent of the Parties, by the issuance of a written modification, signed and dated by both Parties, prior to any changes being performed.

IN WITNESS WHEREOF, the Parties hereto have executed this Memorandum of Understanding to be effective as of the Effective Date.

APPROVED:

CITY OF MORRO BAY

ATTEST:

JAMIE L. IRONS, Mayor

DANA SWANSON, Deputy City Clerk

CAYUCOS SANITARY DISTRICT

ATTEST:

ROBERT ENNS, President of the Board
of Directors

RICK KOON, District General Manager

APPROVED AS TO FORM:

JOSEPH W. PANNONE, Morro Bay City Attorney

_____, District Legal Counsel



AGENDA NO: C-2

MEETING DATE: February 11, 2015

Staff Report

DATE: February 6, 2015
TO: Water Reclamation Facility Citizens Advisory Committee
FROM: Rob Livick, PE/PLS – Public Services Director
SUBJECT: Presentation of Preliminary Water and Sewer (Wastewater) Rate Study

RECOMMENDATION

Staff recommends the WRFCAC receive a presentation on the Water and Sewer Rate Study and provide comments to Staff prior to the City Council study session on February 24, 2015.

FISCAL IMPACT

Both the water and wastewater funds have upcoming required future expenses for which the current rate structures will not provide adequate funding. Additionally, the current rate structures of both revenue streams do not produce adequate funds to meet debt coverage ratios. This study recommends rate structures to correct this fiscal imbalance.

BACKGROUND

The community's water and wastewater rates structures are currently both related to water consumption: water based upon direct meter readings and wastewater upon estimates of what portion of water delivered is "returned" to the wastewater system. Wastewater rates also incorporate the constituents that the various types of customers add to the wastewater stream, such as detergents from laundry businesses and/or food products from restaurants. These higher strength wastewater streams require more treatment than residential strength wastewater and thus have higher rates for treatment.

Water Rates

In advance of setting the water rates in 1994, the City Council considered a number of different types of rate structures, including a flat rate (each billing unit costs the same), a multi-tiered system (flat rate for fixed costs plus variable rate for water delivered) and an inverted block rate (each successive billing unit costs more than the previous unit). The water rate philosophy adopted by the City Council was a version of the inverted block rate. This system's primary characteristic is that it provides for incentives for water conservation but it also provides that higher volume customers effectively pay a significantly higher unit cost for water for which the City pays a flat rate (i.e., State Water at \$1500 +/- per acre foot).

The water rate structure has been in place unchanged since that time, with the exception of the rate reduction program which we can no longer offer due to Prop 218. During that same time, operational expenses have increased more than 200%. Additionally, there may be different strategies in a rate structure to encourage

Prepared By: RL Dept Review: RL

water conservation in accordance with the City's adopted 2010 Urban Water Management Plan and State Requirements. For the past four fiscal years, the City has not met its obligation to the State Water project for the debt coverage ratio. The City is required to earn/charge monies through rate payers so that the amount taken in is 1.25 times more than the amount required for operational expenses. Currently, this debt coverage ratio is only at 0.74 times the amount needed. Additionally, there are capital project needs within the system that are necessary to maintain a safe and dependable water supply, including the following major Capital projects: Desalinization Plant upgrades and replacement of the Nutmeg Water Tank. In addition to these major capital projects there are a host of smaller "maintenance" type projects whose costs are not insignificant. These projects include pump replacements, valve replacements and water meter replacements among other maintenance projects.

Wastewater Rates

The wastewater rate schedule underwent a similar consideration when it was originally adopted in the early 1980's based upon both community philosophical desires and Wastewater Treatment plant (WWTP) upgrade grant requirements. The adopted rate schedule is a multi-tiered system for residential customers with a flat rate component from 0 – 10 water billing units, which recovered fixed costs for both the Collection System and the WWTP and a variable component based upon usage above that amount and the constituents of the residential wastewater stream.

The most recent increase occurred in October 2007, where the City Council adopted a schedule of wastewater rate increases to fund the construction of the wastewater treatment plant at the current site. This rate increase looked more closely at the residential and commercial categories and initially provided a 50% commercial and residential increase and a subsequent 7.25% annual commercial and 5% annual residential increase. This current rate schedule for increases ends in one year as Proposition 218 requires a new vote every five years for succeeding rate increases.

Due to events that have occurred since that adopted increase, including the denial of the Coastal Development Permit for the wastewater treatment plant at the current location and the community's desire to construct a new Water Reclamation Facility away from the coast, the assumptions used in the 2007 rate increase are no longer adequate. In late 2010/early 2011, finance staff worked with RBC Capital to verify debt service coverage in anticipation of entering into a State Revolving Fund loan, and discovered our revenues in excess of our expenditures were insufficient to meet debt coverage ratios.

The most recent work on the New Water Reclamation Facility provides us with a planning level estimate for the development, permitting and construction of a new WRF at approximately \$75,000,000. While we do not have a final estimated construction cost; it will behoove the City to point the wastewater rates in the direction of developing this facility.

DISCUSSION

This draft report by Bartle Wells Associates establishes new water and wastewater rate structures that are needed to fulfill the Operation and Maintenance needs along with future Capital construction requirements. These rates are phased in over the next five years. For the typical residential water user (5 Billing Units per month) the combined water and wastewater bill will increase from \$73.17/month to \$98/month in July 2015 and ultimately to \$151.40 in 2020. Commercial customers will see a similar rate increase, but based on customer class and water use for wastewater. The significant changes include adding a base fee to water, reducing the water billing tiers to four and charging for each unit of water, a flat wastewater fee for residential and reducing the number of customer classes for wastewater. Additional analysis will be presented at your next meeting regarding miscellaneous fees and connection charges.

CONCLUSION

Based on the projected needs for the maintenance of our water and wastewater systems system, the relocation and construction of the water reclamation facility as well as continued maintenance of our current wastewater treatment plant and other capital demands; along with the need to increase the debt coverage ratio to the minimum required amounts, the City needs to increase revenues to its Water and Wastewater funds. The only mechanism to increase revenue to these enterprise funds is to increase rates. In addition to rates the City's consultant is looking at other miscellaneous charges. This was presented to the Public Works Advisory Board (PWAB) at its special meeting on January 29, 2015 and continued discussion of the matter will occur at its February 19, 2015 PWAB meeting before being presented to the City Council at its February 24, 2015 study session.

ATTACHMENT

Water & Sewer Rate Studies - Draft Tables 1-27-2015

City of Morro Bay



Water & Sewer Rate Studies

Draft Tables 01/27/15



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS



City of Morro Bay

Water & Sewer Rate Study Key Issues

Background

- The City of Morro Bay is located on the Central California coast in San Luis Obispo County, about 12 miles northwest of the City of San Luis Obispo. The City has a population of approximately 10,300. The City was incorporated in 1964 and is governed by a 5-member City Council. Council Members are elected at-large from the community for 4-year terms on alternating even years.
- The City provides water and wastewater services to its residents. Both water and sewer utilities are facing major financial challenges in upcoming years that will require substantial rate increases.
 - Water rates have not been increased in almost 20 years and the water utility is operating in deficit mode with an anticipated budget deficit of over \$900,000 in the current fiscal year. Additionally, the City needs to fund a number of near-term water system capital improvements to address deficiencies and improve reliability, and faces long-term challenges regarding its water supply.
 - The biggest challenge facing the sewer enterprise is the requirement to build a new wastewater treatment plant at an estimated cost of almost \$75 million over the next four years. Additional funding is needed for repair and rehabilitation of various components of the City's aging sewer collection system.
- *The preliminary draft financial and rate projections attached are for discussion and input only at this stage. Final recommendations will be developed incorporating input received from the City's Public Works Advisory Board, City Council, staff and the public.*

Financial Plan & Rate Study Objectives

- In 2014, Bartle Wells Associates (BWA) was retained to develop water and sewer rate studies and update various water and sewer charges. Key objectives of the rate studies are to recommend water and sewer service charges that are adequate to fund future operating and capital needs of each utility. Key elements of the rate study include
1. Develop 10-year water and sewer enterprise financial projections to determine annual revenue requirements

2. Incorporate the latest available financial information and estimates of future operating and capital funding needs
 3. Evaluate financing alternatives for the City's water and wastewater capital improvement programs including construction of a new Water Reclamation Plant.
 4. Develop water and sewer rates that:
 - a. Recover the City's costs of providing service and support long-term financial stability
 - b. Provide adequate funding for capital needs including long-term infrastructure repairs and replacements
 - c. Comply with the legal requirements of Proposition 218
 5. Aim for gradual annual rate increases, to the extent possible, to help minimize the annual impact on customers
 6. Pursue low-cost financing alternatives for required debt financing
 7. Maintain a prudent level of fund reserves
-

WATER FINANCIAL PLAN & RATE STUDY

Water Finances & Rates



- The City's water utility is a financially self-supporting enterprise.
 - Water rates are the main source of revenues and currently account for approximately 98% of total revenues.
 - Water rates should be set at levels adequate to fund the cost of providing service, including long-term operating and capital needs, and support the enterprise's long-term financial stability.
- Water rates were last increased in 1995 and have not been adjusted in almost 20 years. Adjusted for inflation, water rates are about 36% lower than they were in 1995. With hypothetical 3% annual rate escalation since 1995, the City's water rates would now be approximately 75% higher than they currently are.
- The water enterprise is now operating in deficit mode with a projected budget deficit of over \$900,000 in the current fiscal year.
- The City is out of compliance with debt service coverage covenants related to its share of payments for the Central Coast Water Authority's Series 2006A Revenue Bonds. The City

has legally covenanted to raise water rates and charges as needed to generate Net Revenues – revenues remaining after funding the City’s water operating expenses -- adequate to fund 125% of the City’s total state water contract payments, including the bond payments and other contractual funding requirements payable to the San Luis Obispo County Flood Control and Water Conservation District, the local State Water Contractor.

- The water enterprise had approximately \$2.6 million in reserves as of June 30, 2014. However, the City anticipates drawing down fund reserves during the current fiscal year, to levels slightly below prudent minimum targets.
- The monthly water bill for a typical single family home using 6 hundred cubic feet (hcf) of water per month, equal to a little under 150 gallons per day (gpd), is \$33.20 or slightly over \$1 per day. The City’s typical residential water bills are in the lower-middle range compared to other regional agencies and were the fourth lowest of 12 agencies surveyed.
- The City’s current water rates include both a fixed monthly charge of \$16.43 plus water quantity charges that gradually escalate from \$5.56 for the fourth unit of metered water use per month to \$13.68. The first three units of water are provided with the fixed charge, at no additional cost. All customer pays according to the same rate schedule.

Financial Challenges

The City’s water enterprise faces a number of financial challenges in upcoming years that are putting upward pressure on rates. Key challenges include:

- **Eliminate Budget Deficits and Restore Financial Stability**
 - With almost 20 years of no rate increases, the water enterprise has been slowly starved of funds resulting in current budget deficits. The budget deficit for the current fiscal year is projected at over \$900,000. Rate increase are needed to restore financial stability and eliminate annual deficits.
- **Repair & Replacement of Aging Facilities**
 - The City’s water system capital improvement program identifies approximately \$9 million (current \$) of funding needs over the next 10 years, including \$6 million (current \$) of capital needs over the upcoming five years. Projects include adding storage for fire flow and reliability, repairing and improving the City’s water desalination facility, and repairing/replacing aging water distribution pipelines. Many of the City’s pipelines are over 50 years old and are approaching the end of their useful lives.

- The City plans on constructing a “reclamation ready” wastewater treatment plant over approximately the next four years. In addition to the capital needs of the existing water system, the City anticipates funding some form of a recycled water system to facilitate use of the reclaimed/recycled water to help support long-term reliability and sustainability of the City’s water supply. The financial projections include financing for a \$10 million (current \$) recycled water project starting 2020/21, after completion of the wastewater treatment plant.
- Accounting for 3% construction cost inflation, water capital improvements are projected to total approximately \$22 million over the next decade.

➤ **Reduced Water Sales**

- Water sales have decreased in recent years. Average annual water sales from the past three fiscal years are about 7% lower than the average from the prior three years. Additional reductions in water sales are anticipated due to customer response to projected substantial rate increases.
- Reduced levels of water use result in a reduction of water sales revenues, which in turn puts upward pressure on water rates. However, customers who conserve will end up purchasing fewer units of water which helps mitigate the impact of higher unit charges.

➤ **Operating Cost Inflation**

- Annual rate increases are needed to keep revenues in line with ongoing operating cost inflation. Cost inflation for water & wastewater utilities (whose costs are largely related to labor and capital) has historically been higher than CPI, which is more of a measure of urban goods and services.

Financial Projections

- BWA developed 10-year financial projections to evaluate annual revenue requirements and project water rate increases. The projections were based on reasonable and slightly conservative assumptions including:
 - o Operating cost projections are based on the 2014/15 Budget
 - o Operating cost inflation is projected at 4% per year for planning purposes
 - o The projections assume a relatively low growth scenario of 10 new single family homes or equivalent units per year

- To account for customer response to rate increases, water sales projections account for elasticity estimated at -0.15; each 10% increase in rates results in a 1.5% decrease in water sales.
- Includes funding for the water system capital improvement program with 3% construction cost inflation. Due to the extent of near-term funding needs, the projections assumes the City issues debt to finance \$3.5 million of capital improvement projects in 2015/16. BWA recommends the City pursue a subsidized loan from the California Infrastructure and Economic Development Bank, commonly known as the “I-Bank”, for these funding needs.
- Assumes the City funds the future recycled water system via a Clean Water State Revolving Fund (SRF) loan. The SRF financing program currently offers 20 or 30-year loans with interest rates below 2%. For planning purposes, the projections assume a 30-year SRF loan with a 3% annual interest rate.
- Includes new operating costs for the recycled water system projected at \$300,000 (escalated \$) starting 2022/23.
- A minimum fund reserve target for planning purposes is recommended at 25% of annual operating expenses, plus \$1 million for emergency capital reserves. It is acceptable for reserves to temporarily drop below these levels provided the City has taken action to achieve the targets over the longer run.

Draft Rate Projections

- Cash flow projections indicate the need for substantial water rate increases over the next five years.
- Deferring or reducing necessary rate increases in the near-term would result in the need for higher rate increases in future years (and vice versa)
- With the proposed rate increases, the City’s water rate are expected to end up in the middle to upper-middle range compared to other regional agencies. A number of other regional agencies are also anticipating water rate increases in upcoming years.
- For a typical single family home using 6 hcf of water per month, the maximum proposed rates for the next five years will equal the City’s 1995 rate escalated at the annual rate of slightly over 3.3% through 2019/20.
- The financial projections indicate the need for small annual rate increases after the next five years. Small future annual rate adjustments are recommended keep revenues in line with operating cost inflation and help minimize the potential for future rate spikes.

Water Rate Structure

- All water customers currently pay both a fixed monthly charge of \$16.43 plus water quantity charges that gradually escalate from \$5.56 starting with the fourth unit of metered water use per month to \$13.68. The first three units of water are provided with the fixed charge, at no additional cost. The fixed charge is roughly equal to the City's lowest rate per unit of water applied to the first three units of unbilled water.
- Under the current rate structure, low-use customers and second homes benefit from both a) fixed charges that are disproportionately low compared to fixed expenses, and b) no charges for the first three units of monthly water use. Over 35% of annual bills are for three units of water or less.
- BWA developed draft rates with the following modifications to the rate structure
 - Water quantity charges are gradually phased in for the first three units of currently-unbilled water from \$2 per unit starting 2015/16 and escalating at \$1 per year to \$6 per unit in 2019/20.
 - Fixed monthly charges recover approximately one-third of total rate revenues in 2019/20, very slightly higher than current fixed revenue recovery which is estimated at a little over 30%. While the fixed charges are disproportionately low compared to the City's fixed expenses, this level of fixed revenue recovery is in line with industry norms and conservation-oriented rates.
 - Proposed draft water quantity rates transition to a four-tiered inclining rate structure. Under the draft proposed rate structure, customers would first purchase water in the lowest tier before purchasing water in successive higher tiers as use increases. Due to a transition in rate structure, billing impacts will vary based on water use.

SEWER FINANCIAL PLAN & RATE STUDY

Sewer Finances & Rates



- The City's sewer utility is a financially self-supporting enterprise.
 - Sewer rates are the main source of revenues and currently account for approximately 98% of total revenues.
 - Sewer rates should be set at levels adequate to fund the cost of providing service, including long-term operating and capital needs, and support the enterprise's long-term financial stability.
- The City has gradually increased sewer rates every year since at least 1998. Since 2008, the City has adopted 5% annual rate adjustments each year. These rate increases have supported the financial stability of the sewer utility and put the enterprise in decent financial position to address its financial challenges with substantial, but gradual, rate increases.
- The sewer enterprise had approximately \$3.1million in reserves as of June 30, 2014. However, the City anticipates drawing down over \$1 million of fund reserves during the current fiscal year on preliminary costs related to the new Water Reclamation Facility. The City anticipates that these costs will be reimbursed by future SRF financing.
- The monthly sewer bill for a typical single family home is \$45.59 or slightly over \$1.50 per day. The City's residential sewer bills are in the middle range compared to other regional agencies.

Financial Challenges

The City's sewer enterprise faces a number of financial challenges in upcoming years that are putting upward pressure on rates. Key challenges include:

- **Funding a New \$75 Million Water Reclamation Facility**
 - Based on engineering and financial evaluation of key alternatives, the City anticipates moving forward with design and construction of a new \$75 million wastewater treatment plant at the Rancho Colima site. This facility will replace the existing treatment plant jointly owned by the City and Cayucos Sanitary District. The new treatment plant will be a "reclamation ready" facility designed to meet current and future permit requirements.
 - A City anticipates pursuing a design-build process with a) \$10 million of design, environmental, and other preliminary costs needed through the end of fiscal year

2016/17, and b) almost \$65 million in funding needed during a 2-year construction phase starting 2017/18.

- The City anticipates fully funding the facility with a low-rate Clean Water State Revolving Fund Loan. Annual debt service is projected at a little under \$4 million per year starting 2019/20, the year after the project is complete. In order to provide interim funding for design and other preliminary costs leading up to construction, the City should pursue an SRF Planning Loan, which can subsequently be rolled into the long-term construction financing agreement.
- The City anticipates that Cayucos Sanitary District will fund 25% to 30% the costs of the new facility either as a partner or customer. For planning purposes, the financial projections assume Cayucos SD funds 25% of annual debt service for the new facility.

➤ **Repair & Replacement of Aging Facilities**

- The City's sewer system capital improvement program identifies approximately \$10 million (current \$) of funding needs over the next 10 years, including \$7.6 million (current \$) of sewer collection system rehabilitation and upgrades over the upcoming five years. Many of the City's sewer pipelines are over 50 years old and are approaching the end of their useful lives. The City anticipates funding these projects on a pay-as-you-go cash basis.
- In anticipation of a new wastewater treatment plant, the City has deferred a number of capital improvements needed at the existing treatment plant. Some of these projects can no longer be deferred and are needed to ensure continued safe and reliable operations and compliance with the City's waste discharge permit. The City anticipates funding about \$2.3 million of major maintenance and repair projects at the existing treatment plant over the current and subsequent three fiscal years. The City anticipates funding these projects on a pay-as-you-go cash basis with Cayucos SD contributing 25% of project costs.

➤ **Operating Cost Inflation**

- Annual rate increases are needed to keep revenues in line with ongoing operating cost inflation. Cost inflation for water and wastewater utilities (whose costs are largely related to labor and capital) has historically been higher than CPI, which is more of a measure of urban goods and services.

Financial Projections

- BWA developed 10-year financial projections to evaluate annual revenue requirements and project sewer rate increases. The projections were based on reasonable and slightly conservative assumptions including:
 - Operating cost projections are based on the 2014/15 Budget
 - Operating cost inflation is projected at 4% per year for planning purposes
 - The projections assume a relatively low growth scenario of 10 new single family homes or equivalent units per year
 - Sewer revenue projections account for a small decline in volumetric sewer sales in response to water and sewer rate increases.
 - Assumes the City funds the proposed new \$75 million Water Reclamation Facility via a Clean Water State Revolving Fund (SRF) loan. The SRF financing program currently offers 20 or 30-year loans with interest rates below 2%. For planning purposes, the projections assume a 30-year SRF loan with a 3% annual interest rate. The projections assume that Cayucos Sanitary District pays 25% of the debt service.
 - A minimum fund reserve target for planning purposes is recommended at 25% of annual operating expenses, plus \$1 million for emergency capital reserves. It is acceptable for reserves to temporarily drop below these levels provided the City has taken action to achieve the targets over the longer run.

Draft Rate Projections

- Cash flow projections indicate the need for substantial sewer rate increases over the next five years. Monthly single family residential sewer charges are projected to steadily increase from the current level of \$45.59 to \$83.00 over the next five fiscal years.
- Deferring or reducing necessary rate increases in the near-term would result in the need for higher rate increases in future years (and vice versa)
- The financial projections indicate the need for small annual rate increases after the next five years. Small future annual rate adjustments are recommended keep revenues in line with operating cost inflation and help minimize the potential for future rate spikes.

Sewer Rate Structure

- The City's current residential sewer rate structure includes a fixed charge of \$45.59 per month per account, plus a volumetric charge of \$4.07 applied to metered water use over 10 hcf for single family homes and apartments, and over 3 hcf for condos. Non-residential accounts pay volumetric rates that vary based on customer type subject to a minimum monthly charge of \$51.77.
- BWA developed draft rate projections based on a cost-of-service approach. The draft rate projections include a number of relatively minor rate structure modifications including:
 - Residential rates are revised to include fixed monthly charges per dwelling unit only and eliminate the additional volumetric charges levied on water use over the monthly allowance. Only a small amount of revenues are currently generated by the volumetric charges, and they may be recovering charges for outdoor water use that does not get returned to the sewer system.
 - Under the proposed residential rates, multi-family residential units and condominiums would pay reduced charges equal to 80% of the single family charge based on analysis of water use data.
 - Although the City's non-residential rates list 18 customer classes, these customers are billed only five different sewer rates. The proposed rates continue to include five rate classes, with each class defined based on wastewater strength (Low, Domestic, Moderate, Mod-High, and High Strength).
 - Two commercial customer classes are reclassified based on wastewater strength:
 - Mobile home parks, which currently pay volumetric commercial sewer rates (not residential rates per dwelling unit), are reclassified from Class A – Low Strength to Class B – Domestic Strength.
 - The City's single retirement homes with dining is reclassified from Class D – Mod-High Strength to Class C – Moderate Strength.
 - New rates were developed based on updated cost allocations and wastewater strength estimates for each customer class. Rate adjustments from current rates to proposed maximum rates in 2019/20 were phased in over five years for each rate class. Under the proposed draft rates, each non-residential rate category increases by roughly the same dollar amount (not the same percentage amount) over the next five years.
 - The minimum non-residential sewer charge is revised from being higher than the current fixed residential charge, to the reduced flat monthly charge proposed for multi-family residential accounts, equal to 80% of the single family rate.

