



**CITY OF MORRO BAY  
PUBLIC WORKS ADVISORY BOARD  
SPECIAL MEETING AGENDA**

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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.

**Thursday, January 29, 2015  
Veteran's Memorial Building - 6:00 P.M.  
209 Surf Street, Morro Bay, CA**

Vacant, Chairperson

Ron Burkhart, Vice Chairperson  
Janith Goldman  
Stephen Shively

Deborah Owen  
Marlys McPherson  
David Sozinho

ESTABLISH QUORUM AND CALL TO ORDER  
MOMENT OF SILENCE/PLEDGE OF ALLEGIANCE  
ANNOUNCEMENTS  
PRESENTATIONS - None

**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 Services 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 of October 16, 2014 Meeting  
Recommendation: Approve minutes.

**B. OLD BUSINESS - None**

C. NEW BUSINESS

C-1 Discussion of Preliminary Water and Sewer Rate Study - *Staff Report and study will be made available prior to special meeting*

**Recommendation:** Review, discuss and make a recommendation to City Council regarding the rate study options.

D. ADJOURNMENT

Adjourn to the Public Works Advisory Board meeting at the Veteran's Memorial Building, 209 Surf Street, on **Thursday, February 19, 2015 at 6:00 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 Services 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 Services 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/pwab](http://www.morro-bay.ca.us/pwab) . Materials related to an item on this Agenda submitted to the Board after publication of the Agenda packet are available for inspection at the Public Services Department during normal business hours or at the scheduled meeting.

AGENDA ITEM:   A-1  

DATE:   1-29-15  

ACTION: \_\_\_\_\_

MORRO BAY PUBLIC WORKS ADVISORY BOARD - SYNOPSIS MINUTES  
MEETING – OCTOBER 16, 2014  
VETERAN’S HALL – 6:30 P.M.

PRESENT:	Matt Makowetski	Chairperson
	Ron Burkhart	Vice-Chairperson
	Janith Goldman	Board Member
	Deborah Owen	Board Member
	Stephen Shively	Board Member
	David Sozinho	Board Member
ABSENT:	Marlys McPherson	Board Member
STAFF:	Rob Livick	Public Services Director
	Janeen Burlingame	Management Analyst

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

Matt Makowetski called the meeting to order at 6:40pm, stated all Board members are present except for Marlys McPherson, who is absent, and asked for a moment of silence.

ANNOUNCEMENTS

Stephen Shively stated he is a member of the Water Reclamation Facility Citizen Advisory Committee (WRFCAC) and presented to the Board an update of the last two WRFCAC meetings.

PRESENTATIONS

Geoff Straw from the Regional Transit Authority (RTA), presented a report for a Proposal to increase Runabout fares and ways for community members and the public to provide input. He clarified Runabout is for people with disabilities. Several public workshops are scheduled for community members to participate in.

Jessica Berry from San Luis Obispo Council of Governments (SLOCOG) presented a Regional Transportation Plan (RTP) update, outlined what SLOCOG is and the services it provides, and a Chorro Valley Trail Study.

Jeff Brubaker, also from San Luis Obispo Council of Governments (SLOCOG), presented slides regarding the Chorro Valley Trail project.

PUBLIC COMMENT PERIOD

Matt Makowetski opened Public Comment, seeing none, closed Public Comment.

A. CONSENT CALENDAR

A-1 Approval of Minutes of August 21, 2014 Meeting

Steve Shively stated the minutes showed him absent at the last meeting, but he was present.

Matt Makowetski asked Rob Livick to give an update on the taste and odor issue of the State Water that was talked about in Public Comment at this meeting. Rob Livick stated the taste and odor issues are improving and clarified well water is not being used at this time.

**MOTION:** Board Member Sozinho moved to approve the minutes as corrected. The motion was seconded by Board Member Shively and carried unanimously. (6-0)

A-2 Director's Report – Verbal Report

Rob Livick stated the City is currently repairing and/or replacing manholes as needed. Matt Makowetski asked if the Morro Creek Bridge Project is on time and Rob Livick replied yes, the project is on time.

Rob Livick explained the “Notify Me” on the City’s website enables anyone to sign up to receive e-mails from various City Boards, Committees and Meetings. The “Let Us Know” is to inform the City if there is a problem or issue. A form is filled out and then the problem or issue is addressed. Rob Livick stated the spreadsheet on overall water usage will be updated for the next meeting. The water rate study will be brought to PWAB in January

B. OLD BUSINESS - None

C. NEW BUSINESS

C-1 Morro Bay Transit and Trolley Operations and Management Request for Proposals (RFP)  
MB 14-T1

Janeen Burlingame presented the staff report. Proposals for an RFP were sent to a Statewide Transit Organization, several transit operators, and posted on the City’s website. One submittal was received which was from the current provider, MB Transportation.

Board members and Burlingame discussed the small scope of services out for bid and what could be done in future transit bid processes to get more transit operators interested in submitting a proposal.

Matt Makowetski opened Public Comment, seeing none, closed Public Comment.

**MOTION:** Board member Shively moved to accept the proposal and recommend the City Council award RFP No. MB 14-T1 to MV Transportation. Board member Owen seconded the motion and the motion passed unanimously. (6-0)

D. FUTURE AGENDA ITEM

- Matt Makowetski resigned as Chairperson and Ron Burkhart will act as Vice Chairperson at the next meeting.
- A special meeting will be held in January for the water rate analysis and to establish a new Chairperson and Vice Chairperson.

E. ADJOURNMENT

Adjourn at 7:46 p.m. to the next Public Works Advisory Board meeting at the Veteran’s Memorial Building, 209 Surf Street, on **Thursday, December 18, 2014 at 6:00 p.m.**



AGENDA NO: C-1

MEETING DATE: January 29, 2015

# Staff Report

**TO:** Public Works Advisory Board                      **DATE:** January 28, 2015  
**FROM:** Rob Livick, PE/PLS – Public Services Director  
**SUBJECT:** Preliminary Water and Sewer (Wastewater) Rate Study Workshop

## **RECOMMENDATION**

That the Public Works Advisory Board receives a presentation on Water and Wastewater Rates; then discuss and make a recommendation to City Council regarding the rate study options for them to consider at their February 24, 2015 workshop on rates.

## **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 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

Prepared By: RL      Dept Review: RL

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 will be presented at the February PWAB meeting.

**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



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## City of Morro Bay

### Water & Sewer Rate Study Key Issues

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#### 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
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## **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:
  - 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

- 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 \$3.1 million 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:
  - 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 to. 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.
  - 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.
  - 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.
-

# **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
<b>Minimum Charge</b>	\$2.93	\$3.96	\$16.43			
<b>Water Quantity Charges</b>						
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)

