

City of Morro Bay



Water & Sewer Rate Studies

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INDEPENDENT PUBLIC FINANCE ADVISORS

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City of Morro Bay

Water & Sewer Rate Study Key Issues

1. BACKGROUND & OBJECTIVES

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 to five years. Additional funding is needed for repair and rehabilitation of various components of the City's aging sewer collection system.

BWA met with the City's Public Works Advisory Board on January 29, 2015 and February 19, 2015 to present preliminary finding and recommendations and receive input. The draft water and sewer rate recommendations presented in this report incorporate input received from the Public Works Advisory Board. The Public Works Advisory Board opted to make no formal recommendations regarding various other related issues such as an additional surcharge for desalination facility use, emergency water shortage rates, or an automatic pass-through for State Water Contract costs. However, the Public Works Advisory Board expressed support for some form of a low-income discount to help mitigate the impact on economically disadvantaged customers.

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 water and sewer service and support the long-term financial stability of the water and sewer utilities
 - b. Provide adequate funding for capital needs including long-term infrastructure repairs and replacements
 - c. Are fair, equitable, and politically acceptable
 - d. 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

Constitutional Requirements for Water & Sewer Rates

The California Constitution includes two key articles applicable to water and sewer rates: Article 10 and Article 13D. The rates developed in this study were designed to comply with both of these constitutional mandates as well as various provisions of the California Water Code and Government Code that support and add further guidance for implementing these constitutional requirements. In accordance with the constitutional provisions, the proposed rates are designed to a) recover the City's cost of providing service, b) recover revenues in reasonable proportion to the cost for serving each customer, and c) promote conservation and discourage waste.

Article 10, Section 2 – This section was established by voter-approval in 1976 and requires public agencies to maximize the beneficial use of water, prevent waste, and encourage conservation. Section 2 states that:

“It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare.”

Article 13D, Section 6 - Proposition 218 was adopted by California voters in 1996 and added Articles 13C and 13D to the California Constitution. Article 13D, Section 6 governs property-related charges, which the California Supreme Court subsequently ruled includes ongoing utility service charges such as water, sewer, and garbage rates. This section establishes a) procedural requirements for imposing or increasing property-related charges, and b) substantive requirements for those charges. Article 13D also requires voter approval for new or increased property-related charges but exempts water, sewer, and garbage rates from the voting requirement provided the rates comply with the section’s cost of service requirements.

The substantive rate requirements of Article 13D, Section 6 include:

1. Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service.
2. Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
3. The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.
4. No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question.

A subsequent appellate court decision in 2015 further clarified that agencies must demonstrate, satisfactory to a court’s independent judgment, that property-related fees and charges meet the proportionality requirement of Section 6.(3). This rate study provides that justification. The water and sewer rates derived in this report are each based on a cost-of-service methodology that fairly apportions costs to all customers.

2. 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. Accounting for 3% construction cost inflation, capital improvements are projected to total approximately \$10 million over the next decade. Projects include adding storage for fire flow and reliability, repairing and improving the City's water desalination facility, and repairing/replacing aging and substandard water distribution pipelines. Many of the City's pipelines are over 50 years old and are approaching the end of their useful lives.

➤ **Long-Term Water Supply**

- A large portion the City's water supply comes from the State Water Project. The City's 2014/15 budget includes a little over \$2.2 million for costs related to the State Water Project. This equates to over 55% of annual operating expenses and roughly half of total annual expenditures.
- State Water Project costs are expected to increase substantially in future years due to implementation of the Bay Delta Conservation Plan, a 50-year plan to restore the Sacramento-San Joaquin Delta ecosystem and secure future water supply through the State Water Project and Central Valley Project. The plan includes construction of roughly 30-miles of water conveyance pipelines to enable source water to circumvent the Delta. Costs are estimated at roughly \$25 billion over the next 50 years with costs front-loaded over the next decade.
- Planned construction of a new "reclamation ready" wastewater treatment plant will enable the City to pursue a future recycled water project that could ultimately support the long-term reliability and sustainability of the City's water supply. Based on very preliminary engineering cost estimates, the recycled water system is projected to cost

roughly \$25 million (future \$) starting in about six years in 2020/21. When constructed, the City would also need to pay additional operating costs for recycled water operations. However, recycled water may enable the City to reduce reliance the State Water Project and thus replace imported water with a potentially lower-cost local source of supply.

- The City will continue to evaluate water supply alternatives with the goals of securing a reliable and cost-effective source of water supply to meet the City's long-term supply needs.