OTHER RECOMMENDATIONS



Debt Financing Recommendations

- BWA strongly recommends the City pursue funding from the Clean Water State Revolving Fund Financing Program to finance the new Water Reclamation Facility and subsequent recycled water project.
 - The SRF financing program offers low-rate loans with 20 to 30 year repayment terms and interest rates currently below 2%. Interest rates are based on approximately half the average interest rate of the most recent California state general obligation bond issuance.
 - Debt service on SRF loans is not due until one year following the project's certified completion date.
 - In recent years, the SRF program has been requiring agencies to establish a debt service reserve fund equal to annual debt service.
 - The SRF program also typically requires agencies to maintain annual net revenues (gross revenues less operating expenses) equal to at least 1.10x of annual debt service, although some agencies may be required to maintain a 1.20x debt service coverage ratio.
 - Prior to award of funding, the SRF program requires agencies to adopt rates adequate to support debt repayment and achieve the required debt service coverage ratio.
 - The SRF financing program does not provide a final funding commitment until after the project has been designed and bid out in compliance with SRF specifications. Agencies can subsequently seek reimbursement for preliminary design and other soft costs incurred prior to construction award.
 - Due to the need for approximately \$10 million of funding for preliminary engineering, design, and other soft costs leading up to construction of the proposed Water Reclamation Plant, BWA recommends the City pursue an SRF Planning Loan to help fund these costs. If awarded, repayment of SRF planning loans can be rolled into the long-term SRF project loan.
 - During construction, agencies fund ongoing construction invoices and can subsequently seek monthly reimbursement from SRF. However, the City needs to be prepared to fund a few months of project expenditures due to the lag in reimbursements. BWA has

assisted agencies in obtaining a competitively-bid line of credit in cases where agencies have not had adequate fund reserves to meet the cash flow needs of their SRF projects.

- BWA also recommends the City submit an inquiry form to the California Financing Coordinating Committee to identify if the City is eligible for subsidized funding from other various state and federal financing programs, such as the California Infrastructure and Economic Development Bank (I-Bank), for its debt financing needs.

Proposition 218 Rate Increase Process

- In order to increase rates, the City must comply with the procedural requirements of Article 13D, Section 6 of the California Constitution, which was established by Proposition 218. These requirements require the City to:
 - o Mail a notice of to all affected property-owners informing them of a) the proposed rate increases, b) the basis for increases, and c) the date, time, and location of a Public Hearing at which the proposed rates will be considered for adoption.
 - There are differing legal opinions regarding who agencies must mail the required notice too. Many agencies mail notices to all affected property owners only, some mail to both property owners and tenant ratepayers responsible for paying the bill, and a few agencies only send the notice to ratepayers. However, in case of delinquency, agencies are only allowed to place a lien on the property if the notice was mailed to the property owner.
 - BWA recommends the notice go beyond the minimum legal requirements and present a clear and concise explanation why the proposed rate increases are needed. Ratepayers are more accepting of rate increases when they understand why the increases are needed.
 - o Hold a Public Hearing on the proposed rate increases not less than 45 days after the notice is mailed. Most agencies schedule the Public Hearing during a regularly-scheduled meeting of their governing body.
 - BWA recommends that the City establish a clear structure for the Board Meeting and Public Hearing in advance to help ensure the process is understandable to the Board and public and goes as smoothly as possible.
 - o At the Public Hearing, the proposed rate increases are subject to “majority protest” and cannot be adopted if written protests are received from more than 50% of affected parcels, with one protest counted per parcel.

- BWA generally recommends agencies take a lenient approach to counting written protests at the Public Hearing to demonstrate a good-faith effort to account for every protest, even if some protests do not include all of the legally-required information.
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Water Financial Plan & Rate Study

Working Draft Tables

Table 1
City of Morro Bay
Current Monthly Water Rates
Effective Since 07/01/1995

Minimum Monthly Charge \$16.43

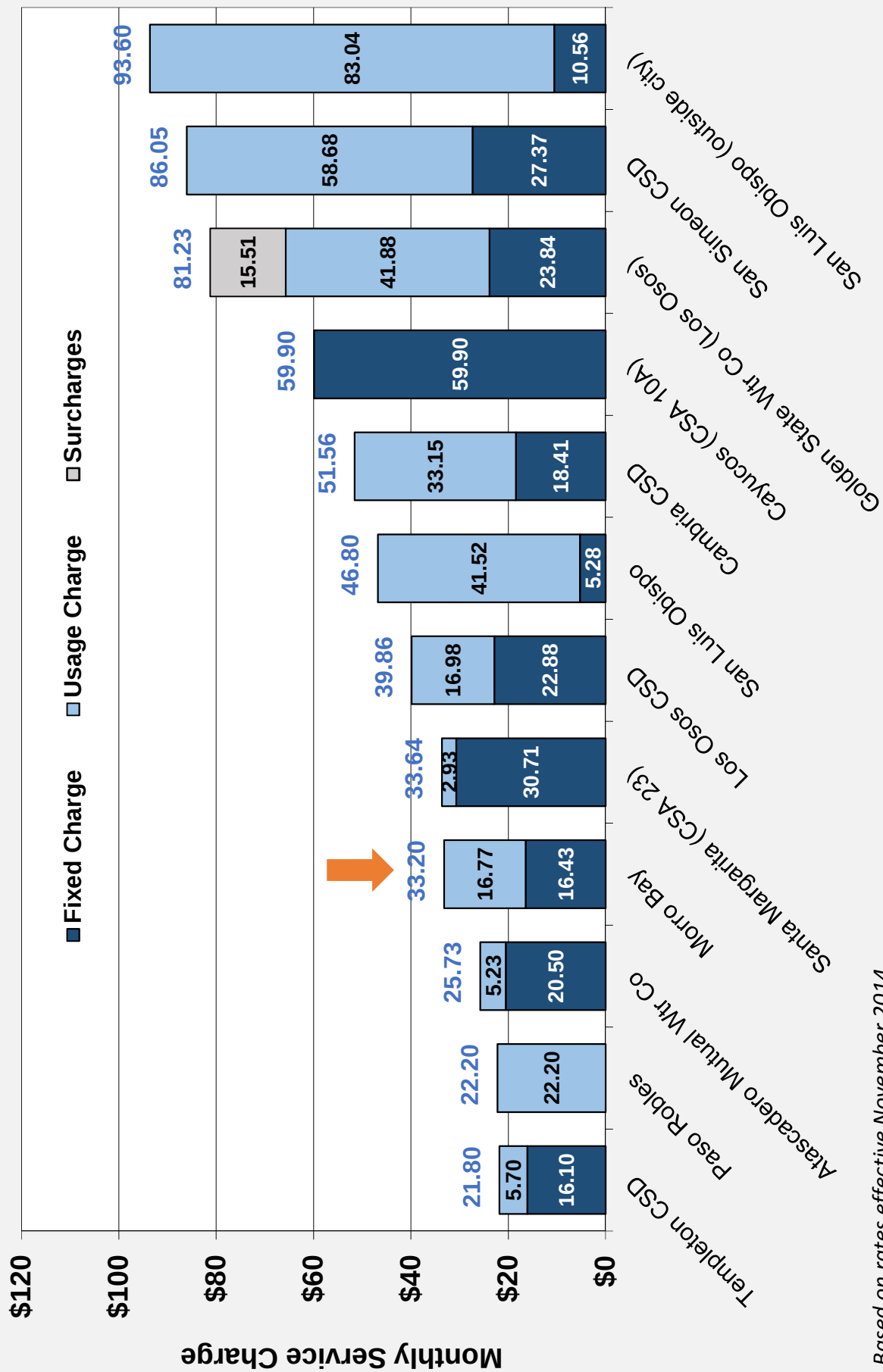
Water Quantity Charges

Water Use (hcf)*	Cost per Unit (\$/hcf)	Change in Cost per Unit	Total Monthly Charge	Water Use (hcf)*	Cost per Unit (\$/hcf)	Change in Cost per Unit	Total Monthly Charge
0	-	-	16.43	36	7.15	0.03	222.09
1	-	-	16.43	37	7.22	0.07	229.31
2	-	-	16.43	38	7.27	0.05	236.58
3	-	-	16.43	39	7.30	0.03	243.88
4	5.56	-	21.99	40	7.36	0.06	251.24
5	5.59	0.03	27.58	41	7.43	0.07	258.67
6	5.62	0.03	33.20	42	7.45	0.02	266.12
7	5.65	0.03	38.85	43	7.52	0.07	273.64
8	5.68	0.03	44.53	44	7.54	0.02	281.18
9	5.71	0.03	50.24	45	7.60	0.06	288.78
10	5.74	0.03	55.98	46	7.64	0.04	296.42
11	5.77	0.03	61.75	47	7.66	0.02	304.08
12	5.80	0.03	67.55	48	7.72	0.06	311.80
13	5.83	0.03	73.38	49	7.76	0.04	319.56
14	5.86	0.03	79.24	50	7.81	0.05	327.37
15	5.89	0.03	85.13	51	7.85	0.04	335.22
16	5.93	0.04	91.06	52	7.87	0.02	343.09
17	5.95	0.03	97.01	53	7.91	0.04	351.00
18	5.98	0.03	102.99	54	7.93	0.02	358.93
19	6.01	0.03	109.00	55	7.99	0.06	366.92
20	6.04	0.03	115.04	56	8.03	0.04	374.95
21	6.13	0.09	121.17	57	8.05	0.02	383.00
22	6.22	0.09	127.39	58	8.09	0.04	391.09
23	6.31	0.09	133.70	59	8.11	0.02	399.20
24	6.37	0.06	140.07	60	8.15	0.04	407.35
25	6.47	0.10	146.54	61	8.17	0.02	415.52
26	6.55	0.08	153.09	62	8.21	0.04	423.73
27	6.61	0.06	159.70	63	8.23	0.02	431.96
28	6.67	0.06	166.37	64	8.30	0.07	440.26
29	6.73	0.06	173.10	65	8.32	0.02	448.58
30	6.83	0.10	179.93	66	8.36	0.04	456.94
31	6.88	0.05	186.81	67	8.35	(0.01)	465.29
32	6.94	0.06	193.75	68	8.39	0.04	473.68
33	7.00	0.06	200.75	69	8.41	0.02	482.09
34	7.07	0.07	207.82	70	8.45	0.04	490.54
35	7.12	0.05	214.94	>70	rates continue escalating to a max of \$13.68		

* 1 hcf = 100 cubic feet = approximately 748 gallons.

Monthly Residential Water Rate Survey

With 6 hcf monthly water use



Based on rates effective November 2014

Table 2
City of Morro Bay
Historical Monthly Water Rates

	07/01/92	07/01/94	07/01/95	07/01/92	07/01/94	07/01/95
Minimum Charge	\$2.93	\$3.96	\$16.43			
Water Quantity Charges						
Water Use (hcf)*	Cost per Unit (\$/hcf)			Total Monthly Charges		
0	-	-	-	2.93	3.96	16.43
1	-	-	-	2.93	3.96	16.43
2	2.96	4.00	-	5.89	7.95	16.43
3	2.99	4.04	-	8.88	11.99	16.43
4	3.01	4.06	5.56	11.89	16.05	21.99
5	3.02	4.08	5.59	14.91	20.13	27.58
6	3.04	4.10	5.62	17.95	24.23	33.20
7	3.06	4.13	5.65	21.01	28.36	38.85
8	3.07	4.14	5.68	24.08	32.51	44.53
9	3.09	4.17	5.71	27.17	36.68	50.24
10	3.10	4.19	5.74	30.27	40.86	55.98
11	3.12	4.21	5.77	33.39	45.08	61.75
12	3.14	4.24	5.80	36.53	49.32	67.55
13	3.15	4.25	5.83	39.68	53.57	73.38
14	3.17	4.28	5.86	42.85	57.85	79.24
15	3.19	4.31	5.89	46.04	62.15	85.13
16	3.20	4.32	5.93	49.24	66.47	91.06
17	3.22	4.35	5.95	52.46	70.82	97.01
18	3.23	4.36	5.98	55.69	75.18	102.99
19	3.25	4.39	6.01	58.94	79.57	109.00
20	3.27	4.41	6.04	62.21	83.98	115.04
21	3.32	4.48	6.13	65.53	88.47	121.17
22	3.36	4.54	6.22	68.89	93.00	127.39
23	3.41	4.60	6.31	72.30	97.61	133.70
24	3.45	4.66	6.37	75.75	102.26	140.07
25	3.49	4.71	6.47	79.24	106.97	146.54
26	3.54	4.78	6.55	82.78	111.75	153.09
27	3.58	4.83	6.61	86.36	116.59	159.70
28	3.61	4.87	6.67	89.97	121.46	166.37
29	3.64	4.91	6.73	93.61	126.37	173.10
30	3.69	4.98	6.83	97.30	131.36	179.93
Max Rate	5.44	7.34	13.68			

Note: Total Charges can differ slightly from rate ordinance due to rounding.

Note: Rates continue to escalate per unit for use over 30 hcf.

City of Morro Bay

Historical Monthly Water Bills

(6 hcf monthly water use)

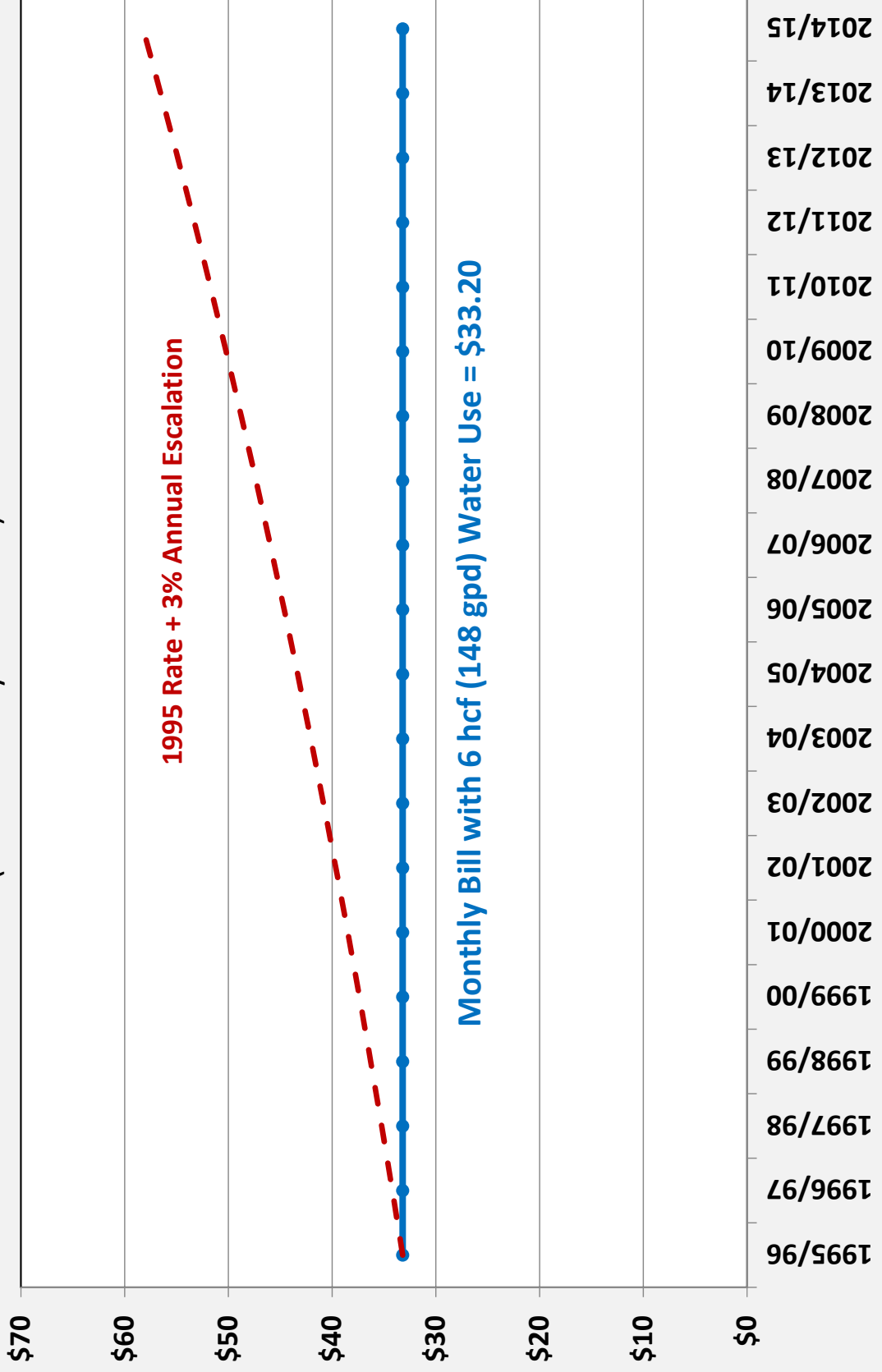


Table 3
City of Morro Bay
Historical Water Utility Finances & Budget

	Actual 2009/10	Actual 2010/11	Actual 2011/12	Budget 2012/13	Amended Budget 2013/14	Proposed Budget 2014/15
<u>Beginning cash balance</u>						
1. Equipment replacement fund	\$279,563	\$284,451	\$286,451	\$288,622	\$289,801	\$289,801
2. Operation fund	(38,519)	(455,458)	375,192	(114)	(236,113)	0
3. CIP fund	<u>5,166,472</u>	<u>4,994,374</u>	<u>4,852,454</u>	<u>4,360,525</u>	<u>4,135,073</u>	<u>2,290,947</u>
Total	5,407,516	4,823,367	5,514,097	4,649,033	4,188,761	2,580,748
<u>Revenue and reserve transfers</u>						
1. Equipment replacement fund:						
Interest/other income	<u>5,050</u>	<u>2,448</u>	<u>2,171</u>	<u>1,179</u>	0	0
Subtotal	5,050	2,448	2,171	1,179	0	0
2. Operation fund:						
Water sales	3,451,279	3,323,916	3,325,454	3,273,369	3,400,000	3,230,000
Service fees	111,950	103,643	100,040	105,628	65,000	62,750
Other revenues	791	5,135	1,552	1,371	0	500
Transfer from reserve fund	0	222,327	622,808	147,350	775,136	595,341
Other transfers	<u>54,612</u>	<u>342</u>	<u>14,408</u>	0	0	0
Subtotal	3,618,632	3,655,363	4,064,262	3,527,718	4,240,136	3,888,591
3. CIP fund:						
Impact fees	10,315	16,566	6,920	42,408	30,000	25,000
Interest income	85,426	44,964	40,977	18,669	10,000	5,000
Other income	534	546	218	0	0	0
Transfers in	0	0	<u>135,864</u>	<u>191,829</u>	0	0
Subtotal	96,275	62,076	183,979	252,906	40,000	30,000
Total Revenues	3,665,345	3,497,218	3,477,332	3,442,624	3,505,000	3,323,250
Total Transfers In	<u>54,612</u>	<u>222,669</u>	<u>773,080</u>	<u>339,179</u>	<u>775,136</u>	<u>595,341</u>
Total	3,719,957	3,719,887	4,250,412	3,781,803	4,280,136	3,918,591
<u>Expenses</u>						
1. Equipment replacement fund:						
Equipment/Vehicles						
Subtotal	0	0	0	0	0	0
2. Operation fund:						
Personnel	(728,891)	(755,617)	(782,729)	(767,758)	(917,839)	(740,637)
Supplies	(255,591)	(228,166)	(182,847)	174,552	(126,750)	(136,050)
Services	(2,533,363)	(1,467,021)	(3,208,479)	(2,480,107)	(2,683,073)	(2,732,800)
Other (no depreciation)	(299,612)	(105,934)	(34,325)	(24,400)	0	0
Payment to General Fund for cost allocation	0	(267,975)	(271,188)	(271,188)	(276,341)	(279,104)
Transfer to Capital Improvement Fund	(218,114)	0	0	0	0	0
Transfer to Reserve fund	0	0	0	<u>(45,732)</u>	0	0
Subtotal	(4,035,571)	(2,824,713)	(4,479,568)	(3,414,633)	(4,004,003)	(3,888,591)
3. CIP fund:						
Capital Improvements	(278,151)	0	0	(331,008)	(1,108,990)	(1,660,000)
Transfer to Operation Fund	0	<u>(203,996)</u>	<u>(675,908)</u>	<u>(147,350)</u>	<u>(775,136)</u>	<u>(595,341)</u>
Subtotal	(278,151)	(203,996)	(675,908)	(478,358)	(1,884,126)	(2,255,341)
Total Expenses	(4,095,608)	(2,824,713)	(4,479,568)	(3,699,909)	(5,112,993)	(5,548,591)
Total Transfers Out (excl Gen Fund pymt)	<u>(218,114)</u>	<u>(203,996)</u>	<u>(675,908)</u>	<u>(193,082)</u>	<u>(775,136)</u>	<u>(595,341)</u>
Total	(4,313,722)	(3,028,709)	(5,155,476)	(3,892,991)	(5,888,129)	(6,143,932)
Revenues Less Expenses	(593,765)	691,178	(905,064)	(111,188)	(1,607,993)	(2,225,341)
<u>Ending Cash Balance</u>						
1. Equipment replacement fund	252,986	286,451	288,622	289,801	289,801	289,801
2. Operation fund	(455,458)	375,192	(114)	(236,133)	0	0
3. CIP fund	<u>4,984,596</u>	<u>4,852,454</u>	<u>4,360,525</u>	<u>4,135,073</u>	<u>2,290,947</u>	<u>65,606</u>
Total	4,782,124	5,514,097	4,649,033	4,188,741	2,580,748	355,407