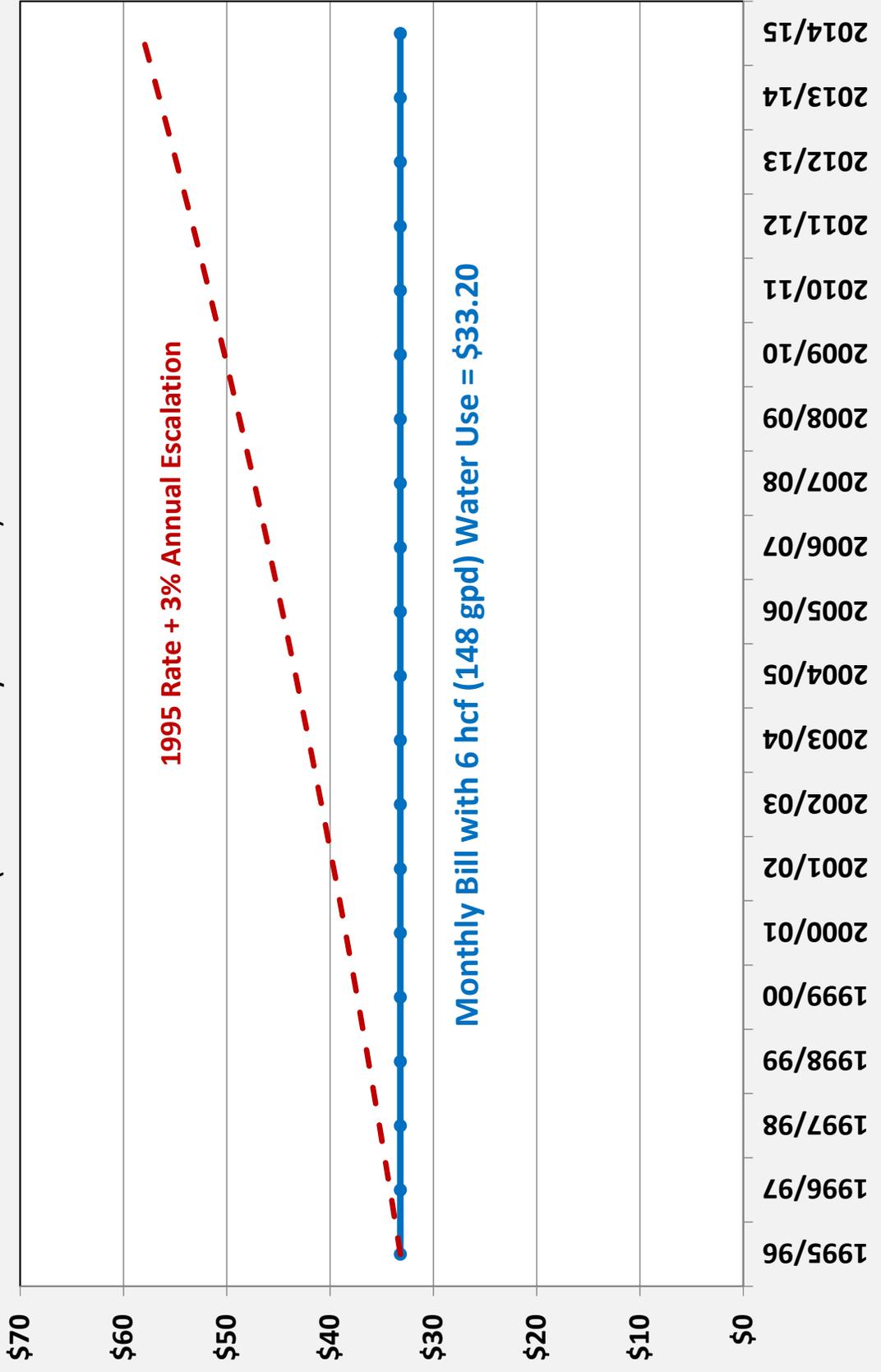


Table 3  
City of Morro Bay  
Historical Water Utility Finances & Budget

	Actual 2009/10	Actual 2010/11	Actual 2011/12	Budget 2012/13	Amended Budget 2013/14	Proposed Budget 2014/15
<b>Beginning cash balance</b>						
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
<b>Revenue and reserve transfers</b>						
1. Equipment replacement fund:						
Interest/other income	<u>5,050</u>	<u>2,448</u>	<u>2,171</u>	<u>1,179</u>	<u>0</u>	<u>0</u>
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
Others transfers	<u>54,612</u>	<u>342</u>	<u>14,408</u>	<u>0</u>	<u>0</u>	<u>0</u>
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	<u>0</u>	<u>0</u>	<u>135,864</u>	<u>191,829</u>	<u>0</u>	<u>0</u>
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
<b>Expenses</b>						
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	<u>0</u>	<u>0</u>	<u>0</u>	<u>(45,732)</u>	<u>0</u>	<u>0</u>
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	<u>0</u>	<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)
<b>Revenues Less Expenses</b>	(593,765)	691,178	(905,064)	(111,188)	(1,607,993)	(2,225,341)
<b>Ending Cash Balance</b>						
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
<b>UNESCALATED CAPITAL EXPENSES</b>											
<b>Vehicles</b>											
2004 Chevrolet Silverado Pickup 05/20/04		35,000									35,000
2005 Chevrolet Silverado Pickup 05/21/04			35,000								35,000
<b>Capital Improvements</b>											
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
<b>Placeholder for Future Water System Improvements</b>											
				500,000	500,000	500,000	500,000	500,000	500,000	500,000	2,500,000
<b>Recycled Water System, Phase 2</b>											
							5,000,000	5,000,000			10,000,000
<b>Total Unescalated</b>	<b>350,000</b>	<b>3,635,000</b>	<b>585,000</b>	<b>600,000</b>	<b>850,000</b>	<b>1,000,000</b>	<b>5,500,000</b>	<b>5,500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>19,020,000</b>
<b>CAPITAL EXPENSES WITH COST ESCALATION</b>											
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	
<b>Subtotal Water Capital Projects</b>	<b>350,000</b>	<b>3,744,000</b>	<b>621,000</b>	<b>656,000</b>	<b>957,000</b>	<b>1,159,000</b>	<b>597,000</b>	<b>615,000</b>	<b>633,000</b>	<b>652,000</b>	<b>9,984,000</b>
<b>Recycled Water System, Phase 2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,970,000</b>	<b>6,150,000</b>	<b>0</b>	<b>0</b>	<b>12,120,000</b>
<b>Total with Cost Escalation</b>	<b>350,000</b>	<b>3,744,000</b>	<b>621,000</b>	<b>656,000</b>	<b>957,000</b>	<b>1,159,000</b>	<b>6,567,000</b>	<b>6,765,000</b>	<b>633,000</b>	<b>652,000</b>	<b>22,104,000</b>

Table 5  
 City of Morro Bay  
 SRF Loan Debt Service Estimates

	<b>Phase 2 Recycled Water System</b>
<b>Funding Target</b>	\$12,120,000
<b>SRF Loan Amount</b>	
Eligible Project Costs <sup>1</sup>	12,120,000
Accrued Interest During Construction <sup>2</sup>	<u>303,000</u>
Total Loan Amount	12,423,000
<b>Loan Terms</b>	
Term (years)	30
Interest Rate <sup>3</sup>	3.00%
<b>Annual Loan Payment<sup>4</sup></b>	634,000
<b>Total Payments Over Loan Term</b>	19,020,000
<b>Reserve Fund Requirement<sup>5</sup></b>	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
<b>Draft Project Funding Target</b>	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000
<b>Loan Amount</b>						
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
<b>Loan Terms</b>						
Term (years)	10	15	20	20	25	30
Interest Rate (estimated)	3.00%	3.75%	4.00%	3.25%	3.50%	3.75%
<b>Annual Debt Service</b>	\$419,000	\$316,000	\$263,000	\$246,000	\$217,000	\$201,000
<b>Debt Service per \$1 Million of Project Funding</b>	<b>\$119,714</b>	<b>\$90,286</b>	<b>\$75,143</b>	<b>\$70,286</b>	<b>\$62,000</b>	<b>\$57,429</b>
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 Equivalent	-	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%
<b>Beginning Fund Reserves</b>	<b>\$2,580,000</b>	<b>\$1,644,000</b>	<b>\$1,836,000</b>	<b>\$1,873,000</b>	<b>\$2,082,000</b>
<b>REVENUES</b>					
Fixed Service Charges	1,048,000	1,468,000	1,663,000	1,794,000	1,926,000
Water Consumption Charges	<u>2,182,000</u>	<u>3,028,000</u>	<u>3,356,000</u>	<u>3,572,000</u>	<u>3,786,000</u>
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	<u>6,000</u>	<u>4,000</u>	<u>9,000</u>	<u>19,000</u>	<u>21,000</u>
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
<b>EXPENSES</b>					
<b>Operating &amp; Maintenance</b>					
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	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	3,885,000	3,997,000	4,143,000	4,295,000	4,454,000
<b>City Debt Service</b>					
Projected Loan for City CIP Projects	0	161,000	322,000	322,000	322,000
SRF Loan for Recycled Water Phase 2	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	0	161,000	322,000	322,000	322,000
<b>Capital Improvements</b>					
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.	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
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
<b>Revenues Less Expenses</b>	<b>(936,000)</b>	<b>192,000</b>	<b>37,000</b>	<b>209,000</b>	<b>98,000</b>
Transfer for SRF Reserve Requirement	-	-	-	-	-
<b>Ending Fund Reserves</b>	<b>1,644,000</b>	<b>1,836,000</b>	<b>1,873,000</b>	<b>2,082,000</b>	<b>2,180,000</b>
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