➤ **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 a future \$25 million recycled water project using 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. Due to the level of current budget deficits coupled with near-term financial needs, a larger initial rate increase is needed in 2015/16, with smaller increases in future 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 approximately 3.5% through 2019/20.
- The financial projections indicate the need for additional gradual rate increases after the next five years to provide adequate repayment capacity for a future SRF loan anticipated for a future recycled water project. 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 updated water rates with the following modifications to the rate structure:
 - Water quantity charges are phased in for the first three units of water.
 - Fixed monthly charges continue to recover approximately one-third of total rate revenues. 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 (e.g. the California Urban Water Conservation Council has historically recommended agencies' fixed charges recover 30% or less of total rate revenues, but also recognizes that some agencies legitimately have a higher percentage of rate revenues recovered from fixed charges to better ensure revenue stability).
 - Proposed 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.
- The rate structure modifications represent incremental modifications to the City's existing rate structure, not a complete revision.

Cost Recovery & Rate Derivation

- The California Constitution does not give agencies leeway to arbitrarily set rates purely based on policy preferences. Rather, it provides agencies with flexibility to implement rates within a framework established by Articles 10 and 13D. Together, these Articles establish that rates should both a) discourage waste and encourage conservation of water, and b) not exceed the costs of service attributable to each parcel or customer.
- In reality, many costs can be reasonably attributed to components of an agency's rate structure based on a range of approaches. For example, costs for an agency's conservation

program can reasonably be attributed and recovered via many approaches including from a) both fixed and variable charges, b) 100% from variable charges, c) on a pro-rata basis from all volumetric tiers, or d) from higher volumetric rate tiers. Likewise, costs for salaries, debt service, and capital improvements can reasonably be treated as a) fixed annual costs that should be recovered from fixed charges, b) costs related to providing water supply and system capacity to meet customer demand and therefore costs that should be recovered from variable rates based on each customer's share of actual water use, or c) costs that can be recovered by both fixed and variable rates, a middle-road approach. Furthermore, costs attributable to meeting peak demands can reasonably be allocated a) to all volumetric tiers on a pro-rata basis, or b) more to higher tiers in recognition that higher tier water use accounts for a disproportionately higher share of demand during peak use months and are the underlying driver of the need for sizing facilities to meet peak demands.

- Ultimately, there is no single correct way to allocate or attribute costs; rather there are a range of reasonable approaches. Hence, five similar agencies may have five different rate structures provided each agency establishes a reasonable cost basis for their own particular rate structure within the parameters of meeting the various requirements of the California Constitution.
- While there is no single correct approach for cost attribution and rate-setting, BWA believes that costs should be allocated within a reasonable range that reflects both a) underlying cost causation, to the extent such causation can reasonably be determined or estimated, and b) the policy preferences of the agency within the parameters of having a reasonable cost basis. The rates developed in this report are designed to achieve the City's policy preferences while complying with the requirements of the California Constitution.
- A detailed cost recovery allocation was developed supporting the proposed rates for fiscal year 2019/20. Rates in intervening years are phased in from current levels to the proposed levels calculated for 2019/20, in order to help minimize the annual impact due to rate structure modifications occurring in addition to overall rate increases.
- The proposed rates were developed based on reasonable and equitable allocations for cost recovery from the City's fixed charges and tiered quantity charges. Based on the allocations, fixed monthly service charges will recover approximately 34% of total rate revenues and water quantity charges will recover roughly 66% of total rate revenues.

- The roughly 66% of costs designated for recovery from the City’s water quantity charges are further allocated for recovery from each rate tier based on the following assumptions:
 - Costs attributable to all water use are allocated on a pro-rata basis to all water use. This results in each rate tier recovering a pro-rata share of costs based on the percentage of water consumed in each tier.
 - Costs related to meeting peak demands are allocated more toward higher tiers in recognition that higher tier water use accounts for a disproportionately higher share of demand during peak use months and therefore is the underlying driver of the need for sizing facilities to meet peak demands. Costs attributable to peak demand are attributed to 15% of Tier 2 water use, 35% of Tier 3 water use, and 60% of Tier 4 water use. No peak costs are allocated for cost recovery from Tier 1.
 - Many costs – such as costs for operating and maintaining facilities – are incurred providing service to meet both average demands and peak demands. The share of these costs allocated for variable revenue recovery are further allocated two-thirds to all water use and one-third to meeting peak demand
 - In total, costs are recovered as follows:
 - Fixed rate cost recovery: 34%
 - Variable rate cost recovery : 66%, of which costs are recovered
 - Pro-rata allocation to all water use: 47.4%
 - Allocation to peak use: 18.7%

Proposed Water Rates & Impacts

- The following table shows a schedule of proposed water rates for the next 5 years. Charges include both a) a fixed monthly charge billed regardless of water use, and b) water quantity charges billed in 4 inclining tiers with water first purchased in Tier 1 and subsequently higher tiers as water use increases.