Table 4
City of Morro Bay
Water Capital Improvement Program

		2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Total
UNESCALATED CAPITAL EXPENSES												
Vehicles												
2004 Chevrolet Silverado Pickup	05/20/04		35,000									35,000
2005 Chevrolet Silverado Pickup	05/21/04			35,000								35,000
Capital Improvements												
Nutmeg Tank construction			2,000,000									2,000,000
Chorro Valley Stream gauges			250,000									250,000
Desalination plant decanting facilities			500,000									500,000
Desalination plant capacity improvements			250,000									250,000
Desalination plant structural improvements			100,000									100,000
Various master plan improvements		350,000	350,000	350,000	350,000							1,750,000
Convert meter reading to AMR			150,000	200,000	250,000							600,000
Additional 750k gal storage tank at Kings						500,000	500,000					1,000,000
Placeholder for Future Water System Improvements												
						500,000	500,000	500,000	500,000	500,000		2,500,000
Recycled Water System, Phase 2												
							5,000,000	5,000,000				10,000,000
Total Unescalated		350,000	3,635,000	585,000	600,000	850,000	1,000,000	5,500,000	5,500,000	500,000	500,000	19,020,000
CAPITAL EXPENSES WITH COST ESCALATION												
Annual Cost Escalation			3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	
Cost Escalator		1.000	1.030	1.061	1.093	1.126	1.159	1.194	1.230	1.267	1.305	
Subtotal Water Capital Projects		350,000	3,744,000	621,000	656,000	957,000	1,159,000	597,000	615,000	633,000	652,000	9,984,000
Recycled Water System, Phase 2		0	0	0	0	0	0	5,970,000	6,150,000	0	0	12,120,000
Total with Cost Escalation		350,000	3,744,000	621,000	656,000	957,000	1,159,000	6,567,000	6,765,000	633,000	652,000	22,104,000

Table 5
City of Morro Bay
SRF Loan Debt Service Estimates

	Phase 2 Recycled Water System
Funding Target	\$12,120,000
SRF Loan Amount	
Eligible Project Costs ¹	12,120,000
Accrued Interest During Construction ²	<u>303,000</u>
Total Loan Amount	12,423,000
Loan Terms	
Term (years)	30
Interest Rate ³	3.00%
Annual Loan Payment⁴	634,000
Total Payments Over Loan Term	19,020,000
Reserve Fund Requirement⁵	634,000

1 Some costs may not be eligible for SRF Loan funding & would require another funding source

2 Assumes steady gradual drawdown of loan funds over two years.

3 Total net interest rate estimated for financial planning purposes; actual rate may vary.

4 First debt service payment due one year following completion of project.

5 Agencies must set aside funds to meet the SRF Reserve Requirement at least 90 days prior to project completion date.

Table 6
City of Morro Bay
Bank Loan & I-Bank Debt Estimates

	Bank Loan/Private Placement Estimates			I-Bank Loan Estimates		
	10-Year	15-Year	20-Year	20-Year	25-Year	30-Year
Draft Project Funding Target	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000
Loan Amount						
Project Funding	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000
Reserve Fund	tbd	tbd	tbd	tbd	tbd	tbd
Issuance Costs (est. for planning purposes)	<u>75,000</u>	<u>75,000</u>	<u>75,000</u>	<u>75,000</u>	<u>75,000</u>	<u>75,000</u>
Total Loan Amount	3,575,000	3,575,000	3,575,000	3,575,000	3,575,000	3,575,000
Loan Terms						
Term (years)	10	15	20	20	25	30
Interest Rate (estimated)	3.00%	3.75%	4.00%	3.25%	3.50%	3.75%
Annual Debt Service	\$419,000	\$316,000	\$263,000	\$246,000	\$217,000	\$201,000
Debt Service per \$1 Million of Project Funding	\$119,714	\$90,286	\$75,143	\$70,286	\$62,000	\$57,429
Total Payments Over Term of Loan	\$4,190,000	\$4,740,000	\$5,260,000	\$4,920,000	\$5,425,000	\$6,030,000
Present Value of Payments Discounted at 3%	3,574,000	3,772,000	3,913,000	3,660,000	3,779,000	3,940,000

Note: Bank Loans and I-Bank ISRF Loans may require the District to set aside funds for a debt service reserve fund equal to annual debt service.

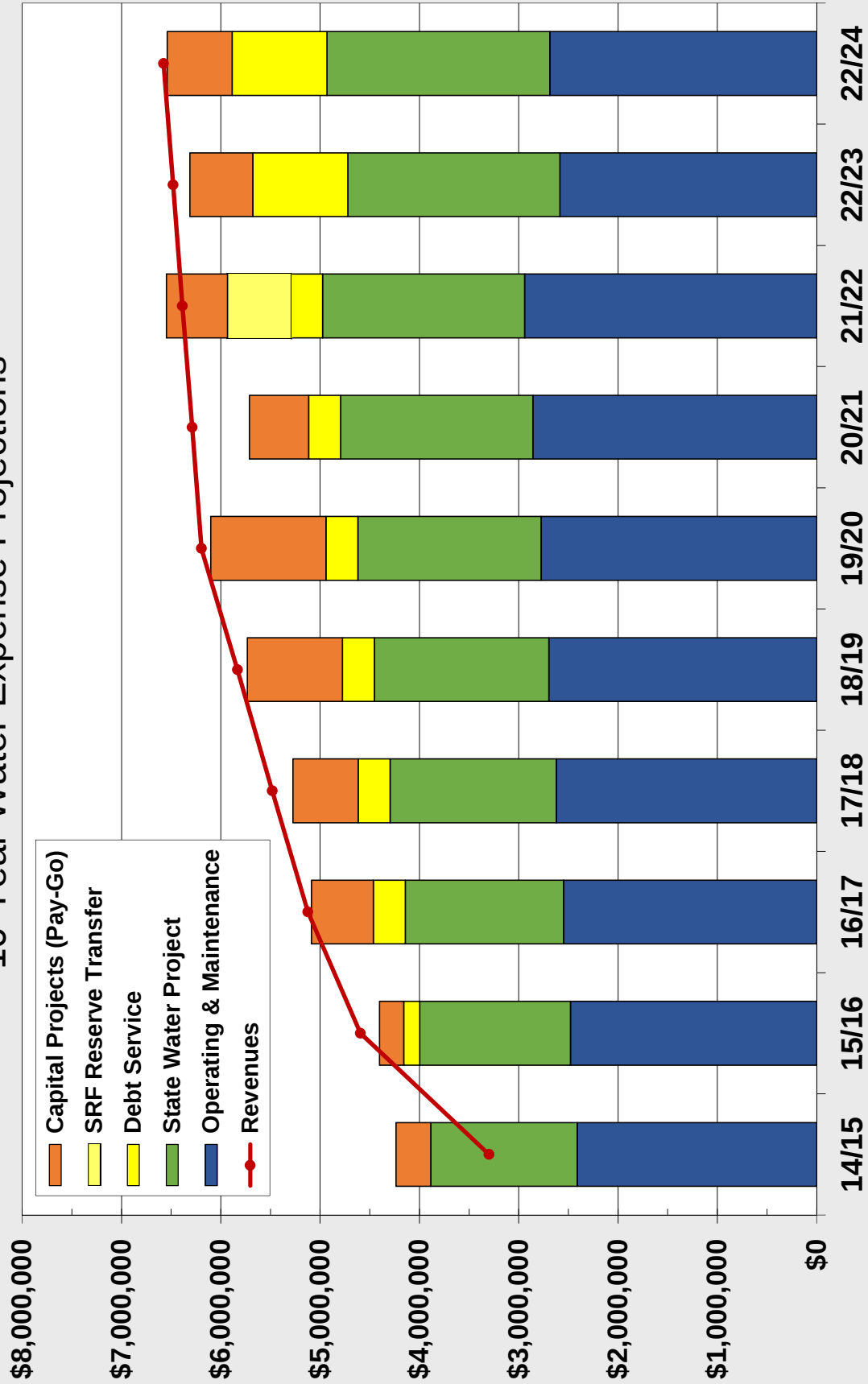
Table 7 Morro Bay - Water Cash Flow Projections				Years 1-5	
	Budget	Projected			
	2014/15	2015/16	2016/17	2017/18	2018/19
Effective Date of Rate Adjustment	07/01/14	07/01/15	07/01/16	07/01/17	07/01/18
Fixed Monthly Service Charge	\$16.43	\$23.00	\$26.00	\$28.00	\$30.00
Fixed Rate Recovery Net of Delinquencies	98%	98%	98%	98%	98%
Beginning Accounts	5,424	5,424	5,434	5,444	5,454
Growth:Single Family Homes or Equivalents	-	10	10	10	10
Future Water Sales Elasticity	-	(0.15)	(0.15)	(0.15)	(0.15)
Change in Annual Water Consumption		-7.5%	-2.0%	-1.2%	-1.1%
Water Development Impact Fee	\$2,900	\$2,960	\$3,020	\$3,080	\$3,140
Debt Svc per \$1M of Funding (15Yr, 4%)	-	\$92,000	\$92,000	\$92,000	\$92,000
Interest Earnings Rate	0.25%	0.25%	0.50%	1.0%	1.0%
State Water Project Cost Escalation	-	3.0%	5.0%	5.0%	5.0%
Operating Cost Escalation	-	4.0%	4.0%	4.0%	4.0%
Beginning Fund Reserves	\$2,580,000	\$1,644,000	\$1,836,000	\$1,873,000	\$2,082,000
REVENUES					
Fixed Service Charges	1,048,000	1,468,000	1,663,000	1,794,000	1,926,000
Water Consumption Charges	2,182,000	3,028,000	3,356,000	3,572,000	3,786,000
Subtotal Water Rate Revenues	3,230,000	4,496,000	5,019,000	5,366,000	5,712,000
Service Fees/Other	63,000	64,000	65,000	66,000	67,000
Development Impact Fees	0	30,000	30,000	31,000	31,000
Interest Earnings	6,000	4,000	9,000	19,000	21,000
Subtotal	3,299,000	4,594,000	5,123,000	5,482,000	5,831,000
Debt Proceeds: City CIP Projects	0	3,500,000	0	0	0
SRF Loan: Recycled Water, WRP Phase 2	0	0	0	0	0
EXPENSES					
Operating & Maintenance					
Water System Personnel	741,000	771,000	802,000	834,000	867,000
Supplies & Services	648,000	674,000	701,000	729,000	758,000
State Water Project Payments	1,473,000	1,517,000	1,593,000	1,673,000	1,757,000
Share of CCWA 2006 Bonds (Thru Oct-2021) c	744,000	745,000	745,000	745,000	745,000
General Fund Cost Allocation	279,000	290,000	302,000	314,000	327,000
Recycled Water Operations	0	0	0	0	0
Subtotal	3,885,000	3,997,000	4,143,000	4,295,000	4,454,000
City Debt Service					
Projected Loan for City CIP Projects	0	161,000	322,000	322,000	322,000
SRF Loan for Recycled Water Phase 2	0	0	0	0	0
Subtotal	0	161,000	322,000	322,000	322,000
Capital Improvements					
Water CIP Projects: Cash Funded	350,000	244,000	621,000	656,000	957,000
Water CIP Projects: Debt Financed	0	3,500,000	0	0	0
Recycled Water System Phase 2 Est.	0	0	0	0	0
Subtotal	350,000	3,744,000	621,000	656,000	957,000
Total Expenses	4,235,000	7,902,000	5,086,000	5,273,000	5,733,000
Revenues Less Expenses	(936,000)	192,000	37,000	209,000	98,000
Transfer for SRF Reserve Requirement	-	-	-	-	-
Ending Fund Reserves	1,644,000	1,836,000	1,873,000	2,082,000	2,180,000
Min Fund Rsrv Target (25% O&M + \$1M)	1,971,000	1,999,000	2,036,000	2,074,000	2,114,000
Debt Service Coverage on City Debt	-	3.71	3.04	3.69	4.28
Coverage on Contract Pymts (Min ≥1.25)	0.74	1.26	1.42	1.49	1.55

Table 7 Morro Bay - Water Cash Flow Projections					Years 6-10	
	Projected					Esc Factor
	2019/20	2020/21	2021/22	2022/23	2023/24	
Effective Date of Rate Adjustment	07/01/19	07/01/20	07/01/21	07/01/22	07/01/23	
Fixed Monthly Service Charge	\$32.00	\$32.50	\$33.00	\$33.50	\$34.00	
Fixed Rate Recovery Net of Delinquencies	98%	98%	98%	98%	98%	
Beginning Accounts	5,464	5,474	5,484	5,494	5,504	
Growth:Single Family Homes or Equivalents	10	10	10	10	10	
Future Water Sales Elasticity	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	
Change in Annual Water Consumption	-0.7%	-0.2%	-0.2%	-0.2%	-0.1%	
Water Service Connection Fee	\$3,200	\$3,260	\$3,330	\$3,400	\$3,470	2.0%
Debt Svc per \$1M of CIP Project Funding	\$92,000	\$92,000	\$92,000	\$92,000	\$92,000	
Interest Rate	1.0%	1.0%	1.0%	1.0%	1.0%	
State Water Project Cost Escalation	5.0%	5.0%	5.0%	5.0%	5.0%	
Operating Cost Escalation	4.0%	4.0%	4.0%	4.0%	4.0%	
Beginning Fund Reserves	\$2,180,000	\$2,273,000	\$2,849,000	\$2,689,000	\$2,859,000	
REVENUES						
Fixed Service Charges	2,058,000	2,094,000	2,130,000	2,166,000	2,203,000	
Water Consumption Charges	4,011,000	4,067,000	4,123,000	4,179,000	4,235,000	
Subtotal Water Rate Revenues	6,069,000	6,161,000	6,253,000	6,345,000	6,438,000	
Service Fees/Other	68,000	69,000	70,000	71,000	72,000	2.0%
Development Impact Fees	32,000	33,000	33,000	34,000	35,000	
Interest Earnings	25,000	26,000	31,000	30,000	31,000	
Subtotal	6,194,000	6,289,000	6,387,000	6,480,000	6,576,000	
Debt Proceeds: City CIP Projects	0	0	0	0	0	
SRF Loan: Recycled Water, WRP Phase 2	0	5,970,000	6,150,000	0	0	
EXPENSES						
Operating & Maintenance						
Water System Personnel	902,000	938,000	976,000	1,015,000	1,056,000	
Supplies & Services	788,000	820,000	853,000	887,000	922,000	
State Water Project Payments	1,845,000	1,937,000	2,034,000	2,136,000	2,243,000	
Share of CCWA 2006 Bonds (Thru Oct-2021)	745,000	745,000	745,000	0	0	
General Fund Cost Allocation	340,000	354,000	368,000	383,000	398,000	
Recycled Water Operations	0	0	0	300,000	312,000	
Subtotal	4,620,000	4,794,000	4,976,000	4,721,000	4,931,000	
Debt Service						
Projected Loan for City CIP Projects	322,000	322,000	322,000	322,000	322,000	
SRF Loan for Recycled Water Phase 2	0	0	0	634,000	634,000	
Subtotal	322,000	322,000	322,000	956,000	956,000	
Capital Improvements						
Water CIP Projects: Cash Funded	1,159,000	597,000	615,000	633,000	652,000	
Water CIP Projects: Debt Financed	0	0	0	0	0	
Recycled Water System Phase 2 Est.	0	5,970,000	6,150,000	0	0	
Subtotal	1,159,000	6,567,000	6,765,000	633,000	652,000	
Total Expenses	6,101,000	11,683,000	12,063,000	6,310,000	6,539,000	
Revenues Less Expenses	93,000	576,000	474,000	170,000	37,000	
Transfer for SRF Reserve Requirement	-	-	(634,000)	-	-	
Ending Fund Reserves	2,273,000	2,849,000	2,689,000	2,859,000	2,896,000	
Min Fund Rsrv Target (25% O&M + \$1M)	2,155,000	2,199,000	2,244,000	2,180,000	2,233,000	
Debt Service Coverage on City Debt	4.89	4.64	4.38	1.84	1.72	
Debt Coverage on Contract Pymts (≥1.25)	1.61	1.56	1.51	1.82	1.73	

City of Morro Bay
Summary of Water Cash Flow Projections (\$ millions)

Fiscal Year	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24
Rate Increase Target Effective July 1	-	40%	13%	7.7%	7.1%	7%	2%	2%	2%	1%
Beginning Fund Reserves	\$2.6	\$1.6	\$1.8	\$1.9	\$2.1	\$2.2	\$2.3	\$2.8	\$2.7	\$2.9
REVENUES										
Water Rate Revenues	3.2	4.5	5.0	5.4	5.7	6.1	6.2	6.3	6.3	6.4
Other Revenues	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Debt Proceeds	-	3.5	-	-	-	-	6.0	6.2	-	-
Total	3.3	8.1	5.1	5.5	5.8	6.2	12.3	12.5	6.5	6.6
EXPENSES										
Operating Expenses	3.9	4.0	4.1	4.3	4.5	4.6	4.8	5.0	4.7	4.9
Debt Service	0.0	0.2	0.3	0.3	0.3	0.3	0.3	0.3	1.0	1.0
Capital Expenditures	0.4	3.7	0.6	0.7	1.0	1.2	6.6	6.8	0.6	0.7
Total	4.2	7.9	5.1	5.3	5.7	6.1	11.7	12.1	6.3	6.5
Revenues Less Expenses	(0.9)	0.2	0.0	0.2	0.1	0.1	0.6	0.5	0.2	0.0
Transfer to SRF Rsrv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.6)	0.0	0.0
Ending Fund Reserves	1.6	1.8	1.9	2.1	2.2	2.3	2.8	2.7	2.9	2.9
Min Fund Reserve Target	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.2	2.2	2.2
Debt Service Coverage	-	3.71	3.04	3.69	4.28	4.89	4.64	4.38	1.84	1.72
CCWA Contract Coverage	0.74	1.26	1.42	1.49	1.55	1.61	1.56	1.51	1.82	1.73

City of Morro Bay 10-Year Water Expense Projections



Excludes capital projects funded by debt; but includes projected debt service.

Table 8
City of Morro Bay
Estimated Water Use by Tier

		Water Sales 2012/13	Water Sales 2013/14	2-Year Average	2014/15 Use % of 2-Yr Avg	Water Sales 2014/15 Est	% of Total
Projected Water Sales by Tier					<u>Estimated</u>		
Tier 1	0 - 3 hcf	162,551	163,765	163,158	98%	159,895	31.8%
Tier 2	4 - 10 hcf	162,836	164,020	163,428	98%	160,159	31.8%
Tier 3	11- 50 hcf	95,039	96,696	95,868	98%	93,950	18.7%
Tier 4	>50 hcf	<u>85,687</u>	<u>97,113</u>	<u>91,400</u>	98%	<u>89,572</u>	<u>17.8%</u>
Total		506,113	521,594	513,854		503,576	100.0%

Table 9
City of Morro Bay
Water Sales by Tier

Water Sales by Tier			
	Bi-Monthly Use	Projected Water User in Tier 2014/15	% of Total
Tier 1	0 - 3 hcf	159,895	31.8%
Tier 2	4 - 10 hcf	160,159	31.8%
Tier 3	11- 50 hcf	93,950	18.7%
Tier 4	>50 hcf	89,572	17.8%

Note: Based on billing data from FY 2012/13 with adjustments.

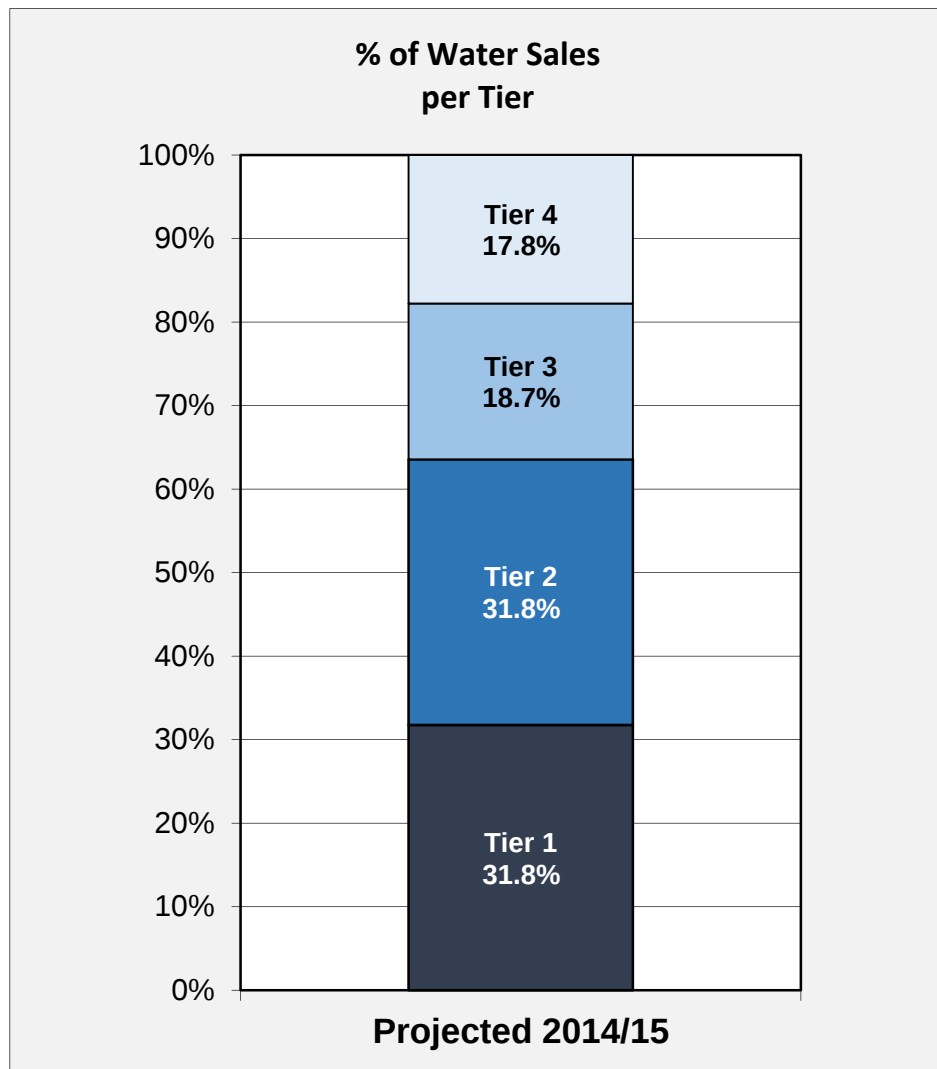


Table 10
City of Morro Bay
Projected Water Use by Tier

Tier Adjustment			Projected Water Sales by Tier					
Factor*			2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Projected Change in Demand				-7.50%	-1.96%	-1.15%	-1.07%	-0.67%
Projected Change in Sales by Tier								
Tier 1	0 - 3 hcf	60%		-4.50%	-1.17%	-0.69%	-0.64%	-0.40%
Tier 2	4 - 10 hcf	100%		-7.50%	-1.96%	-1.15%	-1.07%	-0.67%
Tier 3	11- 50 hcf	125%		-9.38%	-2.45%	-1.44%	-1.34%	-0.83%
Tier 4	>50 hcf	150%		<u>-11.25%</u>	<u>-2.93%</u>	<u>-1.73%</u>	<u>-1.61%</u>	<u>-1.00%</u>
Total				-7.56%	-1.96%	-1.15%	-1.07%	-0.66%
Projected Water Sales by Tier								
Tier 1	0 - 3 hcf		159,895	152,700	150,907	149,862	148,899	148,303
Tier 2	4 - 10 hcf		160,159	148,147	145,248	143,572	142,034	141,087
Tier 3	11- 50 hcf		93,950	85,142	83,060	81,862	80,766	80,093
Tier 4	>50 hcf		<u>89,572</u>	<u>79,495</u>	<u>77,162</u>	<u>75,827</u>	<u>74,608</u>	<u>73,862</u>
Total			503,576	465,484	456,377	451,123	446,307	443,345
% of Water Use by Tier								
Tier 1	0 - 3 hcf		31.75%	32.80%	33.07%	33.22%	33.36%	33.45%
Tier 2	4 - 10 hcf		31.80%	31.83%	31.83%	31.83%	31.82%	31.82%
Tier 3	11- 50 hcf		18.66%	18.29%	18.20%	18.15%	18.10%	18.07%
Tier 4	>50 hcf		<u>17.79%</u>	<u>17.08%</u>	<u>16.91%</u>	<u>16.81%</u>	<u>16.72%</u>	<u>16.66%</u>
Total			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

* Represents the percentage of the total overall projected change in demand applied to each tier;
assumes a lower % reduction in lower tier water use and a higher % reduction in higher tier water use.