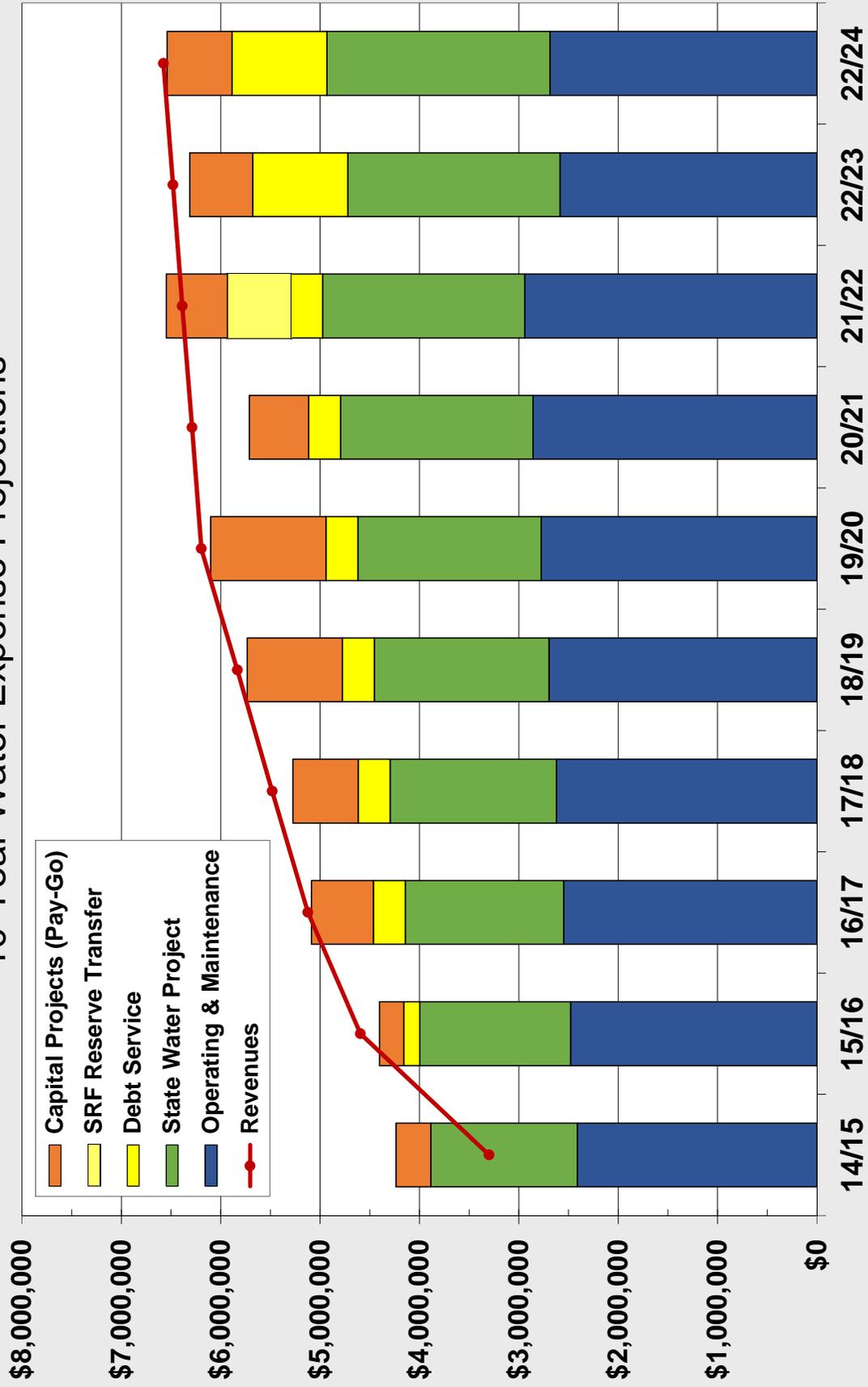
**Table 7 Morro Bay - Water Cash Flow Projections** **Years 6-10**

	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 Equivalent	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%	
<b>Beginning Fund Reserves</b>	<b>\$2,180,000</b>	<b>\$2,273,000</b>	<b>\$2,849,000</b>	<b>\$2,689,000</b>	<b>\$2,859,000</b>	
<b>REVENUES</b>						
Fixed Service Charges	2,058,000	2,094,000	2,130,000	2,166,000	2,203,000	
Water Consumption Charges	<u>4,011,000</u>	<u>4,067,000</u>	<u>4,123,000</u>	<u>4,179,000</u>	<u>4,235,000</u>	
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	<u>25,000</u>	<u>26,000</u>	<u>31,000</u>	<u>30,000</u>	<u>31,000</u>	
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	
<b>EXPENSES</b>						
<b>Operating &amp; Maintenance</b>						
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	<u>0</u>	<u>0</u>	<u>0</u>	<u>300,000</u>	<u>312,000</u>	
Subtotal	4,620,000	4,794,000	4,976,000	4,721,000	4,931,000	
<b>Debt Service</b>						
Projected Loan for City CIP Projects	322,000	322,000	322,000	322,000	322,000	
SRF Loan for Recycled Water Phase 2	<u>0</u>	<u>0</u>	<u>0</u>	<u>634,000</u>	<u>634,000</u>	
Subtotal	322,000	322,000	322,000	956,000	956,000	
<b>Capital Improvements</b>						
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.	<u>0</u>	<u>5,970,000</u>	<u>6,150,000</u>	<u>0</u>	<u>0</u>	
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	
<b>Revenues Less Expenses</b>	93,000	576,000	474,000	170,000	37,000	
Transfer for SRF Reserve Requirement	-	-	(634,000)	-	-	
<b>Ending Fund Reserves</b>	<b>2,273,000</b>	<b>2,849,000</b>	<b>2,689,000</b>	<b>2,859,000</b>	<b>2,896,000</b>	
Min Fund Rsv 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)**

<b>Fiscal Year</b>	<b>14/15</b>	<b>15/16</b>	<b>16/17</b>	<b>17/18</b>	<b>18/19</b>	<b>19/20</b>	<b>20/21</b>	<b>21/22</b>	<b>22/23</b>	<b>23/24</b>
<b>Rate Increase Target</b> Effective July 1	-	40%	13%	7.7%	7.1%	7%	2%	2%	2%	1%
<b>Beginning Fund Reserves</b>	\$2.6	\$1.6	\$1.8	\$1.9	\$2.1	\$2.2	\$2.3	\$2.8	\$2.7	\$2.9
<b>REVENUES</b>										
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	-	-
<b>Total</b>	<b>3.3</b>	<b>8.1</b>	<b>5.1</b>	<b>5.5</b>	<b>5.8</b>	<b>6.2</b>	<b>12.3</b>	<b>12.5</b>	<b>6.5</b>	<b>6.6</b>
<b>EXPENSES</b>										
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
<b>Total</b>	<b>4.2</b>	<b>7.9</b>	<b>5.1</b>	<b>5.3</b>	<b>5.7</b>	<b>6.1</b>	<b>11.7</b>	<b>12.1</b>	<b>6.3</b>	<b>6.5</b>
<b>Revenues Less Expenses</b>	<b>(0.9)</b>	<b>0.2</b>	<b>0.0</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.6</b>	<b>0.5</b>	<b>0.2</b>	<b>0.0</b>
Transfer to SRF Rsrv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.6)	0.0	0.0
<b>Ending Fund Reserves</b>	<b>1.6</b>	<b>1.8</b>	<b>1.9</b>	<b>2.1</b>	<b>2.2</b>	<b>2.3</b>	<b>2.8</b>	<b>2.7</b>	<b>2.9</b>	<b>2.9</b>
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
<b>Projected Water Sales by Tier</b>					<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

<b>Water Sales by Tier</b>			
	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.*