Table 11
City of Morro Bay
Projected Water Rates

		Projected Water Rates				
		07/01/15	07/01/16	07/01/17	07/01/18	07/01/19
FIXED MONTHLY SERVICE CHARGES						
Fixed Monthly Service Charge		\$23.00	\$26.00	\$28.00	\$30.00	\$32.00
Accounts Billed		<u>5,429</u>	<u>5,439</u>	<u>5,449</u>	<u>5,459</u>	<u>5,469</u>
Total Fixed Charges		\$1,498,404	\$1,696,968	\$1,830,864	\$1,965,240	\$2,100,096
Collection Rate		<u>98%</u>	<u>98%</u>	<u>98%</u>	<u>98%</u>	<u>98%</u>
Estimated Revenues		\$1,468,436	\$1,663,029	\$1,794,247	\$1,925,935	\$2,058,094
WATER QUANTITY CHARGES						
Projected Revenue Target		\$3,028,000	\$3,356,000	\$3,572,000	\$3,786,000	\$4,011,000
Water Sales per Tier (hcf)						
Tier 1	0 - 3 hcf	152,700	150,907	149,862	148,899	148,303
Tier 2	4 - 10 hcf	148,147	145,248	143,572	142,034	141,087
Tier 3	11- 50 hcf	85,142	83,060	81,862	80,766	80,093
Tier 4	>50 hcf	<u>79,495</u>	<u>77,162</u>	<u>75,827</u>	<u>74,608</u>	<u>73,862</u>
Total (hcf)		465,484	456,377	451,123	446,307	443,345
Water Quantity Charges (\$/hcf)						
Tier 1	0 - 3 hcf	\$2.00	\$3.00	\$4.00	\$5.00	\$6.00
Tier 2	4 - 10 hcf	7.00	7.75	8.00	8.25	8.50
Tier 3	11- 50 hcf	8.50	9.75	10.25	10.75	11.00
Tier 4	>50 hcf	12.00	12.50	13.00	13.50	14.00
Revenues by Tier						
Tier 1	0 - 3 hcf	\$305,400	\$452,721	\$599,448	\$744,495	\$889,818
Tier 2	4 - 10 hcf	1,037,029	1,125,672	1,148,576	1,171,781	1,199,240
Tier 3	11- 50 hcf	723,707	809,835	839,086	868,235	881,023
Tier 4	>50 hcf	<u>953,940</u>	<u>964,525</u>	<u>985,751</u>	<u>1,007,208</u>	<u>1,034,068</u>
Total		3,020,076	3,352,753	3,572,861	3,791,718	4,004,149
Difference \$ (Rev Est - Target)		(7,924)	(3,247)	861	5,718	(6,852)
Difference % of Target		-0.3%	-0.1%	0.0%	0.2%	-0.2%

Table 12
City of Morro Bay
Projected Water Rates

Working Draft for Discussion

		Current	Projected Water Rates				
			07/01/15	07/01/16	07/01/17	07/01/18	07/01/19
Fixed Monthly Service Charge		\$16.43	\$23.00	\$26.00	\$28.00	\$30.00	\$32.00
Water Quantity Charges (\$/hcf)							
Tier 1	0 - 3 hcf	\$0.00	\$2.00	\$3.00	\$4.00	\$5.00	\$6.00
Tier 2	4 - 10 hcf	5.56 - 5.74	7.00	7.75	8.00	8.25	8.50
Tier 3	11- 50 hcf	5.77 - 7.81	8.50	9.75	10.25	10.75	11.00
Tier 4	>50 hcf	7.85 - 13.68	12.00	12.50	13.00	13.50	14.00

1 hcf = one hundred cubic feet = 748 gallons

<u>Water Quantity Charges (\$ per 100 gallons)</u>			<i>For informational purposes only</i>				
Tier 1	0 - 3 hcf	\$0.00	\$0.27	\$0.40	\$0.53	\$0.67	\$0.80
Tier 2	4 - 10 hcf	0.74 - 0.77	0.94	1.04	1.07	1.10	1.14
Tier 3	11- 50 hcf	0.77 - 1.04	1.14	1.30	1.37	1.44	1.47
Tier 4	>50 hcf	1.05 - 1.83	1.60	1.67	1.74	1.80	1.87

Table 13
City of Morro Bay
Projected Monthly Water Bill Impacts

Monthly Use (hcf)	Current \$/Month	Projected Monthly Bills					5-Year Impact	
		2015/16	2016/17	2017/18	2018/19	2019/20	\$/month	\$/day
0	\$16.43	\$23.00	\$26.00	\$28.00	\$30.00	\$32.00	\$15.57	\$0.51
1	16.43	25.00	29.00	32.00	35.00	38.00	21.57	0.71
2	16.43	27.00	32.00	36.00	40.00	44.00	27.57	0.91
3	16.43	29.00	35.00	40.00	45.00	50.00	33.57	1.10
4	21.99	36.00	42.75	48.00	53.25	58.50	36.51	1.20
5	27.58	43.00	50.50	56.00	61.50	67.00	39.42	1.30
6	33.20	50.00	58.25	64.00	69.75	75.50	42.30	1.39
7	38.85	57.00	66.00	72.00	78.00	84.00	45.15	1.48
8	44.53	64.00	73.75	80.00	86.25	92.50	47.97	1.58
9	50.24	71.00	81.50	88.00	94.50	101.00	50.76	1.67
10	55.98	78.00	89.25	96.00	102.75	109.50	53.52	1.76
11	61.75	86.50	99.00	106.25	113.50	120.50	58.75	1.93
12	67.55	95.00	108.75	116.50	124.25	131.50	63.95	2.10
13	73.38	103.50	118.50	126.75	135.00	142.50	69.12	2.27
14	79.24	112.00	128.25	137.00	145.75	153.50	74.26	2.44
15	85.13	120.50	138.00	147.25	156.50	164.50	79.37	2.61
16	91.06	129.00	147.75	157.50	167.25	175.50	84.45	2.78
17	97.01	137.50	157.50	167.75	178.00	186.50	89.50	2.94
18	102.99	146.00	167.25	178.00	188.75	197.50	94.52	3.11
19	109.00	154.50	177.00	188.25	199.50	208.50	99.51	3.27
20	115.04	163.00	186.75	198.50	210.25	219.50	104.47	3.43
21	121.17	171.50	196.50	208.75	221.00	230.50	109.34	3.59
22	127.39	180.00	206.25	219.00	231.75	241.50	114.12	3.75
23	133.70	188.50	216.00	229.25	242.50	252.50	118.81	3.91
24	140.07	197.00	225.75	239.50	253.25	263.50	123.44	4.06
25	146.54	205.50	235.50	249.75	264.00	274.50	127.97	4.21
26	153.09	214.00	245.25	260.00	274.75	285.50	132.42	4.35
27	159.70	222.50	255.00	270.25	285.50	296.50	136.81	4.50
28	166.37	231.00	264.75	280.50	296.25	307.50	141.14	4.64
29	173.10	239.50	274.50	290.75	307.00	318.50	145.41	4.78
30	179.93	248.00	284.25	301.00	317.75	329.50	149.58	4.92
31	186.81	256.50	294.00	311.25	328.50	340.50	153.70	5.05
32	193.75	265.00	303.75	321.50	339.25	351.50	157.76	5.19
33	200.75	273.50	313.50	331.75	350.00	362.50	161.76	5.32
34	207.82	282.00	323.25	342.00	360.75	373.50	165.69	5.45
35	214.94	290.50	333.00	352.25	371.50	384.50	169.57	5.57
36	222.09	299.00	342.75	362.50	382.25	395.50	173.42	5.70
37	229.31	307.50	352.50	372.75	393.00	406.50	177.20	5.83
38	236.58	316.00	362.25	383.00	403.75	417.50	180.93	5.95
39	243.88	324.50	372.00	393.25	414.50	428.50	184.63	6.07
40	251.24	333.00	381.75	403.50	425.25	439.50	188.27	6.19
50	327.37	418.00	479.25	506.00	532.75	549.50	222.14	7.30
75	533.21	718.00	791.75	831.00	870.25	899.50	366.29	12.04
100	755.68	1,018.00	1,104.25	1,156.00	1,207.75	1,249.50	493.82	16.24
200	1,747.86	2,218.00	2,354.25	2,456.00	2,557.75	2,649.50	901.64	29.64

Sewer Financial Plan & Rate Study

Working Draft Tables

Table 1
City of Morro Bay
Historical Monthly Sewer Rates

		07/01/10	07/01/11	07/01/12	07/01/13	07/01/14
RESIDENTIAL						
Fixed Charge per Dwelling Unit	<u>Allowance</u>					
Single Family Residential	10 ccf	\$37.51	\$39.38	\$41.35	\$43.42	\$45.59
Single Family Condos	3 ccf	37.51	39.38	41.35	43.42	45.59
Multiple Family Residential	10 ccf	37.51	39.38	41.35	43.42	45.59
Charge per hcf in Excess of Allowance		3.35	3.52	3.69	3.88	4.07
NON-RESIDENTIAL						
Charge per hcf of Metered Water Use						
Mobile Home Parks		3.50	3.75	4.02	4.31	4.63
Laundromat		3.50	3.75	4.02	4.31	4.63
Car Wash		3.50	3.75	4.02	4.31	4.63
Water Softners		3.50	3.75	4.02	4.31	4.63
Schools		3.50	3.75	4.02	4.31	4.63
Other Public Facilities		3.50	3.75	4.02	4.31	4.63
City Facilities/on Sewer		3.50	3.75	4.02	4.31	4.63
Commercial/Domestic Strength		4.40	4.72	5.06	5.43	5.82
Commercial Laundry		4.40	4.72	5.06	5.43	5.82
Condo - Common Area (with sewer)		4.40	4.72	5.06	5.43	5.82
Motels		6.07	6.51	6.98	7.49	8.03
Mortuaries		6.59	7.07	7.59	8.14	8.73
Retirement Home/Hospital		7.90	8.47	9.09	9.74	10.45
Hotels with Dining Room		7.90	8.47	9.09	9.74	10.45
Restaurants		10.11	10.84	11.63	12.47	13.38
Bakeries		10.11	10.84	11.63	12.47	13.38
Seafood Processors		10.11	10.84	11.63	12.47	13.38
Power Plant		449.76	482.37	517.34	554.85	595.07
Minimum Charge		39.13	41.97	45.01	48.27	51.77

City of Morro Bay Historical Monthly Residential Sewer Bills

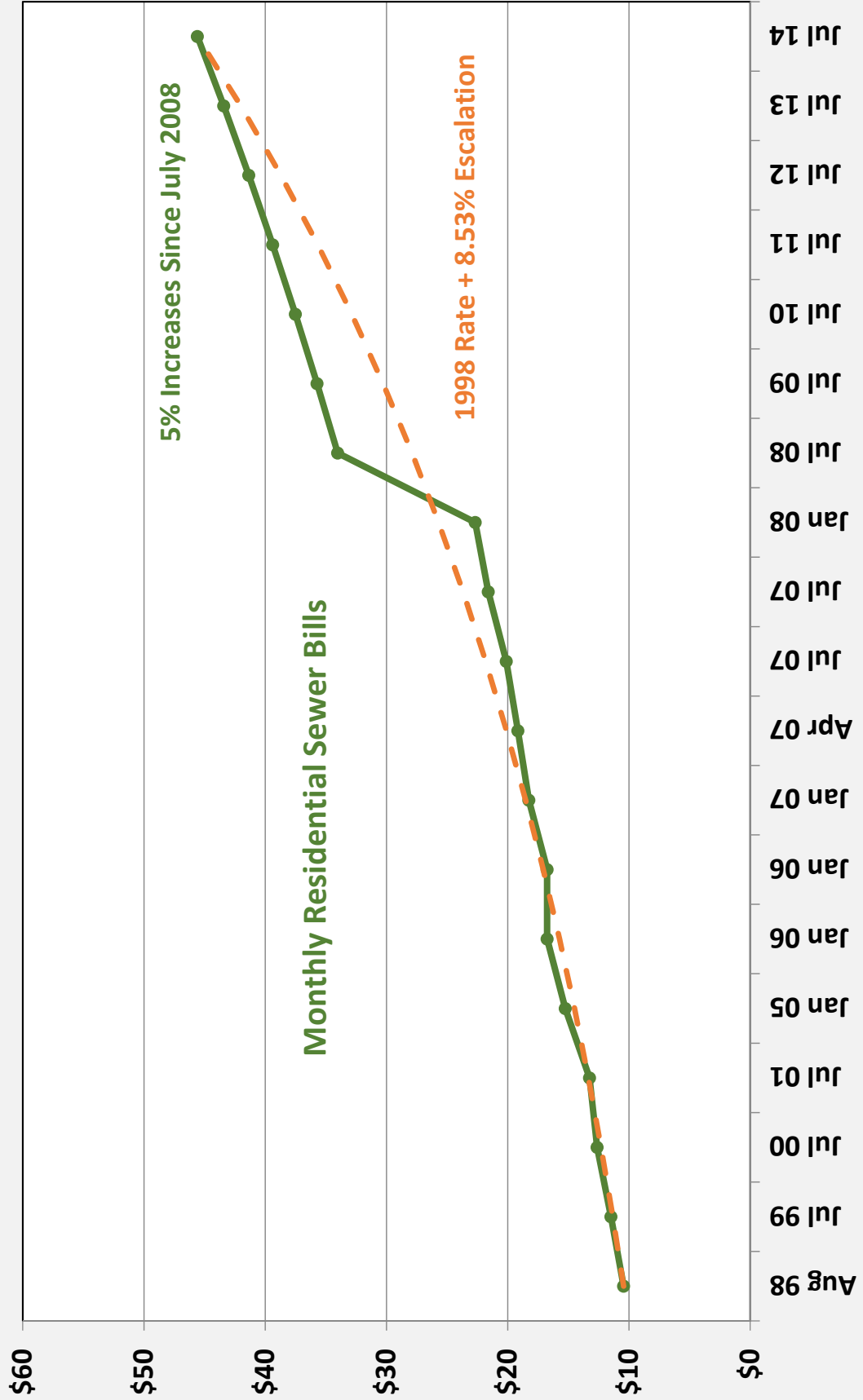


Table 2
City of Morro Bay
Historical Sewer Utility Finances & Budget

	Actual 2009/10	Actual 2010/11	Actual 2011/12	Budget 2012/13	Amended Budget 2013/14	Proposed Budget 2014/15
BEGINNING CASH BALANCES						
1. Equipment replacement fund	\$76,564	\$77,621	\$78,340	\$79,017	\$124,532	\$239,532
2. Operation fund	590,827	1,320,424	2,096,060	100	0	0
3. CIP fund	<u>2,658,118</u>	<u>2,952,936</u>	<u>2,972,051</u>	<u>3,844,505</u>	<u>3,689,625</u>	<u>2,898,812</u>
Total	3,325,509	4,350,981	5,146,451	3,923,622	3,814,157	3,138,344
REVENUES & RESERVE TRANSFERS						
1. Equipment replacement fund:						
Interest/other income	1,429	719	677	515	0	0
Transfers in	0	0	0	<u>45,000</u>	<u>115,000</u>	<u>115,000</u>
<i>Subtotal</i>	1,429	719	677	45,515	115,000	115,000
2. Operation fund:						
Sewer user fees	3,296,452	3,445,189	3,610,534	3,767,815	3,675,000	3,428,067
Intergovernmental	143,193	214,930	24,688	42,534	0	0
Rental income	19,582	19,582	19,665	20,078	19,000	20,000
Other revenues	2,528	30,283	29,931	25,368	25,000	25,000
Transfer from Reserve fund	58,348	54,321	1,170,112	0	595,813	2,191,358
Other	0	7	0	0	0	0
<i>Subtotal</i>	3,520,103	3,764,312	4,854,930	3,855,795	4,314,813	5,664,425
3. CIP fund:						
Impact fees	21,197	32,563	12,703	66,533	0	0
Interest income	66,248	40,305	33,523	16,851	20,000	0
Transfer from Capital Improvement Fund	389,349	630	0	0	0	0
Transfer from Revenue Fund	0	0	<u>2,027,213</u>	<u>1,818,651</u>	0	0
<i>Subtotal</i>	476,794	73,498	2,073,439	1,902,035	20,000	0
Total revenues & transfers in	3,998,326	3,838,529	6,929,046	5,803,345	4,449,813	5,779,425
EXPENSES						
1. Equipment replacement fund:						
Equipment/Vehicles						(70,000)
<i>Subtotal</i>						(70,000)
2. Operation fund:						
Personnel	(452,449)	(515,655)	(527,364)	(507,484)	(748,307)	(686,097)
Supplies	(103,511)	(60,457)	(54,824)	(112,000)	(91,500)	(155,500)
Services	(288,626)	(307,088)	(188,275)	(210,312)	(446,855)	(425,155)
Other (no depreciation)	(271,073)	(21,004)	(91,448)	(15,746)	0	0
MB/CSD wastewater treatment plant	(1,568,081)	(1,924,757)	(1,853,768)	1,611,817	(2,863,450)	(4,231,325)
General fund cost allocation	(147,434)	(159,715)	(161,630)	(161,630)	(164,701)	(166,348)
Transfer to Reserve Fund	0	0	<u>(4,073,581)</u>	<u>(1,236,542)</u>	0	0
<i>Subtotal</i>	(2,831,174)	(2,988,676)	(6,950,890)	(631,897)	(4,314,813)	(5,664,425)
3. CIP fund:						
Capital Improvements	(156,707)	0	(1,200,895)	(2,031,915)	(100,000)	(482,994)
Transfer to Sewer Equipment Repl Fund	0	(53,708)	0	(25,000)	(115,000)	(115,000)
Transfer to Sewer Revenue Fund	0	<u>(675)</u>	0	0	0	0
<i>Subtotal</i>	(156,707)	(54,383)	(1,200,895)	(2,056,915)	(215,000)	(597,994)
Total expenses & transfers out	(2,987,881)	(3,043,059)	(8,151,785)	(2,688,812)	(4,529,813)	(6,332,419)
NET REVENUES	1,010,445	795,470	(1,222,739)	3,114,533	(80,000)	(552,994)
ENDING CASH BALANCES						
1. Equipment replacement fund	77,993	78,340	79,017	124,532	239,532	284,532
2. Operation fund	1,279,756	2,096,060	100	0	0	0
3. CIP fund	<u>2,978,205</u>	<u>2,972,051</u>	<u>3,844,505</u>	<u>3,689,625</u>	<u>2,898,812</u>	<u>109,460</u>
Total	4,335,954	5,146,451	3,923,622	3,814,157	3,138,344	393,992

Table 3

City of Morro Bay
Sewer Capital Improvement Program

		2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Total
SEWER COLLECTION SYSTEM CIP												
Vehicles & Equipment												
GMC 1500 pickup truck	01/01/00				70,000							70,000
GMC 2500 service truck	01/01/00	70,000										70,000
Sterling 17501 Vac-con truck	01/01/01			350,000								350,000
Holcomb Portable generator	01/01/91			35,000								35,000
Capital Improvements/Buildings/Infrastructure												
Lift station #1		200,000										200,000
Section 3 rehabilitation		150,000										150,000
Section 4 rehabilitation			400,000									400,000
Section 5 rehabilitation			200,000									200,000
Section 7 rehabilitation				200,000								200,000
Section 8 rehabilitation				200,000								200,000
Section 9 rehabilitation					200,000							200,000
Section 2 rehabilitation				750,000								750,000
Main Street rehabilitation					3,500,000							3,500,000
Embarcadero rehabilitation			500,000									500,000
Laurel Easement rehabilitation			200,000									200,000
SCADA system						300,000						300,000
782 manholes		60,000	60,000	60,000	60,000	60,000						300,000
Placeholder for Future Sewer System Improvements												
							500,000	500,000	500,000	500,000	500,000	2,500,000
Subtotal		480,000	1,360,000	1,595,000	3,830,000	360,000	500,000	500,000	500,000	500,000	500,000	10,125,000
WASTEWATER TREATMENT PLANT MMRP												
		1,220,000	750,000	250,000	100,000							2,320,000
Morro Bay	72%	878,000	540,000	180,000	72,000							1,670,000
Cayucos	28%	342,000	210,000	70,000	28,000							650,000
CAPITAL EXPENSES WITH COST ESCALATION												
Annual Cost Escalation			3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	
Cost Escalator		1.000	1.030	1.061	1.093	1.126	1.159	1.194	1.230	1.267	1.305	
Sewer Collection System CIP		480,000	1,401,000	1,692,000	4,185,000	405,000	580,000	597,000	615,000	633,000	652,000	11,240,000
Wastewater Treatment Plant MMRP		1,220,000	750,000	250,000	100,000	0	0	0	0	0	0	2,320,000
<i>Not Escalated</i>												
Morro Bay	72%	878,000	540,000	180,000	72,000	0	0	0	0	0	0	1,670,000
Cayucos	28%	342,000	210,000	70,000	28,000	0	0	0	0	0	0	650,000

Table 4		With Cost Escalation to Construction Mid-Point					
City of Morro Bay							
Water Reclamation Plant Cost Projections							
		2014/15	2015/16	2016/17	2017/18	2018/19	Total

Phase 1: Water Reclamation Facility & Conveyance Facilities							
Property Acquisition (placeholder estimate)							
Construction				500,000			500,000
Contingency 30%				19,000,000		11,800,000	30,800,000
Contractor Overhead/Profit/Risk 18%				5,700,000		3,500,000	9,200,000
Cost Escalation to Construction Mid-Point				4,400,000		2,800,000	7,200,000
Engineering/Legal/Admin/Tax				3,600,000		2,300,000	5,900,000
		1,000,000	3,000,000	6,000,000	4,300,000		21,100,000
Subtotal		1,000,000	3,000,000	6,000,000	40,000,000	24,700,000	74,700,000
Estimated Cost Share							
Morro Bay	75%	750,000	2,250,000	4,500,000	30,000,000	18,525,000	56,025,000
Cayucos	25%	250,000	750,000	1,500,000	10,000,000	6,175,000	18,675,000

Source: Based on cost estimates for Rancho Colina Option A from Table 6 of the New Water Reclamation Facility Project Comparative Site Analysis; December 9, 2014, by John F. Rickenbach Consulting in association with Michael K. Nunley & Associates.

Table 5
City of Morro Bay
SRF Loan Debt Service Estimates

		SRF Loan for Phase 1 Water Reclamation Plant
Funding Target		\$74,700,000
<i>Water Reclamation Plant Phase 1</i>		
SRF Loan Amount		
Eligible Project Costs ¹		74,700,000
Accrued Interest During Construction ²		<u>2,770,000</u>
Total Loan Amount		77,470,000
Loan Terms		
Term (years)		30
Interest Rate ³		3.00%
Annual Loan Payment⁴		3,952,000
Morro Bay	75%	2,964,000
Cayucos	25%	988,000
Total Payments over Loan Term		118,560,000
Reserve Fund Requirement⁵		3,952,000
Morro Bay	75%	2,964,000
Cayucos	25%	988,000

1 Some costs may not be eligible for SRF Loan funding & would require another funding source.

2 Assumes steady gradual drawdown of loan funds over two years.

3 Total net interest rate estimated for financial planning purposes; actual rate may vary.

4 First debt service payment due one year following completion of project.

5 Agencies must set aside funds to meet the SRF Reserve Requirement at least 90 days prior to project completion date.

Table 6
City of Morro Bay
Bond Debt Service Estimates

For Comparison with SRF

Assumptions		30-Year Bonds
Funding Target		\$74,700,000
<i>Water Reclamation Plant Phase 1</i>		
Total Debt Issue		\$81,600,000
Proceeds		\$74,699,500
Issuance Costs & Reserve Requirement		
Underwriter Discount	0.70%	\$571,200
Issuance Costs		200,000
Debt Service Reserve Fund		5,615,000
Bond Insurance	tbd	500,000
Reserve Surety Bond	tbd	0
Contingency/Rounding		<u>14,300</u>
Total		6,900,500
Financing Terms		
Term (Years)		30
Est. Future Interest Rate		5.50%
Debt Service		
Annual Debt Service		5,615,000
Less Interest on Reserve Fund	2.50%	<u>(140,000)</u>
Net Annual Debt Service		5,475,000
Total Payments over Bond Term		162,835,000

Table 7 Morro Bay - Sewer Cash Flow Projections					Years 1-5
Years 1 - 5	Budget	Projected			
	2014/15	2015/16	2016/17	2017/18	2018/19
Effective Date of Rate Adjustment	07/01/14	07/01/15	07/01/16	07/01/17	07/01/18
Base Monthly Residential Sewer Charge	\$45.59	\$55.00	\$62.50	\$70.00	\$77.00
Beginning Sewer Accounts	5,346	5,346	5,356	5,366	5,376
Growth: Single Family Homes or Equivalents	-	10	10	10	10
Change in Billed Sewer Use (-0.15x27%xinc)	-	-2.0%	-0.6%	-0.5%	-0.4%
Sewer Development Impact Fee	\$4,570	\$4,660	\$4,750	\$4,850	\$4,950
Interest Earnings Rate	0.25%	0.25%	0.50%	1.0%	1.0%
Annual Cost Escalator	-	4.0%	4.0%	4.0%	4.0%
Beginning Fund Reserves	\$3,138,000	\$1,902,000	\$2,782,000	\$3,269,000	\$1,902,000
REVENUES					
Sewer Service Charges	4,164,000	4,921,000	5,561,000	6,198,000	6,790,000
Service Fees/Other	45,000	46,000	47,000	48,000	49,000
Development Impact Fees	0	47,000	48,000	49,000	50,000
Interest Earnings	4,000	5,000	14,000	33,000	19,000
Subtotal	4,213,000	5,019,000	5,670,000	6,328,000	6,908,000
SRF Financing: WRP Phase 1		4,000,000	6,000,000	40,000,000	24,700,000
Other Debt Financing: Wastewater CIP Projects				0	
EXPENSES					
Operating & Maintenance					
Sewer Personnel	686,000	713,000	742,000	772,000	803,000
Supplies & Services	559,000	581,000	604,000	628,000	653,000
General Fund Cost Allocation	167,000	174,000	181,000	188,000	196,000
Wastewater Treatment Personnel	840,000	874,000	909,000	945,000	983,000
Wastewater Treatment Operations	1,350,000	1,404,000	1,460,000	1,518,000	1,579,000
Less Cayucos SD Share (Est. 25%)	(548,000)	(570,000)	(592,000)	(616,000)	(641,000)
Subtotal	3,054,000	3,176,000	3,304,000	3,435,000	3,573,000
Debt Service					
SRF Financing: WRP Phase 1	0	0	0	0	0
Less Cayucos SD Share (Est. 25%)	0	0	0	0	0
Debt Financing: Wastewater CIP Projects	0	0	0	0	0
Subtotal	0	0	0	0	0
Capital Improvements					
Sewer CIP Projects: Cash Funded	480,000	1,401,000	1,692,000	4,185,000	405,000
Sewer CIP Projects: Debt Financed	0	0	0	0	0
Wastewater Treatment Plant MMRP	1,220,000	750,000	250,000	100,000	0
Less Cayucos SD Share (Est. 25%)	(305,000)	(188,000)	(63,000)	(25,000)	0
New Water Reclamation Plant Phase 1	1,000,000	3,000,000	6,000,000	40,000,000	24,700,000
Subtotal	2,395,000	4,963,000	7,879,000	44,260,000	25,105,000
Total Expenses	5,449,000	8,139,000	11,183,000	47,695,000	28,678,000
Revenues Less Expenses	(1,236,000)	880,000	487,000	(1,367,000)	2,930,000
Transfer for SRF Rsrv Req't, MB Share	-	-	-	-	(2,964,000)
Ending Fund Reserves	1,902,000	2,782,000	3,269,000	1,902,000	1,868,000
Ending SRF Reserve Requirement	-	-	-	-	2,964,000
Min Fund Rsrv Target (25% O&M + \$1M)	1,764,000	1,794,000	1,826,000	1,859,000	1,893,000
Debt Service Coverage (on MB Share)	-	-	-	-	-

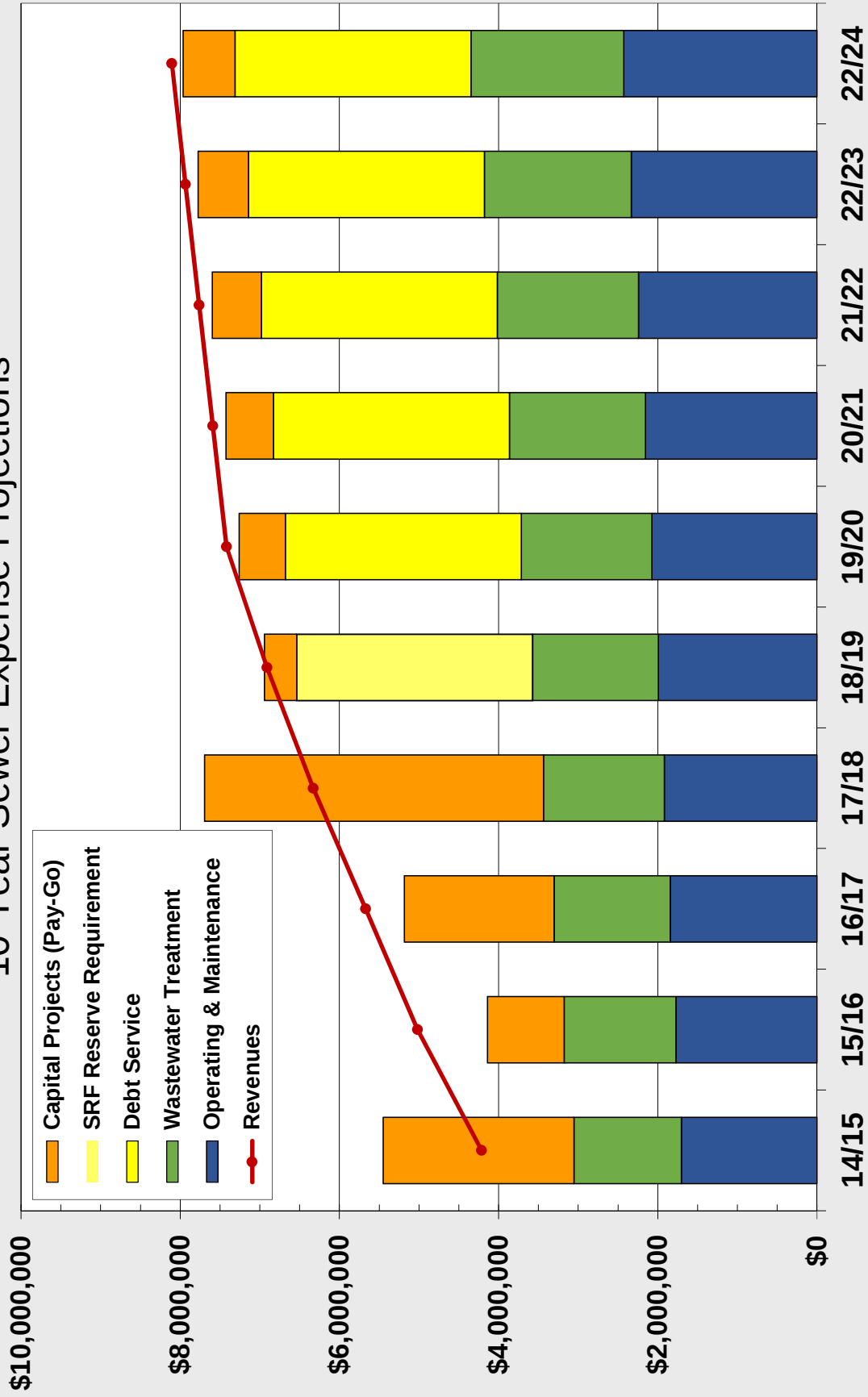
Table 7 Morro Bay - Sewer Cash Flow Projections
Years 6-10

Years 6 - 10	Projected					Esc Factor
	2019/20	2020/21	2021/22	2022/23	2023/24	
Effective Date of Rate Adjustment	07/01/19	07/01/20	07/01/21	07/01/22	07/01/23	
Base Monthly Residential Charge	\$83.00	\$85.00	\$87.00	\$89.00	\$91.00	
Beginning Accounts	5,386	5,396	5,406	5,416	5,426	
Growth: Single Family Homes or Equivalents	10	10	10	10	10	
Change in Billed Sewer Use	-0.3%	-0.1%	-0.1%	-0.1%	-0.1%	
Water Service Connection Fee	\$5,050	\$5,150	\$5,250	\$5,360	\$5,470	2.0%
Interest Rate	1.0%	1.0%	1.0%	1.0%	1.0%	
Annual Cost Escalator	4.0%	4.0%	4.0%	4.0%	4.0%	
Beginning Fund Reserves	\$1,868,000	\$2,026,000	\$2,191,000	\$2,356,000	\$2,513,000	
REVENUES						
Sewer Service Charges	7,296,000	7,464,000	7,632,000	7,800,000	7,968,000	
Service Fees/Other	50,000	51,000	52,000	53,000	54,000	2.0%
Development Impact Fees	51,000	52,000	53,000	54,000	55,000	
Interest Earnings	21,000	23,000	25,000	26,000	28,000	
Subtotal	7,418,000	7,590,000	7,762,000	7,933,000	8,105,000	
SRF Financing: WRP Phase 1						
Debt Financing: Wastewater CIP Projects						
EXPENSES						
Operating & Maintenance						
Sewer Personnel	835,000	868,000	903,000	939,000	977,000	
Supplies & Services	679,000	706,000	734,000	763,000	794,000	
General Fund Cost Allocation	204,000	212,000	220,000	229,000	238,000	
Wastewater Treatment Personnel	1,022,000	1,063,000	1,106,000	1,150,000	1,196,000	
Wastewater Treatment Operations	1,642,000	1,708,000	1,776,000	1,847,000	1,921,000	
Less Cayucos SD Share (Est. 25%)	(666,000)	(693,000)	(721,000)	(749,000)	(779,000)	
Subtotal	3,716,000	3,864,000	4,018,000	4,179,000	4,347,000	
Debt Service						
SRF Financing: WRP Phase 1	\$3,952,000	3,952,000	3,952,000	3,952,000	3,952,000	
Less Cayucos SD Share (Est. 25%)	(988,000)	(988,000)	(988,000)	(988,000)	(988,000)	
Debt Financing: Wastewater CIP Projects	0	0	0	0	0	
Subtotal	2,964,000	2,964,000	2,964,000	2,964,000	2,964,000	
Capital Improvements						
Sewer CIP Projects: Cash Funded	580,000	597,000	615,000	633,000	652,000	
Sewer CIP Projects: Debt Financed	0	0	0	0	0	
Wastewater Treatment Plant MMRP	0	0	0	0	0	
Less Cayucos SD Share (Est. 25%)	0	0	0	0	0	
New Water Reclamation Plant Phase 1	0	0	0	0	0	
Subtotal	580,000	597,000	615,000	633,000	652,000	
Total Expenses	7,260,000	7,425,000	7,597,000	7,776,000	7,963,000	
Revenues Less Expenses	158,000	165,000	165,000	157,000	142,000	
Transfer for SRF Reserve Requirement	-	-	-	-	-	
Ending Fund Reserves	2,026,000	2,191,000	2,356,000	2,513,000	2,655,000	
Ending SRF Reserve Requirement	2,964,000	2,964,000	2,964,000	2,964,000	2,964,000	
Min Fund Rsrv Target (25% O&M + \$1M)	1,929,000	1,966,000	2,005,000	2,045,000	2,087,000	
Debt Service Coverage (on MB Share)	1.25	1.26	1.26	1.27	1.27	

City of Morro Bay
Summary of Sewer Cash Flow Projections (\$ millions)

Fiscal Year	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24
Rate Increase Target Effective July 1	5.5%	21%	14%	12.0%	10.0%	8%	2%	2%	2%	2%
Beginning Fund Reserves	\$3.1	\$1.9	\$2.8	\$3.3	\$1.9	\$1.9	\$2.0	\$2.2	\$2.4	\$2.5
REVENUES										
Water Rate Revenues	4.2	4.9	5.6	6.2	6.8	7.3	7.5	7.6	7.8	8.0
Other Revenues	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Debt Proceeds	-	4.0	6.0	40.0	24.7	-	-	-	-	-
Total	4.2	9.0	11.7	46.3	31.6	7.4	7.6	7.8	7.9	8.1
EXPENSES										
Operating Expenses	3.1	3.2	3.3	3.4	3.6	3.7	3.9	4.0	4.2	4.3
Debt Service	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
Capital Expenditures	2.4	5.0	7.9	44.3	25.1	0.6	0.6	0.6	0.6	0.7
Total	5.4	8.1	11.2	47.7	28.7	7.3	7.4	7.6	7.8	8.0
Revenues Less Expenses	(1.2)	0.9	0.5	(1.4)	2.9	0.2	0.2	0.2	0.2	0.1
Transfer to SRF Reserve	-	-	-	-	(3.0)	-	-	-	-	-
Ending Fund Reserves	1.9	2.8	3.3	1.9	1.9	2.0	2.2	2.4	2.5	2.7
Min Fund Reserve Target	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.0	2.1
Debt Service Coverage	-	-	-	-	-	1.25	1.26	1.26	1.27	1.27

City of Morro Bay 10-Year Sewer Expense Projections



Excludes capital projects funded by debt; but includes projected debt service.

Table 8
City of Morro Bay
Cost Recovery Allocation

	Expenses 2019/20	Allocation %			Allocation \$		
		Flow	BOD	SS	Flow	BOD	SS
Operating & Maintenance							
City Operating Expenses	1,718,000	100%	0%	0%	1,718,000	0	0
WWTP Operating Expenses (net)	1,998,000	60%	20%	20%	1,198,800	399,600	399,600
Subtotal	3,716,000	78.5%	10.8%	10.8%	2,916,800	399,600	399,600
Debt Service							
SRF Financing: WRP Phase 1 (net)	2,964,000	60%	20%	20%	1,778,400	592,800	592,800
Debt Financing: Sewer CIP Projects	0	100%	0%	0%	0	0	0
Subtotal	2,964,000	60.0%	20.0%	20.0%	1,778,400	592,800	592,800
Capital & Other Non-Operating							
City Capital Projects, Cash-Funded	580,000	100%	0%	0%	580,000	0	0
WWTP MMRP Projects, Cash-Funded	0	60%	20%	20%	0	0	0
Subtotal	580,000	100.0%	0.0%	0.0%	580,000	0	0
Total	7,260,000	72.7%	13.7%	13.7%	5,275,200	992,400	992,400

Table 9

City of Morro Bay
Non-Residential Metered Water Use by Customer Class

	Accounts	Historical Water Use (hcf)					Projected Water Use (hcf)					
		2011	2012	2013	3-Yr Avg	2-Yr Avg	Lowest Avg	2015/16	2016/17	2017/18	2018/19	2019/20
Annual Change in Billed Non-Residential Water Use												
Non-Residential Metered Water Use (hcf)												
Class A - Low Strength												
Laundromat	0	0	0	0	0	0	0	0	0	0	0	0
Car Wash	0	0	0	0	0	0	0	0	0	0	0	0
Water Softeners	1	1,972	2,289	2,075	2,112	2,182	2,112	1,954	1,916	1,894	1,874	1,862
Schools	7	22,906	19,251	20,167	20,775	19,709	19,709	18,231	17,874	17,668	17,479	17,362
Other Public Facilities	13	8,956	5,460	6,137	6,851	5,799	5,799	5,364	5,259	5,198	5,142	5,108
City Facilities on Sewer	35	5,859	5,565	5,358	5,594	5,462	5,462	5,052	4,953	4,896	4,844	4,812
Subtotal Class A	56	39,693	32,565	33,737	35,332	33,151	33,081	30,601	30,002	29,656	29,339	29,144
Class B - Domestic Strength												
Commercial/Domestic Strength	321	41,966	41,331	44,754	42,684	43,043	42,684	39,482	38,710	38,263	37,853	37,601
Commercial Laundry	0	0	0	0	0	0	0	0	0	0	0	0
Condo - Common Area (with sewer)	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home Parks ¹	22	19,911	20,702	20,961	20,525	20,832	20,525	18,985	18,614	18,399	18,202	18,081
Subtotal Class B	343	61,877	62,033	65,715	63,208	63,874	63,208	58,467	57,324	56,662	56,055	55,682
Class C - Moderate Strength												
Motels	43	33,474	33,528	34,780	33,927	34,154	33,927	31,383	30,769	30,414	30,088	29,887
Retirement Home with Dining ²	1	9,160	9,136	9,191	9,162	9,164	9,162	8,475	8,309	8,213	8,125	8,071
Mortuaries	1	174	78	47	100	63	63	58	57	56	55	55
Subtotal Class C	45	42,808	42,742	44,018	43,189	43,380	43,152	39,916	39,135	38,683	38,268	38,013
Class D - Mod-High Strength												
Hotels with Dining Room	1	7,061	4,801	4,946	5,603	4,874	4,874	4,508	4,420	4,369	4,322	4,293
Subtotal Class D	1	7,061	4,801	4,946	5,603	4,874	4,874	4,508	4,420	4,369	4,322	4,293
Class E - High Strength												
Restaurants	45	16,765	16,859	16,165	16,596	16,512	16,512	15,274	14,975	14,802	14,643	14,545
Bakeries	2	315	293	323	310	308	308	285	279	276	273	271
Seafood Processors	2	1,416	1,711	1,015	1,381	1,363	1,363	1,261	1,236	1,222	1,209	1,201
Subtotal Class E	49	18,496	18,863	17,503	18,287	18,183	18,183	16,820	16,490	16,300	16,125	16,017
Total	493	169,935	161,004	165,919	165,619	163,462	162,498	150,312	147,371	145,670	144,109	143,149