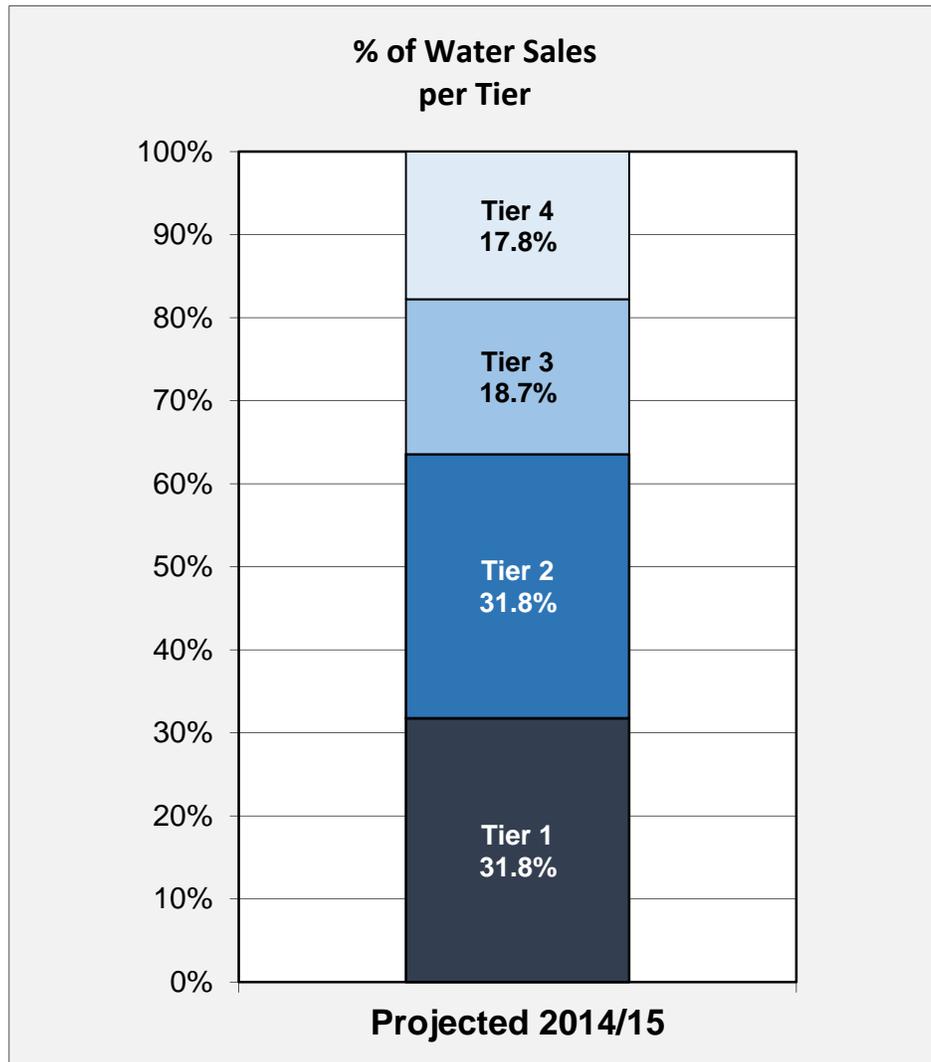


Table 10  
City of Morro Bay  
Projected Water Use by Tier

Tier Adjustment			Projected Water Sales by Tier					
Factor*			2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
<b>Projected Change in Demand</b>				-7.50%	-1.96%	-1.15%	-1.07%	-0.67%
<b>Projected Change in Sales by Tier</b>								
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%
<b>Projected Water Sales by Tier</b>								
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
<b>% of Water Use by Tier</b>								
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	
<b>FIXED MONTHLY SERVICE CHARGES</b>						
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>	
<b>Estimated Revenues</b>	<b>\$1,468,436</b>	<b>\$1,663,029</b>	<b>\$1,794,247</b>	<b>\$1,925,935</b>	<b>\$2,058,094</b>	
<b>WATER QUANTITY CHARGES</b>						
<b>Projected Revenue Target</b>	<b>\$3,028,000</b>	<b>\$3,356,000</b>	<b>\$3,572,000</b>	<b>\$3,786,000</b>	<b>\$4,011,000</b>	
<b>Water Sales per Tier (hcf)</b>						
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
<b>Water Quantity Charges (\$/hcf)</b>						
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
<b>Revenues by Tier</b>						
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
<b>Fixed Monthly Service Charge</b>		\$16.43	\$23.00	\$26.00	\$28.00	\$30.00	\$32.00
<b>Water Quantity Charges (\$/hcf)</b>							
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
<b>RESIDENTIAL</b>						
<b>Fixed Charge per Dwelling Unit</b>	<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
<b>Charge per hcf in Excess of Allowance</b>		3.35	3.52	3.69	3.88	4.07
<b>NON-RESIDENTIAL</b>						
<b>Charge per hcf of Metered Water Use</b>						
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
<b>Minimum Charge</b>		39.13	41.97	45.01	48.27	51.77

# City of Morro Bay Historical Monthly Residential Sewer Bills

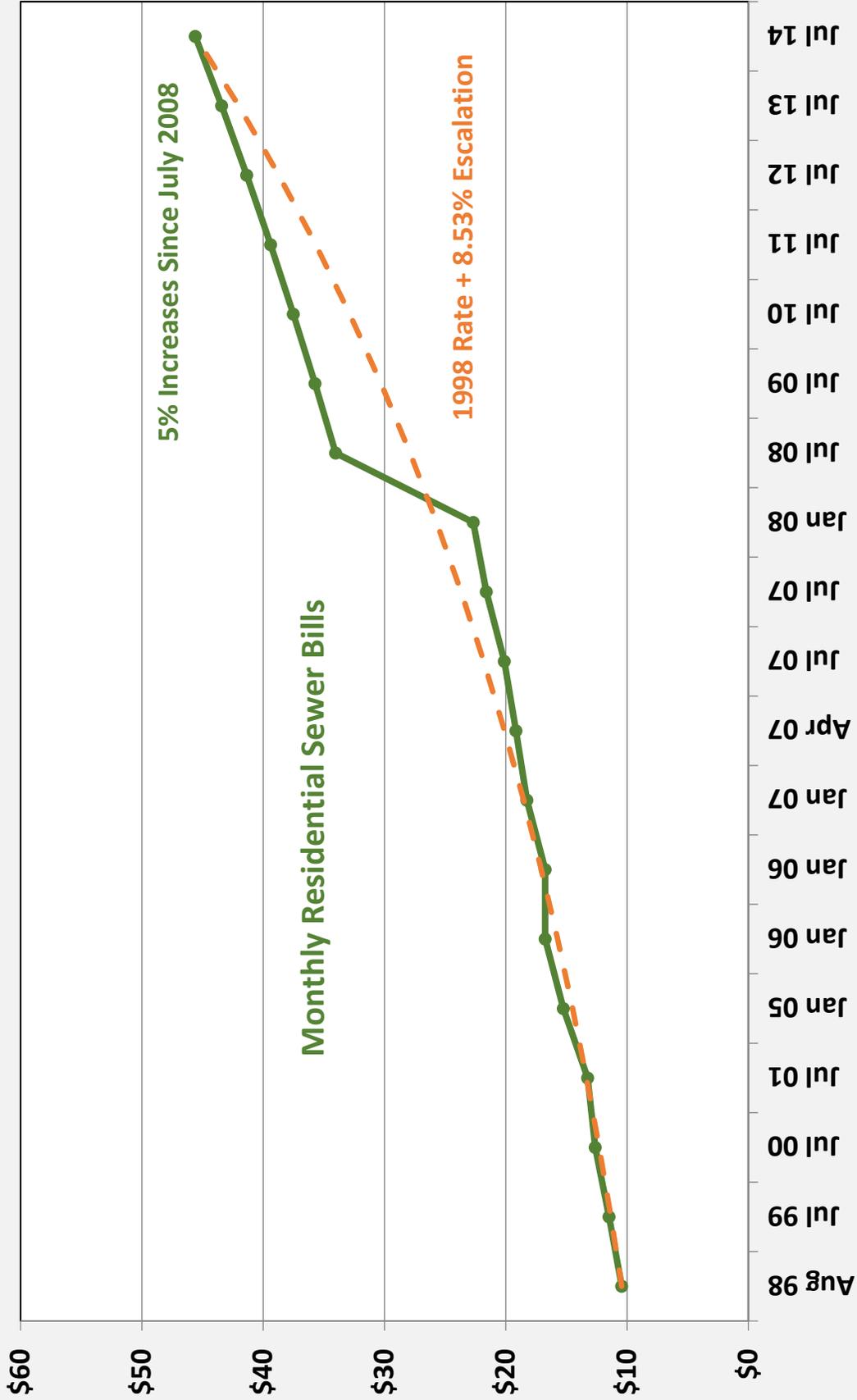


Table 2  
City of Morro Bay  
Historical Sewer Utility Finances & Budget

	Actual 2009/10	Actual 2010/11	Actual 2011/12	Budget 2012/13	Amended Budget 2013/14	Proposed Budget 2014/15
<b>BEGINNING CASH BALANCES</b>						
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>
<b>Total</b>	<b>3,325,509</b>	<b>4,350,981</b>	<b>5,146,451</b>	<b>3,923,622</b>	<b>3,814,157</b>	<b>3,138,344</b>
<b>REVENUES &amp; RESERVE TRANSFERS</b>						
<b>1. Equipment replacement fund:</b>						
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
<b>2. Operation fund:</b>						
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
<b>3. CIP fund:</b>						
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
<b>Total revenues &amp; transfers in</b>	<b>3,998,326</b>	<b>3,838,529</b>	<b>6,929,046</b>	<b>5,803,345</b>	<b>4,449,813</b>	<b>5,779,425</b>
<b>EXPENSES</b>						
<b>1. Equipment replacement fund:</b>						
Equipment/Vehicles						(70,000)
<i>Subtotal</i>						(70,000)
<b>2. Operation fund:</b>						
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)
<b>3. CIP fund:</b>						
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)
<b>Total expenses &amp; transfers out</b>	<b>(2,987,881)</b>	<b>(3,043,059)</b>	<b>(8,151,785)</b>	<b>(2,688,812)</b>	<b>(4,529,813)</b>	<b>(6,332,419)</b>
<b>NET REVENUES</b>	<b>1,010,445</b>	<b>795,470</b>	<b>(1,222,739)</b>	<b>3,114,533</b>	<b>(80,000)</b>	<b>(552,994)</b>
<b>ENDING CASH BALANCES</b>						
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>
<b>Total</b>	<b>4,335,954</b>	<b>5,146,451</b>	<b>3,923,622</b>	<b>3,814,157</b>	<b>3,138,344</b>	<b>393,992</b>

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
<b>SEWER COLLECTION SYSTEM CIP</b>											
<b>Vehicles &amp; Equipment</b>											
GMC 1500 pickup truck			70,000								70,000
GMC 2500 service truck	70,000										70,000
Sterling 17501 Vac-con truck		350,000									350,000
Holcomb Portable generator		35,000									35,000
<b>Capital Improvements/Buildings/Infrastructure</b>											
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
<b>Placeholder for Future Sewer System Improvements</b>						500,000	500,000	500,000	500,000	500,000	2,500,000
<b>Subtotal</b>	<b>480,000</b>	<b>1,360,000</b>	<b>1,595,000</b>	<b>3,830,000</b>	<b>360,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>10,125,000</b>
<b>WASTEWATER TREATMENT PLANT MMRP</b>											
Morro Bay	878,000	540,000	180,000	72,000							1,670,000
Cayucos	342,000	210,000	70,000	28,000							650,000
<b>Subtotal</b>	<b>1,220,000</b>	<b>750,000</b>	<b>250,000</b>	<b>100,000</b>							<b>2,320,000</b>
<b>CAPITAL EXPENSES WITH COST ESCALATION</b>											
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	
<b>Sewer Collection System CIP</b>	<b>480,000</b>	<b>1,401,000</b>	<b>1,692,000</b>	<b>4,185,000</b>	<b>405,000</b>	<b>580,000</b>	<b>597,000</b>	<b>615,000</b>	<b>633,000</b>	<b>652,000</b>	<b>11,240,000</b>
<b>Wastewater Treatment Plant MMRP</b>	<b>1,220,000</b>	<b>750,000</b>	<b>250,000</b>	<b>100,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,320,000</b>
<i>Not Escalated</i>											
Morro Bay	878,000	540,000	180,000	72,000	0	0	0	0	0	0	1,670,000
Cayucos	342,000	210,000	70,000	28,000	0	0	0	0	0	0	650,000

Table 4  
 City of Morro Bay  
 Water Reclamation Plant Cost Projections  
 With Cost Escalation to Construction Mid-Point

	2014/15	2015/16	2016/17	2017/18	2018/19	Total
<b>Phase 1: Water Reclamation Facility &amp; Conveyance Facilities</b>						
Property Acquisition (placeholder estimate)				500,000		500,000
Construction				19,000,000	11,800,000	30,800,000
Contingency 30%				5,700,000	3,500,000	9,200,000
Contractor Overhead/Profit/Risk 18%				4,400,000	2,800,000	7,200,000
Cost Escalation to Construction Mid-Point				3,600,000	2,300,000	5,900,000
Engineering/Legal/Admin/Tax	1,000,000	3,000,000	6,000,000	6,800,000	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
<b>Estimated Cost Share</b>						
Morro Bay	750,000	2,250,000	4,500,000	30,000,000	18,525,000	56,025,000
Cayucos	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

		<b>SRF Loan for Phase 1 Water Reclamation Plant</b>
<b>Funding Target</b>		\$74,700,000
<i>Water Reclamation Plant Phase 1</i>		
<b>SRF Loan Amount</b>		
Eligible Project Costs <sup>1</sup>		74,700,000
Accrued Interest During Construction <sup>2</sup>		<u>2,770,000</u>
Total Loan Amount		77,470,000
<b>Loan Terms</b>		
Term (years)		30
Interest Rate <sup>3</sup>		3.00%
<b>Annual Loan Payment<sup>4</sup></b>		3,952,000
Morro Bay	75%	2,964,000
Cayucos	25%	988,000
<b>Total Payments over Loan Term</b>		118,560,000
<b>Reserve Fund Requirement<sup>5</sup></b>		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
<b>Funding Target</b>		\$74,700,000
<i>Water Reclamation Plant Phase 1</i>		
<b>Total Debt Issue</b>		\$81,600,000
<b>Proceeds</b>		\$74,699,500
<b>Issuance Costs &amp; Reserve Requirement</b>		
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
<b>Financing Terms</b>		
Term (Years)		30
Est. Future Interest Rate		5.50%
<b>Debt Service</b>		
Annual Debt Service		5,615,000
Less Interest on Reserve Fund	2.50%	<u>(140,000)</u>
Net Annual Debt Service		5,475,000
<b>Total Payments over Bond Term</b>		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%
<b>Beginning Fund Reserves</b>	\$3,138,000	\$1,902,000	\$2,782,000	\$3,269,000	\$1,902,000
<b>REVENUES</b>					
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	
<b>EXPENSES</b>					
<b>Operating &amp; Maintenance</b>					
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
<b>Debt Service</b>					
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
<b>Capital Improvements</b>					
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
<b>Revenues Less Expenses</b>	(1,236,000)	880,000	487,000	(1,367,000)	2,930,000
Transfer for SRF Rsrv Req't, MB Share	-	-	-	-	(2,964,000)
<b>Ending Fund Reserves</b>	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**