1 Reclassified from Class A to Class B based on wastewater strength.

2 Reclassified from Class D to Class C based on wastewater strength.

Table 10
City of Morro Bay
Wastewater Loadings for Cost Recovery

	Accounts	Dwelling Units	Estimated Wastewater Flow				Strength (mg/l)		Loadings (lbs)	
			hcf	mg	gpd		BOD	SS	BOD	SS
RESIDENTIAL Single Family Condos Multi-Family	4,200	<u>Est.</u> 4,200	Sewer hcf Per Unit 5.0 4.0 4.0	188.51	516,462		200	200	314,432	314,432
	308	308		11.06	30,299		200	200	18,447	18,447
	345	960		34.47	94,439		200	200	57,496	57,496
NON-RESIDENTIAL Class A - Low Strength Class B - Domestic Strength Class C - Moderate Strength Class D - Mod-High Strength Class E - High Strength	56		2019/20 Wtr Use 29,144 55,682 38,013 4,293 16,017							
	343			85%	24,772	18.53	100	100	15,455	15,455
	45			85%	47,330	35.40	200	200	59,056	59,056
	1			85%	32,311	24.17	300	300	60,474	60,474
	49			85%	3,649	2.73	400	400	9,106	9,106
				85%	13,614	10.18	600	600	50,962	50,962
TOTAL	5,346			325.06	890,570		216	216	585,428	585,428

Table 11
City of Morro Bay
Wastewater Loadings for Cost Recovery

	Flow	BOD	SS
2019/20 Sewer Rate Revenue Target			\$7,296,000
Less estimated additional revenues from minimum charge			<u>0</u>
Net Revenue Requirement from Sewer Loadings			7,296,000
<i>Excludes Revenues from Cayucos Sanitary District</i>			
SEWER RATE RECOVERY			
Cost Allocation %	72.7%	13.7%	13.7%
Cost Allocation \$	\$5,301,358	\$997,321	\$997,321
Total Loadings	434,541 hcf	585,428 lbs	585,428 lbs
Unit Rate	\$12.200 per hcf	\$1.704 per lb	\$1.704 per lb

Table 12

	Wastewater Flow			Wastewater Strength (mg/l)		Unit Costs		Total Sewer Charge
	hcf	mg	BOD	SS	Flow	BOD	SS	
RESIDENTIAL								
<i>Charge per residential dwelling unit</i>								
Single Family	5.0	0.003740	200	200	61.00	10.63	10.63	82.26
Multi-Family/Condo	4.0	0.002992	200	200	48.80	8.50	8.50	65.80
NON-RESIDENTIAL								
<i>Rate per hcf of metered water use</i>								
Class A - Low Strength	Wtr Use	Sewer %	Swr Flow					Per hcf of Water Use
	1.0	85%	0.85	100	10.37	0.90	0.90	12.18
Class B - Domestic Strength	1.0	85%	0.85	200	10.37	1.81	1.81	13.98
Class C - Moderate Strength	1.0	85%	0.85	300	10.37	2.71	2.71	15.79
Class D - Mod-High Strength	1.0	85%	0.85	400	10.37	3.61	3.61	17.60
Class E - High Strength	1.0	85%	0.85	600	10.37	5.42	5.42	21.21

Table 13
City of Morro Bay
Proposed Sewer Rates

	Current 2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	5-Year Impact
PROJECTED SEWER RATES							
RESIDENTIAL							
<i>Charge per residential dwelling unit</i>							
Single Family	\$45.59	\$55.00	\$62.50	\$70.00	\$77.00	\$83.00	\$37.41
Multi-Family/Condo	varies	44.00	50.00	56.00	61.60	66.40	varies
% of Single Family		80%	80%	80%	80%	80%	
NON-RESIDENTIAL							
<i>Rate per hcf of metered water use</i>							
Class A - Low Strength	\$4.63	\$6.72	\$8.34	\$9.93	\$11.27	\$12.18	\$7.55
Class B - Domestic Strength	5.82	8.08	9.83	11.55	13.00	13.98	8.16
Class C - Moderate Strength	8.03	10.18	11.84	13.47	14.85	15.79	7.76
Class D - Mod-High Strength	10.45	12.43	13.96	15.46	16.73	17.60	7.15
Class E - High Strength	13.38	15.55	17.23	18.88	20.27	21.21	7.83
Minimum Annual Charge	51.77	44.00	50.00	56.00	61.60	66.40	14.63
SEWER ACCOUNTS & USE							
RESIDENTIAL							
<i>Number of Dwelling Units</i>							
<i>Projected Growth</i>		10	10	10	10	10	
Single Family	4,200	4,210	4,220	4,230	4,240	4,250	
Multi-Family/Condo	1,268	1,268	1,268	1,268	1,268	1,268	
NON-RESIDENTIAL							
<i>Metered Water Use</i>							
Class A - Low Strength	33,081	30,601	30,002	29,656	29,339	29,144	
Class B - Domestic Strength	63,208	58,467	57,324	56,662	56,055	55,682	
Class C - Moderate Strength	43,152	39,916	39,135	38,683	38,268	38,013	
Class D - Mod-High Strength	4,874	4,508	4,420	4,369	4,322	4,293	
Class E - High Strength	18,183	16,820	16,490	16,300	16,125	16,017	
SEWER RATE REVENUES							
RESIDENTIAL							
Single Family	2,315,000	2,778,600	3,165,000	3,553,200	3,917,760	4,233,000	
Multi-Family/Condo	<u>700,000</u>	<u>669,504</u>	<u>760,800</u>	<u>852,096</u>	<u>937,306</u>	<u>1,010,342</u>	
Subtotal	3,015,000	3,448,104	3,925,800	4,405,296	4,855,066	5,243,342	
NON-RESIDENTIAL							
Class A - Low Strength	153,165	205,639	250,217	294,484	330,651	354,878	
Class B - Domestic Strength	367,873	472,413	563,495	654,446	728,715	778,629	
Class C - Moderate Strength	346,512	406,345	463,358	521,060	568,280	600,236	
Class D - Mod-High Strength	50,928	56,034	61,703	67,545	72,307	75,544	
Class E - High Strength	<u>243,289</u>	<u>261,551</u>	<u>284,123</u>	<u>307,744</u>	<u>326,854</u>	<u>339,731</u>	
Subtotal	1,161,766	1,401,982	1,622,896	1,845,279	2,026,806	2,149,019	
Total	4,176,766	4,850,086	5,548,696	6,250,575	6,881,872	7,392,361	
Target from Cash Flow Projections	4,164,000	4,921,000	5,561,000	6,198,000	6,790,000	7,296,000	
Difference \$	12,766	(70,914)	(12,304)	52,575	91,872	96,361	
Difference %	0.3%	-1.4%	-0.2%	0.8%	1.4%	1.3%	

Appendix

Additional Utility Billing & Usage Analysis

Table A-1
City of Morro Bay
Consumption Block Analysis FY2014
All Consumption

Average Use 8.0
Average Use (excluding zeros) 8.6
Median Use 5.0

Monthly Use (hcf)	Number of Bills				Water Use (hcf)		Use Through Break	
	In Block	% of Total	Cumulative	Cumulative %	In Block	% of Ttl	Use (hcf)	% of Ttl
0	4,459	6.8%	4,459	6.8%	0	0.0%	0	0.0%
1	5,830	8.9%	10,289	15.8%	5,830	1.1%	60,738	11.6%
2	6,789	10.4%	17,078	26.2%	13,578	2.6%	115,646	22.2%
3	7,333	11.2%	24,411	37.4%	21,999	4.2%	163,765	31.4%
4	7,315	11.2%	31,726	48.7%	29,260	5.6%	204,551	39.2%
5	6,474	9.9%	38,200	58.6%	32,370	6.2%	238,022	45.6%
6	5,647	8.7%	43,847	67.3%	33,882	6.5%	265,019	50.8%
7	4,413	6.8%	48,260	74.0%	30,891	5.9%	286,369	54.9%
8	3,378	5.2%	51,638	79.2%	27,024	5.2%	303,306	58.1%
9	2,639	4.0%	54,277	83.3%	23,751	4.6%	316,865	60.7%
10	1,982	3.0%	56,259	86.3%	19,820	3.8%	327,785	62.8%
11	1,508	2.3%	57,767	88.6%	16,588	3.2%	336,723	64.6%
12	1,201	1.8%	58,968	90.4%	14,412	2.8%	344,153	66.0%
13	907	1.4%	59,875	91.8%	11,791	2.3%	350,382	67.2%
14	665	1.0%	60,540	92.9%	9,310	1.8%	355,704	68.2%
15	515	0.8%	61,055	93.6%	7,725	1.5%	360,361	69.1%
16	426	0.7%	61,481	94.3%	6,816	1.3%	364,503	69.9%
17	350	0.5%	61,831	94.8%	5,950	1.1%	368,219	70.6%
18	300	0.5%	62,131	95.3%	5,400	1.0%	371,585	71.2%
19	224	0.3%	62,355	95.6%	4,256	0.8%	374,651	71.8%
20	173	0.3%	62,528	95.9%	3,460	0.7%	377,493	72.4%
21	150	0.2%	62,678	96.1%	3,150	0.6%	380,162	72.9%
22	166	0.3%	62,844	96.4%	3,652	0.7%	382,681	73.4%
23	133	0.2%	62,977	96.6%	3,059	0.6%	385,034	73.8%
24	112	0.2%	63,089	96.8%	2,688	0.5%	387,254	74.2%
25	96	0.1%	63,185	96.9%	2,400	0.5%	389,362	74.6%
26	78	0.1%	63,263	97.0%	2,028	0.4%	391,374	75.0%
27	72	0.1%	63,335	97.1%	1,944	0.4%	393,308	75.4%
28	75	0.1%	63,410	97.3%	2,100	0.4%	395,170	75.8%
29	54	0.1%	63,464	97.3%	1,566	0.3%	396,957	76.1%
30	70	0.1%	63,534	97.4%	2,100	0.4%	398,690	76.4%
31	54	0.1%	63,588	97.5%	1,674	0.3%	400,353	76.8%
32	50	0.1%	63,638	97.6%	1,600	0.3%	401,962	77.1%
33	42	0.1%	63,680	97.7%	1,386	0.3%	403,521	77.4%
34	39	0.1%	63,719	97.7%	1,326	0.3%	405,038	77.7%
35	33	0.1%	63,752	97.8%	1,155	0.2%	406,516	77.9%
36	48	0.1%	63,800	97.9%	1,728	0.3%	407,961	78.2%
37	39	0.1%	63,839	97.9%	1,443	0.3%	409,358	78.5%
38	40	0.1%	63,879	98.0%	1,520	0.3%	410,716	78.7%
39	39	0.1%	63,918	98.0%	1,521	0.3%	412,034	79.0%
40	38	0.1%	63,956	98.1%	1,520	0.3%	413,313	79.2%
41	37	0.1%	63,993	98.2%	1,517	0.3%	414,554	79.5%
42	32	0.0%	64,025	98.2%	1,344	0.3%	415,758	79.7%
43	26	0.0%	64,051	98.2%	1,118	0.2%	416,930	79.9%
44	23	0.0%	64,074	98.3%	1,012	0.2%	418,076	80.2%
45	17	0.0%	64,091	98.3%	765	0.1%	419,199	80.4%
46	23	0.0%	64,114	98.3%	1,058	0.2%	420,305	80.6%
47	30	0.0%	64,144	98.4%	1,410	0.3%	421,388	80.8%
48	19	0.0%	64,163	98.4%	912	0.2%	422,441	81.0%
49	28	0.0%	64,191	98.5%	1,372	0.3%	423,475	81.2%
50	38	0.1%	64,229	98.5%	1,900	0.4%	424,481	81.4%
51-75	295	0.5%	64,524	99.0%	18,095	3.5%	444,651	85.2%
76-100	202	0.3%	64,726	99.3%	17,370	3.3%	458,646	87.9%
101-200	317	0.5%	65,043	99.8%	43,214	8.3%	485,560	93.1%
201+	154	0.2%	65,197	100.0%	66,834	12.8%	521,594	100.0%
Total	65,197	100.0%			521,594	100.0%		

City of Morro Bay

Distribution of Monthly Water Bills 2013/14

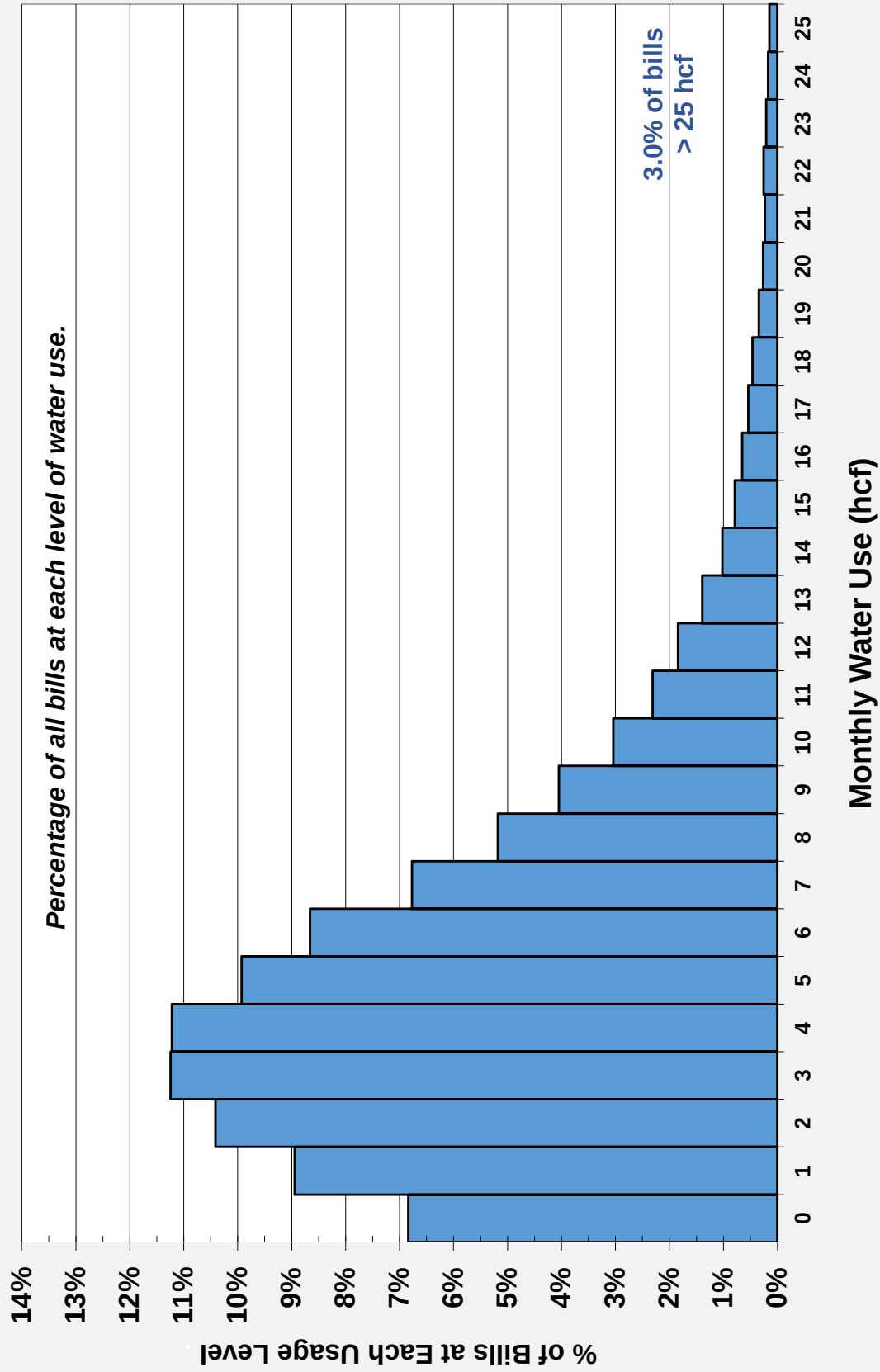


Table A-2
City of Morro Bay
Consumption Block Analysis FY2014
All Consumption

Average Use 7.8
Average Use (excluding zeros) 8.4
Median Use 5.0

Monthly Use (hcf)	Number of Bills				Water Use (hcf)		Use Through Break	
	In Block	% of Total	Cumulative	Cumulative %	In Block	% of Ttl	Use (hcf)	% of Ttl
0	4,738	7.3%	4,738	7.3%	0	0.0%	0	0.0%
1	5,904	9.1%	10,642	16.3%	5,904	1.2%	60,356	11.9%
2	6,709	10.3%	17,351	26.7%	13,418	2.7%	114,808	22.7%
3	7,305	11.2%	24,656	37.9%	21,915	4.3%	162,551	32.1%
4	7,162	11.0%	31,818	48.9%	28,648	5.7%	202,989	40.1%
5	6,553	10.1%	38,371	58.9%	32,765	6.5%	236,265	46.7%
6	5,534	8.5%	43,905	67.4%	33,204	6.6%	262,988	52.0%
7	4,325	6.6%	48,230	74.1%	30,275	6.0%	284,177	56.1%
8	3,386	5.2%	51,616	79.3%	27,088	5.4%	301,041	59.5%
9	2,610	4.0%	54,226	83.3%	23,490	4.6%	314,519	62.1%
10	2,016	3.1%	56,242	86.4%	20,160	4.0%	325,387	64.3%
11	1,520	2.3%	57,762	88.7%	16,720	3.3%	334,239	66.0%
12	1,150	1.8%	58,912	90.5%	13,800	2.7%	341,571	67.5%
13	851	1.3%	59,763	91.8%	11,063	2.2%	347,753	68.7%
14	662	1.0%	60,425	92.8%	9,268	1.8%	353,084	69.8%
15	532	0.8%	60,957	93.6%	7,980	1.6%	357,753	70.7%
16	439	0.7%	61,396	94.3%	7,024	1.4%	361,890	71.5%
17	319	0.5%	61,715	94.8%	5,423	1.1%	365,588	72.2%
18	296	0.5%	62,011	95.3%	5,328	1.1%	368,967	72.9%
19	238	0.4%	62,249	95.6%	4,522	0.9%	372,050	73.5%
20	199	0.3%	62,448	95.9%	3,980	0.8%	374,895	74.1%
21	162	0.2%	62,610	96.2%	3,402	0.7%	377,541	74.6%
22	176	0.3%	62,786	96.5%	3,872	0.8%	380,025	75.1%
23	121	0.2%	62,907	96.6%	2,783	0.5%	382,333	75.5%
24	118	0.2%	63,025	96.8%	2,832	0.6%	384,520	76.0%
25	89	0.1%	63,114	97.0%	2,225	0.4%	386,589	76.4%
26	84	0.1%	63,198	97.1%	2,184	0.4%	388,569	76.8%
27	84	0.1%	63,282	97.2%	2,268	0.4%	390,465	77.1%
28	73	0.1%	63,355	97.3%	2,044	0.4%	392,277	77.5%
29	73	0.1%	63,428	97.4%	2,117	0.4%	394,016	77.9%
30	65	0.1%	63,493	97.5%	1,950	0.4%	395,682	78.2%
31	52	0.1%	63,545	97.6%	1,612	0.3%	397,283	78.5%
32	38	0.1%	63,583	97.7%	1,216	0.2%	398,832	78.8%
33	54	0.1%	63,637	97.8%	1,782	0.4%	400,343	79.1%
34	48	0.1%	63,685	97.8%	1,632	0.3%	401,800	79.4%
35	33	0.1%	63,718	97.9%	1,155	0.2%	403,209	79.7%
36	31	0.0%	63,749	97.9%	1,116	0.2%	404,585	79.9%
37	40	0.1%	63,789	98.0%	1,480	0.3%	405,930	80.2%
38	33	0.1%	63,822	98.0%	1,254	0.2%	407,235	80.5%
39	46	0.1%	63,868	98.1%	1,794	0.4%	408,507	80.7%
40	30	0.0%	63,898	98.2%	1,200	0.2%	409,733	81.0%
41	33	0.1%	63,931	98.2%	1,353	0.3%	410,929	81.2%
42	37	0.1%	63,968	98.3%	1,554	0.3%	412,092	81.4%
43	23	0.0%	63,991	98.3%	989	0.2%	413,218	81.6%
44	26	0.0%	64,017	98.3%	1,144	0.2%	414,321	81.9%
45	24	0.0%	64,041	98.4%	1,080	0.2%	415,398	82.1%
46	17	0.0%	64,058	98.4%	782	0.2%	416,451	82.3%
47	33	0.1%	64,091	98.5%	1,551	0.3%	417,487	82.5%
48	22	0.0%	64,113	98.5%	1,056	0.2%	418,490	82.7%
49	26	0.0%	64,139	98.5%	1,274	0.3%	419,471	82.9%
50	19	0.0%	64,158	98.6%	950	0.2%	420,426	83.1%
51-75	316	0.5%	64,474	99.0%	19,523	3.9%	439,649	86.9%
76-100	181	0.3%	64,655	99.3%	15,947	3.2%	452,996	89.5%
101-200	305	0.5%	64,960	99.8%	40,622	8.0%	476,518	94.2%
201+	134	0.2%	65,094	100.0%	56,395	11.1%	506,113	100.0%
Total	65,094	100.0%			506,113	100.0%		