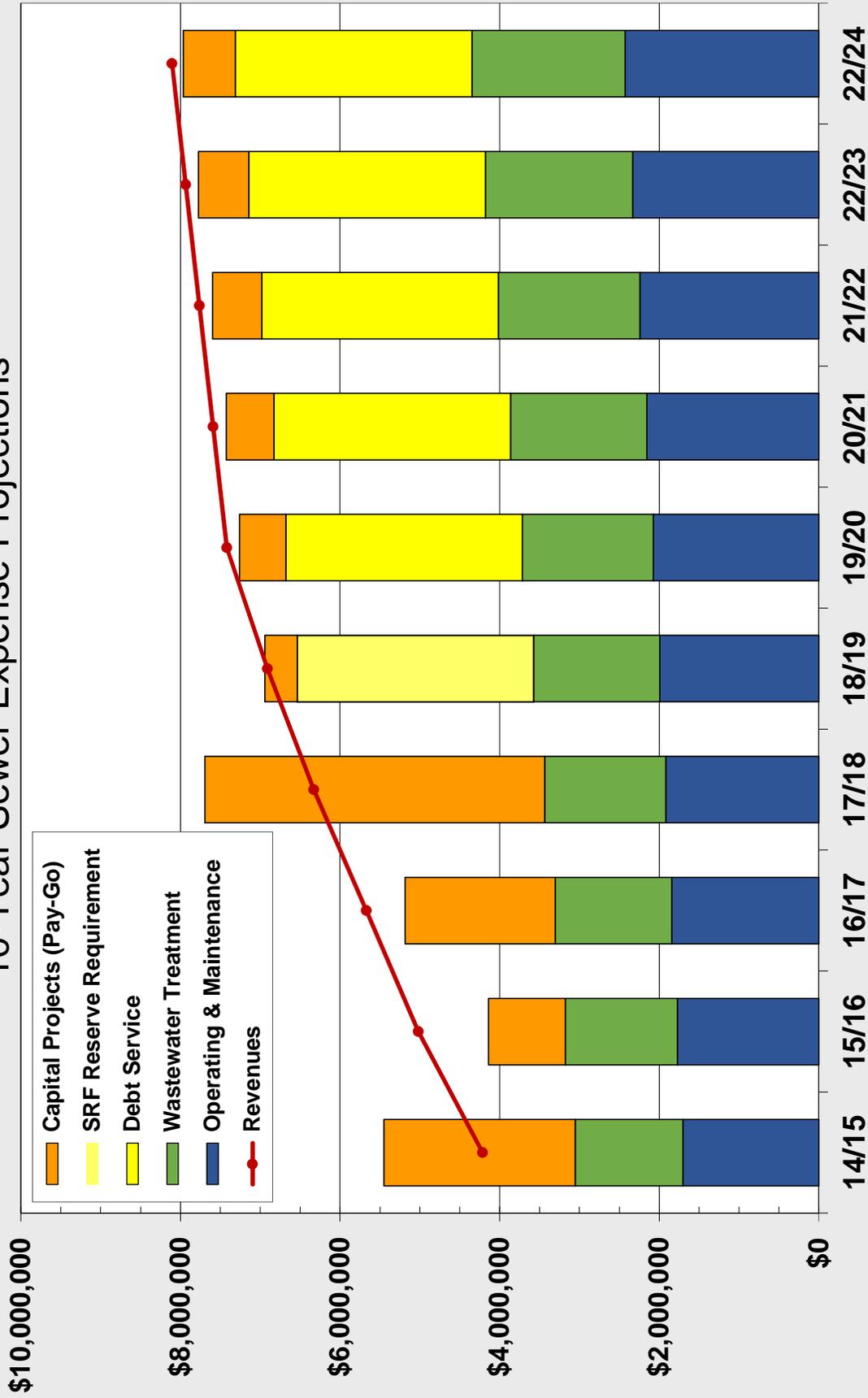
**Years 6-10**

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%	
<b>Beginning Fund Reserves</b>	<b>\$1,868,000</b>	<b>\$2,026,000</b>	<b>\$2,191,000</b>	<b>\$2,356,000</b>	<b>\$2,513,000</b>	
<b>REVENUES</b>						
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						
<b>EXPENSES</b>						
<b>Operating &amp; Maintenance</b>						
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	
<b>Debt Service</b>						
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	
<b>Capital Improvements</b>						
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	
<b>Revenues Less Expenses</b>	<b>158,000</b>	<b>165,000</b>	<b>165,000</b>	<b>157,000</b>	<b>142,000</b>	
Transfer for SRF Reserve Requirement	-	-	-	-	-	
<b>Ending Fund Reserves</b>	<b>2,026,000</b>	<b>2,191,000</b>	<b>2,356,000</b>	<b>2,513,000</b>	<b>2,655,000</b>	
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)**

<b>Fiscal Year</b>	<b>14/15</b>	<b>15/16</b>	<b>16/17</b>	<b>17/18</b>	<b>18/19</b>	<b>19/20</b>	<b>20/21</b>	<b>21/22</b>	<b>22/23</b>	<b>23/24</b>
<b>Rate Increase Target</b> Effective July 1	5.5%	21%	14%	12.0%	10.0%	8%	2%	2%	2%	2%
<b>Beginning Fund Reserves</b>	\$3.1	\$1.9	\$2.8	\$3.3	\$1.9	\$1.9	\$2.0	\$2.2	\$2.4	\$2.5
<b>REVENUES</b>										
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	-	-	-	-	-
<b>Total</b>	<b>4.2</b>	<b>9.0</b>	<b>11.7</b>	<b>46.3</b>	<b>31.6</b>	<b>7.4</b>	<b>7.6</b>	<b>7.8</b>	<b>7.9</b>	<b>8.1</b>
<b>EXPENSES</b>										
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
<b>Total</b>	<b>5.4</b>	<b>8.1</b>	<b>11.2</b>	<b>47.7</b>	<b>28.7</b>	<b>7.3</b>	<b>7.4</b>	<b>7.6</b>	<b>7.8</b>	<b>8.0</b>
<b>Revenues Less Expenses</b>	<b>(1.2)</b>	<b>0.9</b>	<b>0.5</b>	<b>(1.4)</b>	<b>2.9</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.1</b>
Transfer to SRF Reserve	-	-	-	-	(3.0)	-	-	-	-	-
<b>Ending Fund Reserves</b>	<b>1.9</b>	<b>2.8</b>	<b>3.3</b>	<b>1.9</b>	<b>1.9</b>	<b>2.0</b>	<b>2.2</b>	<b>2.4</b>	<b>2.5</b>	<b>2.7</b>
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
<b>Operating &amp; Maintenance</b>							
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
<b>Debt Service</b>							
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
<b>Capital &amp; Other Non-Operating</b>							
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
<b>Total</b>	<b>7,260,000</b>	<b>72.7%</b>	<b>13.7%</b>	<b>13.7%</b>	<b>5,275,200</b>	<b>992,400</b>	<b>992,400</b>



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
<b>RESIDENTIAL</b>									
Single Family	4,200	<u>Est.</u> 4,200	252,000	188.51	516,462	200	200	314,432	314,432
Condos	308	308	14,784	11.06	30,299	200	200	18,447	18,447
Multi-Family	345	960	46,080	34.47	94,439	200	200	57,496	57,496
<b>NON-RESIDENTIAL</b>									
Class A - Low Strength	56								
Class B - Domestic Strength	343								
Class C - Moderate Strength	45								
Class D - Mod-High Strength	1								
Class E - High Strength	49								
			2019/20 Wtr Use						
			29,144	18.53	50,770	100	100	15,455	15,455
			55,682	35.40	97,000	200	200	59,056	59,056
			38,013	24.17	66,220	300	300	60,474	60,474
			4,293	2.73	7,479	400	400	9,106	9,106
			16,017	10.18	27,902	600	600	50,962	50,962
<b>TOTAL</b>	<b>5,346</b>		<b>434,541</b>	<b>325.06</b>	<b>890,570</b>	<b>216</b>	<b>216</b>	<b>585,428</b>	<b>585,428</b>

Table 11  
 City of Morro Bay  
 Wastewater Loadings for Cost Recovery

	Flow	BOD	SS
<b>2019/20 Sewer Rate Revenue Target</b>			\$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>			
<b>SEWER RATE RECOVERY</b>			
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  
City of Morro Bay  
Sewer Rate Calculations

	Wastewater Flow		Wastewater Strength (mg/l)		Flow	Unit Costs		Total Sewer Charge
	hcf	mg	BOD	SS		BOD	SS	
<b>RESIDENTIAL</b>								
<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
<b>NON-RESIDENTIAL</b>								
<i>Rate per hcf of metered water use</i>								
Class A - Low Strength	1.0	0.000636	100	100	10.37	0.90	0.90	12.18
Class B - Domestic Strength	1.0	0.000636	200	200	10.37	1.81	1.81	13.98
Class C - Moderate Strength	1.0	0.000636	300	300	10.37	2.71	2.71	15.79
Class D - Mod-High Strength	1.0	0.000636	400	400	10.37	3.61	3.61	17.60
Class E - High Strength	1.0	0.000636	600	600	10.37	5.42	5.42	21.21
	<u>Wtr Use</u>	<u>Sewer %</u>	<u>Swr Flow</u>					<u>Per hcf of Water Use</u>

Table 13  
City of Morro Bay  
Proposed Sewer Rates

	Current	Proposed					5-Year Impact
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	
<b>PROJECTED SEWER RATES</b>							
<b>RESIDENTIAL</b>							
<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%	
<b>NON-RESIDENTIAL</b>							
<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
<b>Minimum Annual Charge</b>	51.77	44.00	50.00	56.00	61.60	66.40	14.63
<b>SEWER ACCOUNTS &amp; USE</b>							
<b>RESIDENTIAL</b>							
<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	
<b>NON-RESIDENTIAL</b>							
<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	
<b>SEWER RATE REVENUES</b>							
<b>RESIDENTIAL</b>							
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	
<b>NON-RESIDENTIAL</b>							
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	
<b>Total</b>	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**

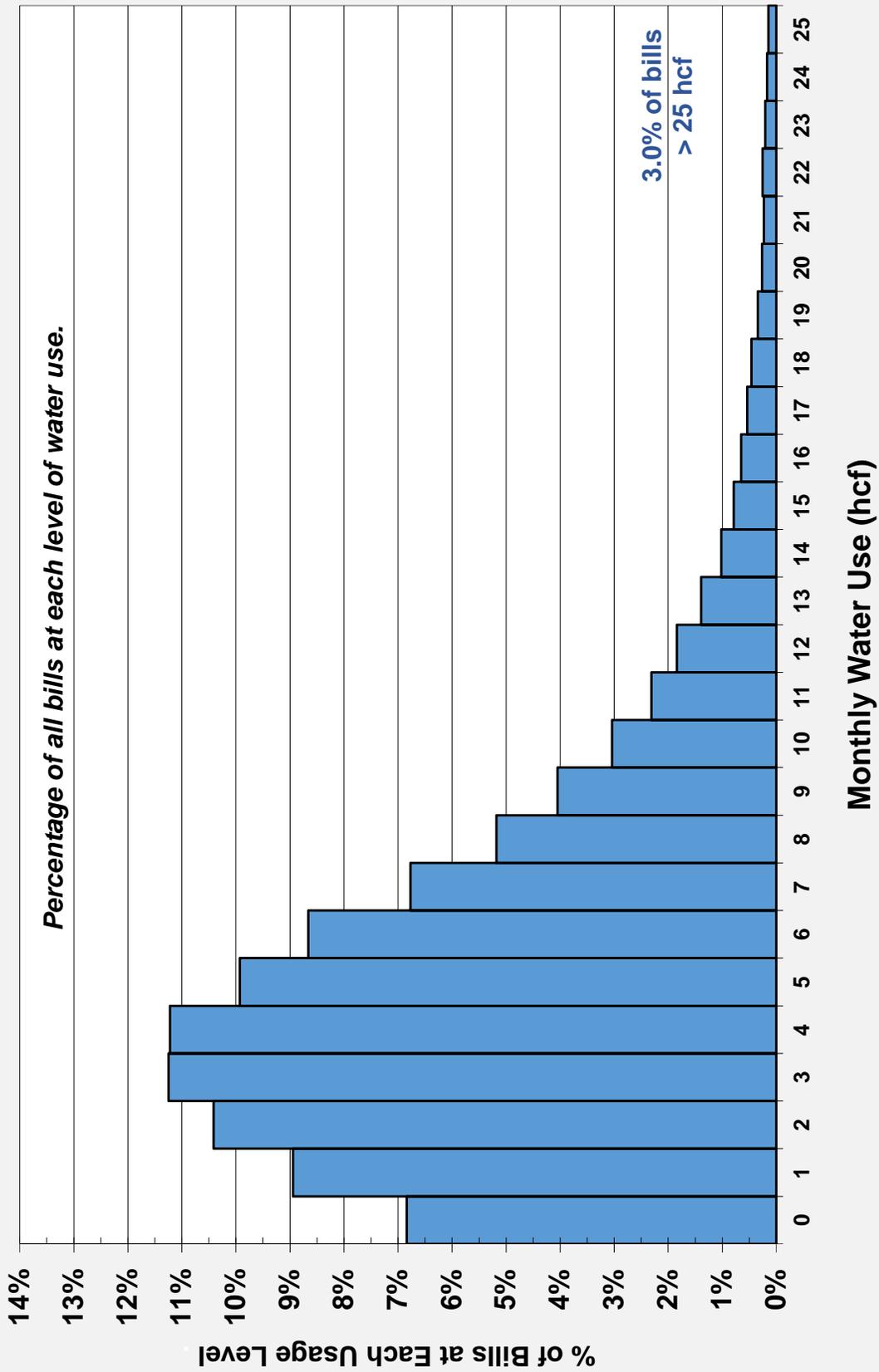
## **Additional Utility Billing & Usage Analysis**

**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

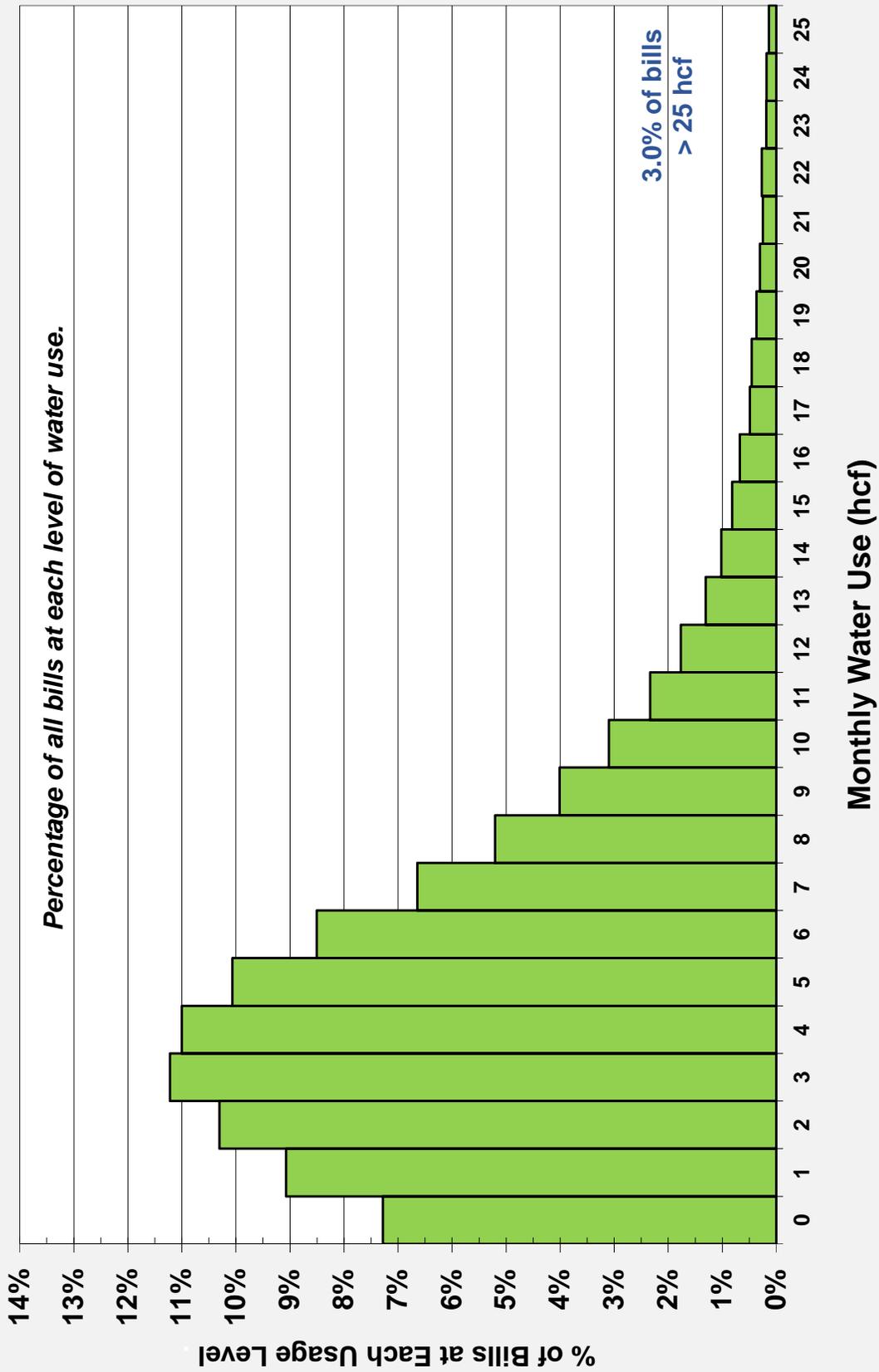


**Table A-2**  
**City of Morro Bay**  
**Consumption Block Analysis FY2014**  
*All Consumption*

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



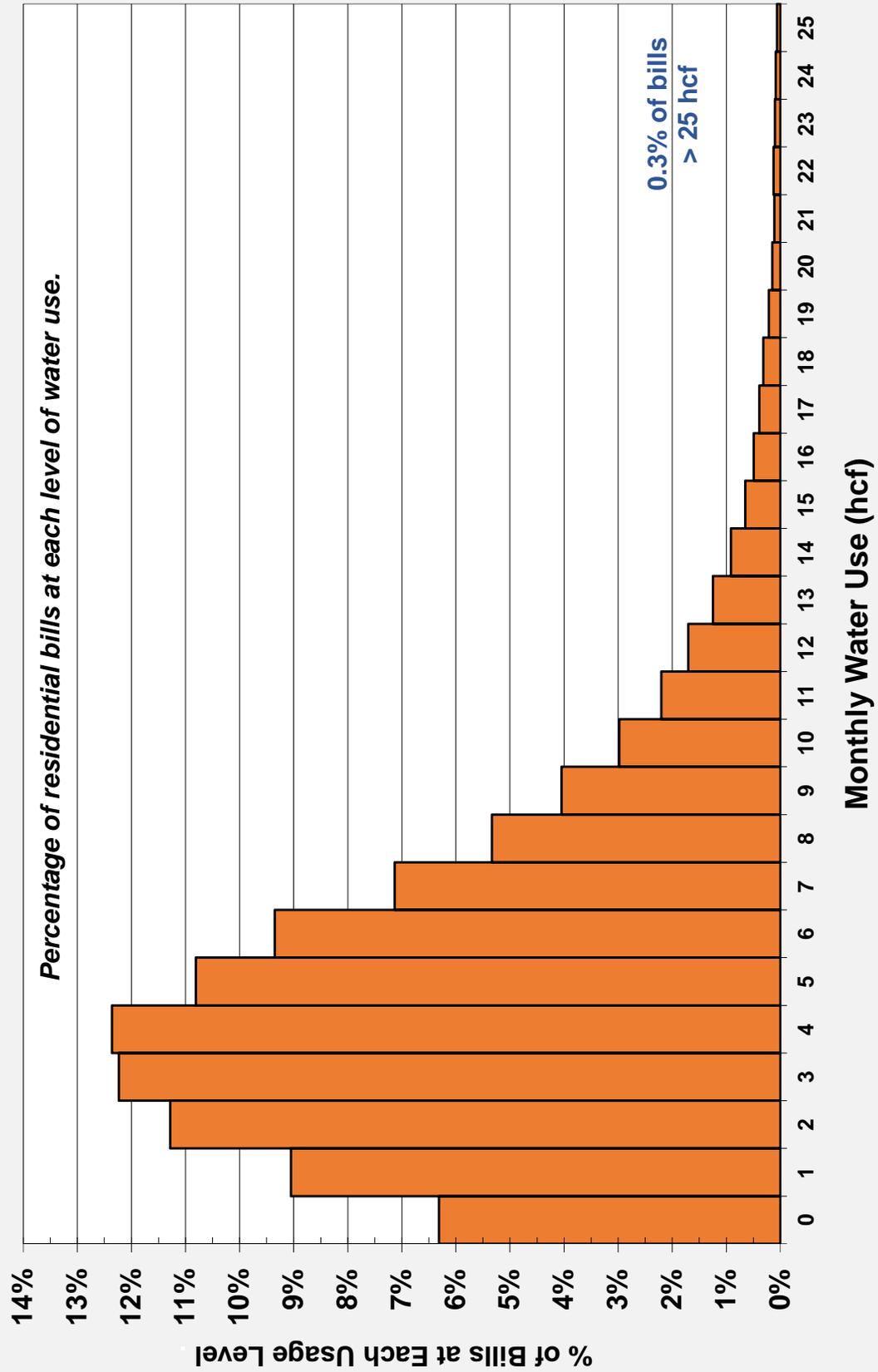
**Table A-3**  
**City of Morro Bay**  
**Consumption Block Analysis FY2014**  
*Residential Bills Only (Single Family & Condos)*