City of Morro Bay

Distribution of Monthly Water Bills 2012/13

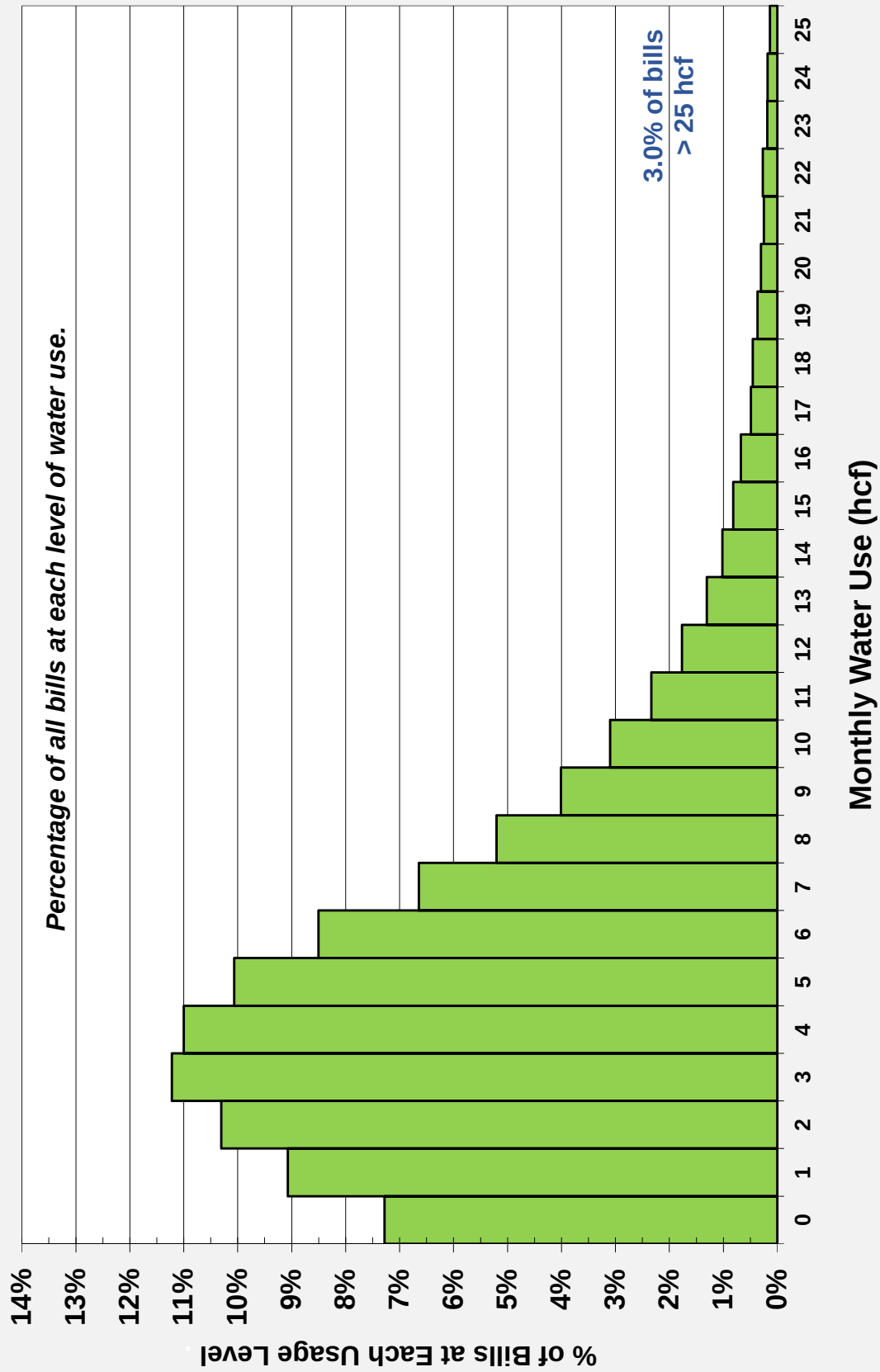


Table A-3
City of Morro Bay
Consumption Block Analysis FY2014
Residential Bills Only (Single Family & Condos)

Average Use 5.2
Average Use (excluding zeros) 5.6
Median Use 4.0

Monthly Use (hcf)	Number of Bills				Water Use (hcf)		Use Through Break	
	In Block	% of Total	Cumulative	Cumulative %	In Block	% of Ttl	Use (hcf)	% of Ttl
0	3,401	6.3%	3,401	6.3%	0	0.0%	0	0.0%
1	4,873	9.0%	8,274	15.4%	4,873	1.7%	50,452	18.0%
2	6,077	11.3%	14,351	26.6%	12,154	4.3%	96,031	34.2%
3	6,589	12.2%	20,940	38.9%	19,767	7.0%	135,533	48.2%
4	6,657	12.4%	27,597	51.2%	26,628	9.5%	168,446	60.0%
5	5,820	10.8%	33,417	62.1%	29,100	10.4%	194,702	69.3%
6	5,035	9.3%	38,452	71.4%	30,210	10.8%	215,138	76.6%
7	3,840	7.1%	42,292	78.5%	26,880	9.6%	230,539	82.1%
8	2,873	5.3%	45,165	83.9%	22,984	8.2%	242,100	86.2%
9	2,180	4.0%	47,345	87.9%	19,620	7.0%	250,788	89.3%
10	1,605	3.0%	48,950	90.9%	16,050	5.7%	257,296	91.6%
11	1,185	2.2%	50,135	93.1%	13,035	4.6%	262,199	93.3%
12	916	1.7%	51,051	94.8%	10,992	3.9%	265,917	94.7%
13	672	1.2%	51,723	96.0%	8,736	3.1%	268,719	95.7%
14	493	0.9%	52,216	97.0%	6,902	2.5%	270,849	96.4%
15	350	0.6%	52,566	97.6%	5,250	1.9%	272,486	97.0%
16	267	0.5%	52,833	98.1%	4,272	1.5%	273,773	97.4%
17	211	0.4%	53,044	98.5%	3,587	1.3%	274,793	97.8%
18	172	0.3%	53,216	98.8%	3,096	1.1%	275,602	98.1%
19	115	0.2%	53,331	99.0%	2,185	0.8%	276,239	98.3%
20	80	0.1%	53,411	99.2%	1,600	0.6%	276,761	98.5%
21	59	0.1%	53,470	99.3%	1,239	0.4%	277,203	98.7%
22	68	0.1%	53,538	99.4%	1,496	0.5%	277,586	98.8%
23	55	0.1%	53,593	99.5%	1,265	0.5%	277,901	98.9%
24	46	0.1%	53,639	99.6%	1,104	0.4%	278,161	99.0%
25	33	0.1%	53,672	99.7%	825	0.3%	278,375	99.1%
26	20	0.0%	53,692	99.7%	520	0.2%	278,556	99.2%
27	20	0.0%	53,712	99.7%	540	0.2%	278,717	99.2%
28	18	0.0%	53,730	99.8%	504	0.2%	278,858	99.3%
29	12	0.0%	53,742	99.8%	348	0.1%	278,981	99.3%
30	10	0.0%	53,752	99.8%	300	0.1%	279,092	99.3%
31	13	0.0%	53,765	99.8%	403	0.1%	279,193	99.4%
32	12	0.0%	53,777	99.9%	384	0.1%	279,281	99.4%
33	6	0.0%	53,783	99.9%	198	0.1%	279,357	99.4%
34	10	0.0%	53,793	99.9%	340	0.1%	279,427	99.5%
35	1	0.0%	53,794	99.9%	35	0.0%	279,487	99.5%
36	6	0.0%	53,800	99.9%	216	0.1%	279,546	99.5%
37	4	0.0%	53,804	99.9%	148	0.1%	279,599	99.5%
38	6	0.0%	53,810	99.9%	228	0.1%	279,648	99.5%
39	2	0.0%	53,812	99.9%	78	0.0%	279,691	99.6%
40	1	0.0%	53,813	99.9%	40	0.0%	279,732	99.6%
41	2	0.0%	53,815	99.9%	82	0.0%	279,772	99.6%
42	1	0.0%	53,816	99.9%	42	0.0%	279,810	99.6%
43	2	0.0%	53,818	99.9%	86	0.0%	279,847	99.6%
44	2	0.0%	53,820	99.9%	88	0.0%	279,882	99.6%
45	2	0.0%	53,822	99.9%	90	0.0%	279,915	99.6%
46	0	0.0%	53,822	99.9%	0	0.0%	279,946	99.6%
47	1	0.0%	53,823	99.9%	47	0.0%	279,977	99.7%
48	2	0.0%	53,825	99.9%	96	0.0%	280,007	99.7%
49	1	0.0%	53,826	99.9%	49	0.0%	280,035	99.7%
50	1	0.0%	53,827	100.0%	50	0.0%	280,062	99.7%
51-75	15	0.0%	53,842	100.0%	889	0.3%	280,476	99.8%
76-100	6	0.0%	53,848	100.0%	511	0.2%	280,662	99.9%
101-200	4	0.0%	53,852	100.0%	574	0.2%	280,936	100.0%
201+	1	0.0%	53,853	100.0%	203	0.1%	280,939	100.0%
Total	53,853	100.0%			280,939	100.0%		

City of Morro Bay

Distribution of Monthly Residential Water Bills 2013/14

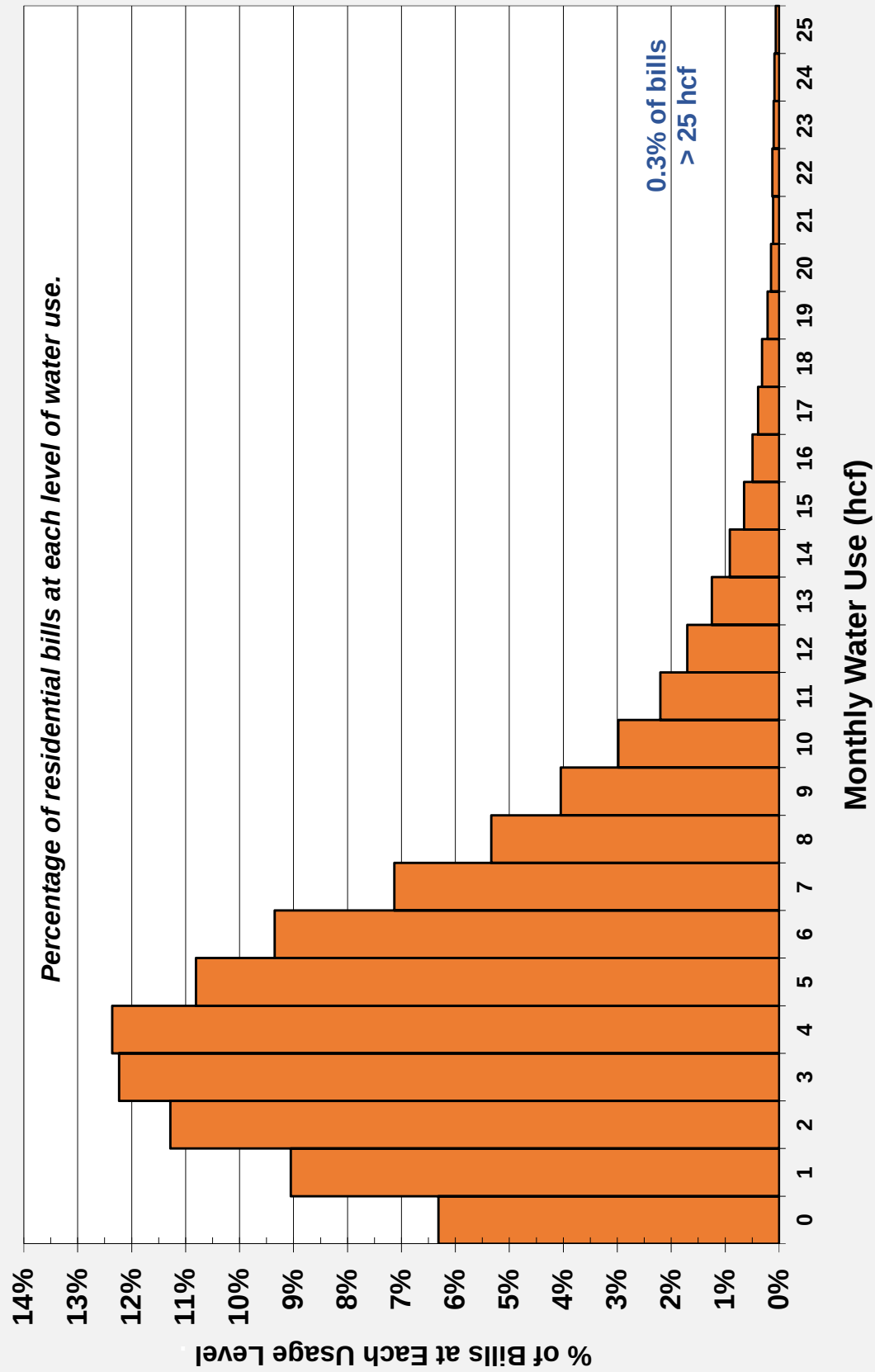


Table A-4
City of Morro Bay
Consumption Block Analysis FY2013
Residential Bills Only (Single Family & Condos)

Average Use 5.2
Average Use (excluding zeros) 5.6
Median Use 4.0

Monthly Use (hcf)	Number of Bills				Water Use (hcf)		Use Through Break	
	In Block	% of Total	Cumulative	Cumulative %	In Block	% of Ttl	Use (hcf)	% of Ttl
0	3,624	6.7%	3,624	6.7%	0	0.0%	0	0.0%
1	4,883	9.1%	8,507	15.8%	4,883	1.7%	50,109	17.9%
2	6,000	11.2%	14,507	27.0%	12,000	4.3%	95,335	34.1%
3	6,620	12.3%	21,127	39.3%	19,860	7.1%	134,561	48.2%
4	6,462	12.0%	27,589	51.3%	25,848	9.3%	167,167	59.9%
5	5,847	10.9%	33,436	62.2%	29,235	10.5%	193,311	69.2%
6	4,924	9.2%	38,360	71.4%	29,544	10.6%	213,608	76.5%
7	3,807	7.1%	42,167	78.5%	26,649	9.5%	228,981	82.0%
8	2,878	5.4%	45,045	83.8%	23,024	8.2%	240,547	86.1%
9	2,186	4.1%	47,231	87.9%	19,674	7.0%	249,235	89.3%
10	1,639	3.1%	48,870	90.9%	16,390	5.9%	255,737	91.6%
11	1,203	2.2%	50,073	93.2%	13,233	4.7%	260,600	93.3%
12	918	1.7%	50,991	94.9%	11,016	3.9%	264,260	94.6%
13	634	1.2%	51,625	96.1%	8,242	3.0%	267,002	95.6%
14	466	0.9%	52,091	96.9%	6,524	2.3%	269,110	96.4%
15	341	0.6%	52,432	97.6%	5,115	1.8%	270,752	97.0%
16	267	0.5%	52,699	98.1%	4,272	1.5%	272,053	97.4%
17	203	0.4%	52,902	98.5%	3,451	1.2%	273,087	97.8%
18	155	0.3%	53,057	98.7%	2,790	1.0%	273,918	98.1%
19	128	0.2%	53,185	99.0%	2,432	0.9%	274,594	98.3%
20	96	0.2%	53,281	99.2%	1,920	0.7%	275,142	98.5%
21	74	0.1%	53,355	99.3%	1,554	0.6%	275,594	98.7%
22	75	0.1%	53,430	99.4%	1,650	0.6%	275,972	98.8%
23	49	0.1%	53,479	99.5%	1,127	0.4%	276,275	98.9%
24	36	0.1%	53,515	99.6%	864	0.3%	276,529	99.0%
25	31	0.1%	53,546	99.7%	775	0.3%	276,747	99.1%
26	32	0.1%	53,578	99.7%	832	0.3%	276,934	99.2%
27	23	0.0%	53,601	99.8%	621	0.2%	277,089	99.2%
28	15	0.0%	53,616	99.8%	420	0.2%	277,221	99.3%
29	15	0.0%	53,631	99.8%	435	0.2%	277,338	99.3%
30	18	0.0%	53,649	99.8%	540	0.2%	277,440	99.4%
31	7	0.0%	53,656	99.9%	217	0.1%	277,524	99.4%
32	4	0.0%	53,660	99.9%	128	0.0%	277,601	99.4%
33	8	0.0%	53,668	99.9%	264	0.1%	277,674	99.4%
34	4	0.0%	53,672	99.9%	136	0.0%	277,739	99.5%
35	3	0.0%	53,675	99.9%	105	0.0%	277,800	99.5%
36	2	0.0%	53,677	99.9%	72	0.0%	277,858	99.5%
37	6	0.0%	53,683	99.9%	222	0.1%	277,914	99.5%
38	1	0.0%	53,684	99.9%	38	0.0%	277,964	99.5%
39	7	0.0%	53,691	99.9%	273	0.1%	278,013	99.6%
40	2	0.0%	53,693	99.9%	80	0.0%	278,055	99.6%
41	4	0.0%	53,697	99.9%	164	0.1%	278,095	99.6%
42	3	0.0%	53,700	99.9%	126	0.0%	278,131	99.6%
43	1	0.0%	53,701	99.9%	43	0.0%	278,164	99.6%
44	0	0.0%	53,701	99.9%	0	0.0%	278,196	99.6%
45	2	0.0%	53,703	99.9%	90	0.0%	278,228	99.6%
46	0	0.0%	53,703	99.9%	0	0.0%	278,258	99.7%
47	1	0.0%	53,704	99.9%	47	0.0%	278,288	99.7%
48	0	0.0%	53,704	99.9%	0	0.0%	278,317	99.7%
49	2	0.0%	53,706	99.9%	98	0.0%	278,346	99.7%
50	3	0.0%	53,709	100.0%	150	0.1%	278,373	99.7%
51-75	16	0.0%	53,725	100.0%	939	0.3%	278,712	99.8%
76-100	3	0.0%	53,728	100.0%	260	0.1%	278,872	99.9%
101-200	3	0.0%	53,731	100.0%	429	0.2%	279,201	100.0%
201+	2	0.0%	53,733	100.0%	434	0.2%	279,235	100.0%
Total	53,733	100.0%			279,235	100.0%		

City of Morro Bay

Distribution of Monthly Residential Water Bills 2012/13

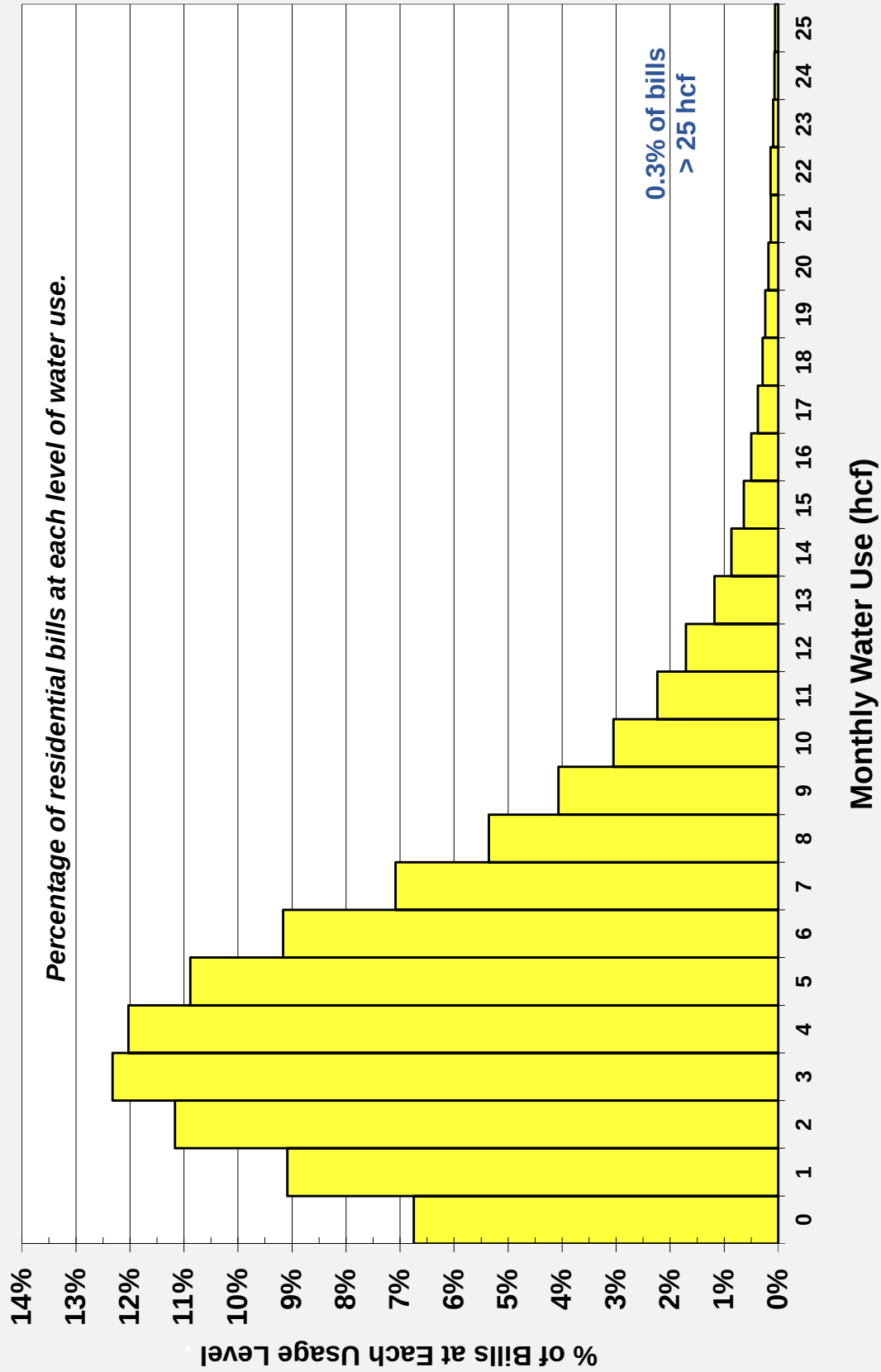


Table A-5
City of Morro Bay
Historical Accounts

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
RESIDENTIAL																				
Average Annual Accounts																				
Single Family Residential	3,613	3,627	3,682	3,738	3,802	3,883	3,960	4,013	4,051	4,125	4,171	4,198	4,237	4,242	4,118	4,155	4,168	4,170	4,180	4,191
Single Family Condo	288	287	290	290	291	293	293	293	292	292	289	296	297	296	290	305	305	305	306	308
Multi - Family Residential	343	339	336	334	331	329	331	329	331	331	330	339	337	363	359	355	350	350	348	341
Single Family - Outside City	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	8	9	9
Subtotal	4,249	4,258	4,314	4,368	4,430	4,511	4,590	4,641	4,679	4,753	4,795	4,839	4,877	4,907	4,773	4,821	4,828	4,832	4,842	4,848
Annual Change		9	56	54	62	81	79	51	38	74	42	43	38	30	-134	48	7	5	10	6
NON-RESIDENTIAL																				
Average Annual Accounts																				
Yard Meter	37	40	46	51	52	54	53	53	57	52	51	53	51	51	47	47	47	47	50	52
Vacant Land	8	7	10	10	10	10	10	10	9	11	9	9	9	9	4	4	4	4	2	2
Mobile Home Parks	25	25	26	25	25	25	25	25	24	23	24	24	24	25	22	22	22	22	22	22
Commercial/Domestic Strength	303	298	321	324	323	323	323	322	324	326	328	329	331	335	318	317	315	316	322	321
Restaurants	41	40	41	42	42	43	43	43	43	42	44	46	46	47	44	44	44	45	45	45
Bakeries	1	1	1	1	1	2	2	2	2	3	3	3	3	3	3	2	2	2	2	2
Retirement Home/Hospital	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1
Motels	47	46	49	50	50	50	50	49	50	50	50	51	50	50	44	43	43	43	43	43
Mortuaries	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hotels with Dining	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Seafood Processors	5	4	5	5	5	5	5	5	5	5	5	5	4	4	3	3	3	3	2	2
Water Softeners	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Schools	5	6	6	6	6	6	6	6	6	6	6	7	8	8	7	7	7	7	7	7
Other Public Facilities	12	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
City Facilities on Sewer	31	32	32	33	34	34	34	34	35	37	36	35	37	38	34	33	33	33	35	35
City Facilities Not on Sewer	20	21	23	24	24	26	25	24	22	30	33	33	34	34	31	31	32	30	29	29
Power Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	539	539	578	589	590	596	594	590	595	603	607	612	614	622	575	570	569	568	575	575
Annual Change		-1	39	11	2	5	-2	-4	5	8	4	5	2	7	-47	-6	-1	0	7	0
TOTAL	4,788	4,797	4,892	4,957	5,020	5,106	5,184	5,231	5,275	5,356	5,403	5,451	5,491	5,529	5,348	5,390	5,396	5,401	5,417	5,424
Annual Change		8	95	65	63	86	77	47	44	82	46	48	40	38	-180	42	6	4	17	6

Table A-6
City of Morro Bay
Historical Water Use

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
RESIDENTIAL																					
Annual Water Use (hcf)																					
Single Family Residential	241,983	246,276	264,445	247,987	257,248	263,947	272,819	282,173	287,449	285,703	275,676	279,339	289,765	290,839	268,232	254,008	262,949	268,056	272,106	178,597	Jan-Aug only
Single Family Condo	10,715	10,366	10,448	10,258	9,875	9,664	10,067	9,604	9,467	9,712	8,934	9,402	9,563	9,480	8,590	9,507	9,837	9,954	9,956	6,309	
Multi - Family Residential	56,570	51,842	55,955	51,024	49,743	47,674	48,400	47,532	46,434	45,719	45,837	45,415	45,411	47,025	45,419	43,271	43,763	44,836	44,287	28,870	
Single Family - Outside City	406	653	806	542	329	501	296	306	356	277	278	376	417	430	326	262	176	731	645	376	
Subtotal	309,674	309,137	331,654	309,811	317,195	321,786	331,582	339,615	343,706	341,411	330,725	334,532	345,156	347,774	322,567	307,048	316,725	323,577	326,994	214,152	
% of Total	60.6%	61.7%	61.0%	62.9%	61.5%	60.9%	60.9%	61.6%	62.3%	62.2%	62.5%	63.0%	62.1%	62.2%	59.1%	56.2%	62.3%	63.9%	63.3%	62.7%	
NON-RESIDENTIAL																					
Annual Water Use (hcf)																					
Yard Meter	5,804	5,339	8,282	8,735	10,012	11,228	11,025	11,313	11,292	8,865	8,379	9,036	9,186	7,954	7,127	5,993	6,335	7,250	9,017	5,156	
Vacant Land	27	32	37	37	35	44	75	122	77	91	59	54	48	24	7	5	7	21	18	5	
Mobile Home Parks	23,676	22,943	26,819	22,346	23,984	23,820	24,877	26,054	25,619	22,747	22,487	21,339	21,997	22,471	22,749	20,678	19,911	20,702	20,961	14,582	
Comm'l/Domestic Strength	41,895	40,159	46,777	43,556	44,229	44,812	43,941	43,836	44,398	44,995	45,946	45,781	45,091	45,818	43,837	41,537	41,966	41,331	44,754	29,920	
Restaurants	18,623	16,608	18,582	18,920	19,271	19,525	21,903	20,480	19,216	18,226	17,707	18,457	17,355	18,172	16,872	15,981	16,765	16,859	16,165	10,878	
Bakeries	78	108	135	119	100	145	141	112	160	178	240	293	358	364	336	289	315	293	323	218	
Retirement Home/Hospital	12,120	9,155	10,401	9,098	11,075	10,826	8,360	10,563	10,179	10,258	10,275	9,792	9,410	10,654	10,486	9,835	9,160	9,136	9,191	6,323	
Motels	33,538	31,612	34,059	32,029	34,657	36,677	36,447	34,145	35,421	34,431	32,494	32,784	33,780	32,265	32,450	31,589	33,474	33,528	34,780	24,032	
Mortuaries	49	123	81	62	53	47	47	33	32	80	75	64	70	143	60	81	174	78	47	27	
Hotels with Dining	7,290	6,346	7,065	4,954	6,594	9,748	9,637	9,368	9,602	9,869	10,202	10,139	9,747	7,472	8,088	7,554	7,061	4,801	4,946	3,000	
Seafood Processors	2,478	1,239	1,357	1,432	1,242	1,286	1,011	1,009	1,069	954	1,018	1,039	929	1,115	1,333	1,358	1,416	1,711	1,015	668	
Water Softeners	3,149	3,745	1,431	1,307	1,622	1,437	1,554	1,416	1,394	1,625	1,785	1,801	2,078	2,256	4,248	2,184	1,972	2,289	2,075	1,670	
Schools	20,687	21,033	19,557	15,090	20,615	22,123	25,341	25,383	25,237	25,867	22,545	21,168	29,961	29,200	46,938	74,645	22,906	19,251	20,167	14,562	
Other Public Facilities	8,010	7,025	7,356	5,944	6,618	7,434	9,063	9,282	6,682	6,443	5,887	5,325	5,459	6,274	5,092	11,580	8,956	5,460	6,137	3,583	
City Facilities on Sewer	10,874	9,499	8,797	8,422	7,171	7,712	8,137	8,158	8,551	5,112	4,757	5,173	5,639	5,043	4,932	5,069	5,859	5,565	5,358	2,945	
City Facilities Not on Sewer	13,027	16,957	20,923	10,879	11,563	9,870	11,185	10,647	9,037	17,526	14,381	14,225	19,361	21,807	18,603	11,321	15,745	14,851	14,700	9,613	
Power Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Subtotal	201,325	191,923	211,659	182,930	198,841	206,734	212,744	211,921	207,966	207,267	198,237	196,470	210,469	211,032	223,158	239,699	192,022	183,126	189,654	127,182	
% of Total	39.4%	38.3%	39.0%	37.1%	38.5%	39.1%	39.1%	38.4%	37.7%	37.8%	37.5%	37.0%	37.9%	37.8%	40.9%	43.8%	37.7%	36.1%	36.7%	37.3%	
TOTAL	510,999	501,060	543,313	492,741	516,036	528,520	544,326	551,536	551,672	548,678	528,962	531,002	555,625	558,806	545,725	546,747	508,747	506,703	516,648	341,334	

Table A-7
City of Morro Bay
Average Monthly Water Use (hcf)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
RESIDENTIAL																				
Average Monthly Use per Account (hcf)																				
Single Family Residential	5.6	5.7	6.0	5.5	5.6	5.7	5.7	5.9	5.9	5.8	5.5	5.5	5.7	5.7	5.4	5.1	5.3	5.4	5.4	5.3
Single Family Condo	3.1	3.0	3.0	2.9	2.8	2.7	2.9	2.7	2.7	2.8	2.6	2.6	2.7	2.7	2.5	2.6	2.7	2.7	2.7	2.6
Multi - Family Residential	13.8	12.7	13.9	12.7	12.5	12.1	12.2	12.0	11.7	11.5	11.6	11.2	11.2	10.8	10.6	10.2	10.4	10.7	10.6	10.6
Single Family - Outside City	6.5	9.3	11.2	7.5	4.5	7.0	4.2	4.2	5.2	3.8	3.9	5.2	5.7	6.0	4.7	3.9	2.9	7.3	5.9	5.2
Subtotal	6.1	6.0	6.4	5.9	6.0	5.9	6.0	6.1	6.1	6.0	5.7	5.8	5.9	5.9	5.6	5.3	5.5	5.6	5.6	5.5
Rolling 3-Year Average			6.2	6.1	6.1	5.9	6.0	6.0	6.1	6.1	6.0	5.8	5.8	5.9	5.8	5.6	5.5	5.5	5.6	5.6
NON-RESIDENTIAL ACCOUNTS																				
Average Monthly Use per Account (hcf)																				
Yard Meter	13.0	11.1	14.9	14.3	16.0	17.4	17.3	17.7	16.5	14.2	13.8	14.2	15.0	13.0	12.5	10.6	11.3	12.9	15.1	12.5
Vacant Land	0.3	0.4	0.3	0.3	0.3	0.4	0.6	1.0	0.7	0.7	0.5	0.5	0.4	0.2	0.1	0.1	0.1	0.5	0.8	0.3
Mobile Home Parks	78.9	76.2	87.6	74.5	79.9	79.4	82.9	87.1	87.4	81.8	78.1	74.1	76.4	76.4	84.6	78.3	75.4	78.4	78.8	82.9
Commercial/Domestic Strength	11.5	11.2	12.1	11.2	11.4	11.6	11.3	11.4	11.4	11.5	11.7	11.6	11.4	11.4	11.5	10.9	11.1	10.9	11.6	11.7
Restaurants	38.3	34.6	37.5	37.5	37.9	37.8	42.4	39.8	37.7	35.8	33.9	33.4	31.3	32.4	31.9	30.4	31.6	31.3	30.2	30.5
Bakeries	6.0	9.0	11.3	9.9	8.3	6.0	6.1	4.7	6.7	5.2	6.7	8.9	9.9	10.1	9.3	10.7	13.1	12.2	13.5	13.6
Retirement Home/Hospital	505.0	381.5	433.4	379.1	461.5	451.1	348.3	440.1	424.1	427.4	428.1	408.0	392.1	443.9	806.6	819.6	763.3	761.3	765.9	790.4
Motels	59.9	57.1	58.1	53.8	57.8	61.0	61.2	58.2	59.4	57.2	53.9	53.7	56.9	53.8	61.6	61.3	65.0	65.4	67.5	70.5
Mortuaries	4.1	10.3	6.8	5.2	4.4	3.9	3.9	2.8	2.7	6.7	6.3	5.3	5.8	11.9	5.0	6.8	14.5	6.5	3.9	3.4
Hotels with Dining	607.5	528.8	588.8	412.8	549.5	812.3	803.1	780.7	800.2	822.4	850.2	844.9	812.3	622.7	674.0	686.7	588.4	400.1	412.2	375.0
Seafood Processors	41.3	24.3	21.9	23.9	20.7	21.4	16.9	17.1	17.8	15.9	16.4	17.6	19.4	23.2	36.0	37.7	39.3	47.5	42.3	41.8
Water Softeners	262.4	249.7	119.3	108.9	135.2	119.8	129.5	118.0	116.2	135.4	127.5	150.1	122.2	188.0	354.0	182.0	164.3	190.8	172.9	208.8
Schools	339.1	292.1	271.6	209.6	286.3	307.3	352.0	352.5	350.5	359.3	317.5	264.6	312.1	304.2	558.8	888.6	276.0	229.2	240.1	260.0
Other Public Facilities	55.6	45.6	47.2	38.1	42.4	47.7	58.1	59.5	42.0	41.3	38.0	34.6	35.2	40.2	32.6	74.2	57.4	35.0	39.3	34.5
City Facilities on Sewer	29.0	24.7	22.8	21.3	17.7	18.9	19.9	20.2	20.6	11.4	10.9	12.2	12.8	11.1	12.2	12.8	14.8	14.1	12.8	10.6
City Facilities Not on Sewer	55.7	67.3	76.9	37.8	40.1	31.9	36.8	37.0	33.7	48.8	36.7	36.1	47.7	53.4	49.9	30.5	41.7	40.8	42.2	41.4
Power Plant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	31.1	29.7	30.5	25.9	28.1	28.9	29.9	29.9	29.1	28.6	27.2	26.7	28.5	28.3	32.3	35.1	28.1	26.8	27.5	27.6
Rolling 3-Year Average			30.5	28.7	28.2	27.6	28.9	29.6	29.6	29.2	28.3	27.5	27.5	27.9	29.7	31.9	31.8	30.0	27.5	27.3
TOTAL	8.9	8.7	9.3	8.3	8.6	8.6	8.8	8.8	8.7	8.5	8.2	8.1	8.4	8.4	8.5	8.5	7.9	7.8	7.9	7.9

Table A-8
City of Morro Bay
Water Revenues

	2010	2011	2012	2013	2014
RESIDENTIAL					Jan-Aug only
Annual Water Revenues					
Single Family Residential	\$1,589,220	\$1,590,605	\$1,493,657	\$1,619,651	\$1,056,777
Single Family Condo	78,356	80,002	72,792	78,880	50,633
Multi - Family Residential	256,672	259,192	247,299	262,196	168,389
Single Family - Outside City	2,306	1,845	4,038	4,152	2,465
Subtotal	1,926,554	1,931,644	1,817,785	1,964,879	1,278,263
% of Total	56.8%	57.9%	59.7%	59.1%	59.0%
NON-RESIDENTIAL					
Annual Water Revenues					
Yard Meter	40,848	43,748	46,837	68,665	33,867
Vacant Land	789	789	724	403	263
Mobile Home Parks	160,961	152,311	149,519	158,080	112,266
Comm'l/Domestic Strength	319,648	320,767	291,500	343,304	228,793
Restaurants	108,111	103,246	105,132	103,858	70,081
Bakeries	1,843	1,799	1,537	1,879	1,246
Retirement Home/Hospital	98,865	91,077	84,090	92,575	62,584
Motels	232,036	248,057	234,401	255,786	178,183
Mortuaries	518	1,224	442	284	159
Hotels with Dining	83,939	76,940	45,384	49,265	28,285
Seafood Processors	9,607	10,196	11,106	7,052	4,654
Water Softeners	18,846	16,566	18,537	17,890	14,504
Schools	134,816	72,754	73,955	75,520	42,626
Other Public Facilities	124,258	89,924	43,752	48,108	29,448
City Facilities on Sewer	33,229	38,812	35,257	37,308	18,897
City Facilities Not on Sewer	96,194	135,778	86,195	100,004	64,166
Power Plant	0	0	0	0	0
Subtotal	1,464,508	1,403,988	1,228,367	1,359,977	890,022
% of Total	43.2%	42.1%	40.3%	40.9%	41.0%
TOTAL	3,391,062	3,335,632	3,046,152	3,324,856	2,168,285

Table A-9
City of Morro Bay
Average Monthly Water Revenues per Account

	2010	2011	2012	2013	2014
RESIDENTIAL					Jan-Aug only
Average Monthly Water Revenues per Account					
Single Family Residential	\$31.87	\$31.80	\$29.85	\$32.29	\$31.52
Single Family Condo	21.39	21.89	19.91	21.49	20.58
Multi - Family Residential	60.31	61.68	58.91	62.83	61.70
Single Family - Outside City	34.42	30.75	40.38	38.09	34.23
NON-RESIDENTIAL					
Average Monthly Water Revenues per Account					
Yard Meter	72.42	77.70	83.19	115.02	82.20
Vacant Land	16.43	16.43	16.45	16.78	16.43
Mobile Home Parks	609.70	576.94	566.36	594.28	637.87
Comm'l/Domestic Strength	84.07	84.75	76.89	88.94	89.20
Restaurants	205.92	194.80	195.41	193.76	196.31
Bakeries	68.27	74.97	64.02	78.28	77.90
Retirement Home/Hospital	8,238.71	7,589.75	7,007.49	7,714.56	7,822.94
Motels	450.56	481.66	456.92	496.67	522.53
Mortuaries	43.17	102.04	36.82	23.64	19.93
Hotels with Dining	7,630.83	6,411.64	3,781.97	4,105.38	3,535.68
Seafood Processors	266.86	283.23	308.50	293.83	290.87
Water Softeners	1,570.54	1,380.46	1,544.71	1,490.83	1,813.04
Schools	1,604.95	876.56	880.42	899.04	761.17
Other Public Facilities	796.53	576.43	280.46	308.38	283.15
City Facilities on Sewer	84.12	98.01	89.03	89.25	67.73
City Facilities Not on Sewer	259.28	359.20	236.80	287.37	276.58
Power Plant	-	-	-	-	-

Table A-10
City of Morro Bay
Water Revenues by Fiscal Year

	2010/11	2011/12	2012/13	2013/14
RESIDENTIAL				
Jul-Dec	1,018,057	1,022,212	1,042,638	1,018,891
Jan-Jun	<u>907,587</u>	<u>934,194</u>	<u>941,837</u>	<u>930,071</u>
Subtotal	1,925,645	1,956,406	1,984,475	1,948,962
% of Total	57.4%	58.0%	60.3%	58.9%
NON-RESIDENTIAL				
Jul-Dec	859,944	836,872	759,128	743,861
Jan-Jun	<u>567,116</u>	<u>579,916</u>	<u>547,049</u>	<u>617,469</u>
Subtotal	1,427,061	1,416,788	1,306,177	1,361,330
% of Total	42.6%	42.0%	39.7%	41.1%
TOTAL				
Jul-Dec	1,878,001	1,859,084	1,801,765	1,762,752
Jan-Jun	<u>1,474,704</u>	<u>1,514,110</u>	<u>1,488,886</u>	<u>1,547,541</u>
Total	3,352,705	3,373,194	3,290,651	3,310,292

Table A-11
City of Morro Bay
Sewer Revenues

	2010	2011	2012	2013	2014
RESIDENTIAL					Jan-Aug only
Annual Sewer Revenues					
Single Family Residential	\$1,878,423	\$1,976,545	\$2,078,450	\$2,204,573	\$1,521,445
Single Family Condo	143,124	150,699	158,283	167,511	114,657
Multi - Family Residential	437,105	454,896	479,749	499,861	337,165
Single Family - Outside City	0	0	0	0	0
Subtotal	2,458,653	2,582,139	2,716,483	2,871,946	1,973,267
% of Total	74.1%	74.1%	74.1%	73.4%	73.1%
NON-RESIDENTIAL					
Annual Sewer Revenues					
Yard Meter	2,782	2,587	2,551	0	210
Vacant Land	0	0	0	0	0
Mobile Home Parks	70,091	72,405	75,232	87,937	63,161
Comm'l/Domestic Strength	247,895	265,823	260,389	325,052	224,473
Restaurants	158,540	162,141	159,492	191,919	133,832
Bakeries	1,975	2,035	1,857	2,365	1,684
Retirement Home/Hospital	41,071	41,005	40,633	48,034	34,033
Motels	185,543	210,554	210,959	253,426	181,493
Mortuaries	729	1,388	660	650	402
Hotels with Dining	57,424	57,461	38,016	45,520	28,597
Seafood Processors	13,046	14,555	17,672	12,351	8,386
Water Softeners	7,363	7,094	8,207	8,660	7,249
Schools	9,772	8,563	6,620	7,831	8,903
Other Public Facilities	37,334	31,911	18,819	25,361	15,177
City Facilities on Sewer	24,246	26,742	26,726	31,625	19,408
City Facilities Not on Sewer	0	0	0	0	0
Power Plant	0	0	0	0	0
Comm'l Adjust for Dec 2012	-	-	81,541	-	-
Subtotal	857,811	904,261	949,373	1,040,730	727,008
% of Total	25.9%	25.9%	25.9%	26.6%	26.9%
TOTAL	3,316,463	3,486,400	3,665,855	3,912,676	2,700,275

Includes estimated revenues from Dec-2012 since data was missing.

Table A-12
City of Morro Bay
Average Monthly Sewer Revenues per Account

	2010	2011	2012	2013	2014
RESIDENTIAL					Jan-Aug only
Average Monthly Sewer Revenues per Account					
Single Family Residential	\$37.67	\$39.52	\$41.54	\$43.95	\$45.38
Single Family Condo	39.06	41.24	43.29	45.64	46.61
Multi - Family Residential	102.70	108.26	114.28	119.78	123.55
Single Family - Outside City	0	0	0	0	0
NON-RESIDENTIAL					
Average Monthly Sewer Revenues per Account					
Yard Meter	4.93	4.59	4.53	0.00	0.51
Vacant Land	-	-	-	-	-
Mobile Home Parks	265.50	274.26	284.97	330.59	358.87
Comm'l/Domestic Strength	65.20	70.23	68.69	84.21	87.51
Restaurants	301.98	305.93	296.45	358.06	374.88
Bakeries	73.14	84.78	77.36	98.52	105.28
Retirement Home/Hospital	3,422.61	3,417.11	3,386.10	4,002.87	4,254.10
Motels	360.28	408.84	411.23	492.09	532.24
Mortuaries	60.72	115.65	55.03	54.13	50.23
Hotels with Dining	5,220.39	4,788.38	3,167.99	3,793.31	3,574.61
Seafood Processors	362.39	404.30	490.90	514.61	524.15
Water Softeners	613.58	591.17	683.88	721.64	906.18
Schools	116.33	103.16	78.81	93.23	158.98
Other Public Facilities	239.32	204.56	120.64	162.57	145.93
City Facilities on Sewer	61.38	67.53	67.49	75.66	69.56
City Facilities Not on Sewer	-	-	-	-	-
Power Plant	-	-	-	-	-

Table A-13
City of Morro Bay
Sewer Revenues by Fiscal Year

	2010/11	2011/12	2012/13	2013/14
RESIDENTIAL				
Jul-Dec	1,264,793	1,325,860	1,395,696	1,477,025
Jan-Jun	<u>1,256,279</u>	<u>1,323,804</u>	<u>1,394,921</u>	<u>1,456,702</u>
Subtotal	2,521,072	2,649,664	2,790,618	2,933,727
% of Total	73.9%	74.0%	73.7%	72.8%
NON-RESIDENTIAL				
Jul-Dec	492,038	512,027	538,391	591,024
Jan-Jun	<u>397,794</u>	<u>418,949</u>	<u>456,139</u>	<u>502,776</u>
Subtotal	889,832	930,976	994,530	1,093,799
% of Total	26.1%	26.0%	26.3%	27.2%
TOTAL				
Jul-Dec	1,756,831	1,837,887	1,934,088	2,068,048
Jan-Jun	<u>1,654,073</u>	<u>1,742,752</u>	<u>1,851,060</u>	<u>1,959,477</u>
Total	3,410,905	3,580,640	3,785,148	4,027,526