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

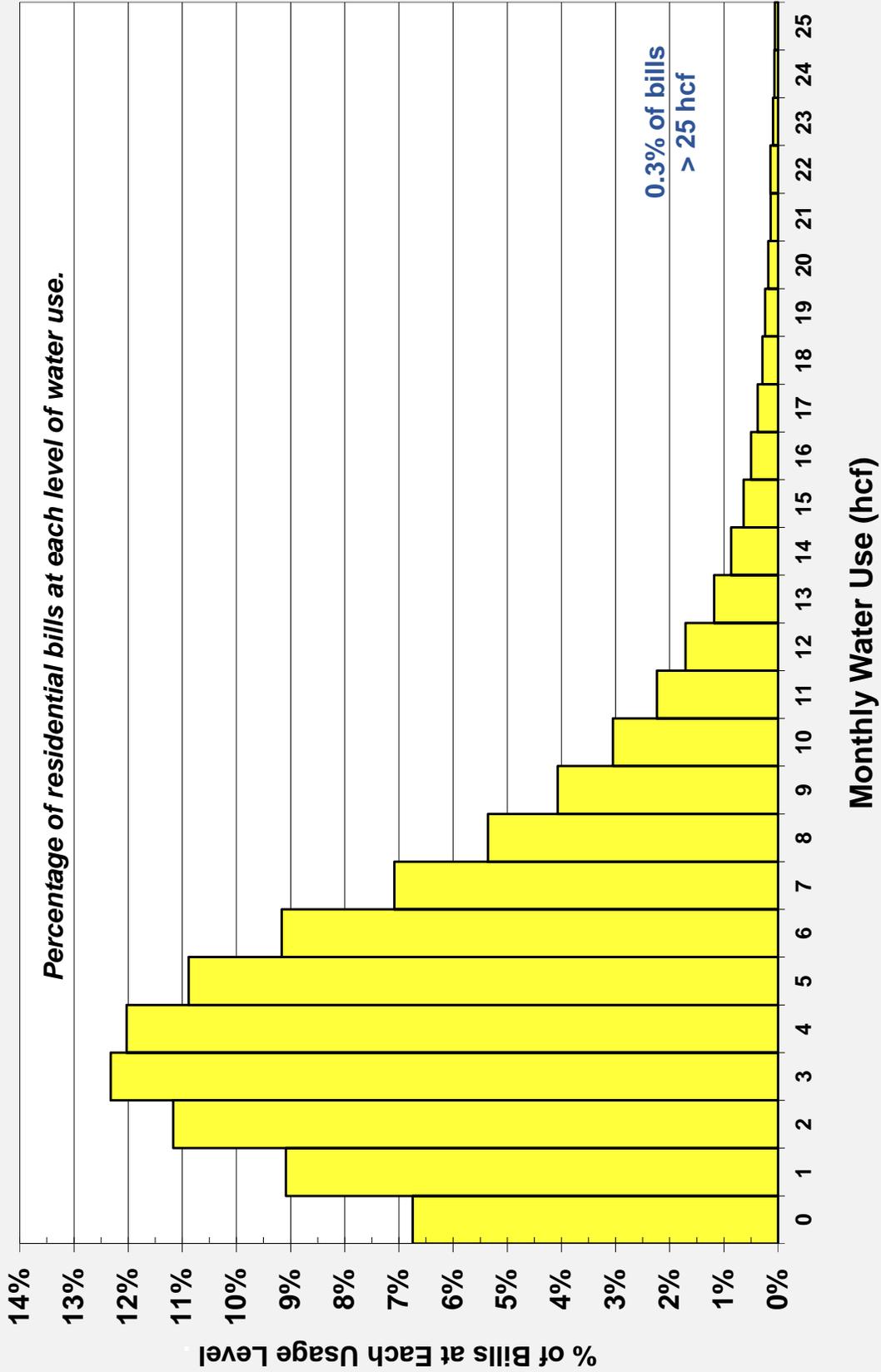


Table A-5  
City of Morro Bay  
Historical Accounts

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
<b>RESIDENTIAL</b>																					
<b>Average Annual Accounts</b>																					
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	
<b>NON-RESIDENTIAL</b>																					
<b>Average Annual Accounts</b>																					
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	
<b>TOTAL</b>	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	Jan-Aug only	
<b>RESIDENTIAL</b>																						
<b>Annual Water Use (hcf)</b>																						
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	278,597		
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%		
<b>NON-RESIDENTIAL</b>																						
<b>Annual Water Use (hcf)</b>																						
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//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%		
<b>TOTAL</b>	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	
<b>RESIDENTIAL</b>																					
<b>Average Monthly Use per Account (hcf)</b>																					Jan-Aug only
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	5.4	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	2.7	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	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	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	5.6	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	5.6
<b>NON-RESIDENTIAL ACCOUNTS</b>																					
<b>Average Monthly Use per Account (hcf)</b>																					
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	27.3
<b>TOTAL</b>	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	7.9

Table A-8  
City of Morro Bay  
Water Revenues

	2010	2011	2012	2013	2014
<b>RESIDENTIAL</b>					Jan-Aug only
<b>Annual Water Revenues</b>					
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
<i>% of Total</i>	56.8%	57.9%	59.7%	59.1%	59.0%
<b>NON-RESIDENTIAL</b>					
<b>Annual Water Revenues</b>					
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
<i>% of Total</i>	43.2%	42.1%	40.3%	40.9%	41.0%
<b>TOTAL</b>	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
<b>RESIDENTIAL</b>					Jan-Aug only
<b>Average Monthly Water Revenues per Account</b>					
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
<b>NON-RESIDENTIAL</b>					
<b>Average Monthly Water Revenues per Account</b>					
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
<b>RESIDENTIAL</b>				
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
<i>% of Total</i>	57.4%	58.0%	60.3%	58.9%
<b>NON-RESIDENTIAL</b>				
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
<i>% of Total</i>	42.6%	42.0%	39.7%	41.1%
<b>TOTAL</b>				
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
<b>RESIDENTIAL</b>					Jan-Aug only
<b>Annual Sewer Revenues</b>					
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	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	2,458,653	2,582,139	2,716,483	2,871,946	1,973,267
<i>% of Total</i>	74.1%	74.1%	74.1%	73.4%	73.1%
<b>NON-RESIDENTIAL</b>					
<b>Annual Sewer Revenues</b>					
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	<u>-</u>	<u>-</u>	<u>81,541</u>	<u>-</u>	<u>-</u>
Subtotal	857,811	904,261	949,373	1,040,730	727,008
<i>% of Total</i>	25.9%	25.9%	25.9%	26.6%	26.9%
<b>TOTAL</b>	<b>3,316,463</b>	<b>3,486,400</b>	<b>3,665,855</b>	<b>3,912,676</b>	<b>2,700,275</b>

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
<b>RESIDENTIAL</b>					Jan-Aug only
<b>Average Monthly Sewer Revenues per Account</b>					
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
<b>NON-RESIDENTIAL</b>					
<b>Average Monthly Sewer Revenues per Account</b>					
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
<b>RESIDENTIAL</b>				
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
<i>% of Total</i>	73.9%	74.0%	73.7%	72.8%
<b>NON-RESIDENTIAL</b>				
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
<i>% of Total</i>	26.1%	26.0%	26.3%	27.2%
<b>TOTAL</b>				
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