Proposed Water Rates

		Current	Projected Water Rates				
			2015/16	2016/17	2017/18	2018/19	2019/20
Fixed Monthly Charge		\$16.43	\$23.00	\$26.00	\$28.00	\$30.00	\$32.00
Water Quantity Charges (\$/hcf)							
Tier 1	0 - 3 hcf	\$0.00	\$3.00	\$4.00	\$5.00	\$5.50	\$6.00
Tier 2	4 - 10 hcf	5.56 - 5.74	6.00	7.00	7.50	8.00	8.50
Tier 3	11- 50 hcf	5.77 - 7.81	9.00	9.50	10.00	10.50	11.00
Tier 4	>50 hcf	7.85 - 13.68	12.00	12.50	13.00	13.50	14.00
<i>1 hcf = one hundred cubic feet = 748 gallons</i>							

- The following table projects monthly water bills at different levels of water use. Due to the phase-in of charges for the first 3 units of water, low-use customers will experience a higher percentage increase but lower dollar increase in their monthly bills. Under the proposed rates, low use customers will still benefit from low fixed monthly charges and water purchases in the lowest rate tiers.

Water Rate Impacts

Monthly Use (hcf)	Current	Projected Monthly Bills					5-Year Impact	
	\$/Month	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	26.00	30.00	33.00	35.50	38.00	21.57	0.71
2	16.43	29.00	34.00	38.00	41.00	44.00	27.57	0.91
3	16.43	32.00	38.00	43.00	46.50	50.00	33.57	1.10
4	21.99	38.00	45.00	50.50	54.50	58.50	36.51	1.20
5	27.58	44.00	52.00	58.00	62.50	67.00	39.42	1.30
6	33.20	50.00	59.00	65.50	70.50	75.50	42.30	1.39
7	38.85	56.00	66.00	73.00	78.50	84.00	45.15	1.48
8	44.53	62.00	73.00	80.50	86.50	92.50	47.97	1.58
9	50.24	68.00	80.00	88.00	94.50	101.00	50.76	1.67
10	55.98	74.00	87.00	95.50	102.50	109.50	53.52	1.76
20	115.04	164.00	182.00	195.50	207.50	219.50	104.47	3.43
30	179.93	254.00	277.00	295.50	312.50	329.50	149.58	4.92
40	251.24	344.00	372.00	395.50	417.50	439.50	188.27	6.19
50	327.37	434.00	467.00	495.50	522.50	549.50	222.14	7.30
75	533.21	734.00	779.50	820.50	860.00	899.50	366.29	12.04
100	755.68	1,034.00	1,092.00	1,145.50	1,197.50	1,249.50	493.82	16.24
200	1,747.86	2,234.00	2,342.00	2,445.50	2,547.50	2,649.50	901.64	29.64

- Under the proposed rates, low use customers will continue to benefit from low fixed charges coupled with water consumption in the lowest quantity rate tiers.
- High-use customers will also continue to benefit from low fixed charges, particularly considering the higher levels of demand these customers place on the water system and associated higher levels of capacity needs in water infrastructure. At the same time, the rate structure balances the low fixed charges for high-use customers with inclining rate tiers that recover a higher share of costs from higher levels of use, similar to the City's historical water rate structure.

Temporary Surcharge for Desalination Facility Use

- The City's desalination plant was originally constructed in 1992 to provide water supply during a drought emergency and was subsequently upgraded in 2009. The plant served as the City's primary source of water supply for a few months of 2010 and is currently used on a very limited basis to treat high-nitrate groundwater to supplement supply from the State Water Project. The plant provides a source of backup and emergency water supply in case of future State Water Project supply reductions or service outages. In future years, the plant may potentially be used as a primary source of supply.
- The plant treats water via reverse osmosis to produce high-quality drinking water. The relatively high operating costs for running the plant during potential future water shortage emergencies are not factored into the proposed water rate increases. As such, BWA recommends adoption of a surcharge to recover the plant's operating costs during periods of use. The surcharge would be billed based on a customer's metered water use and would only be levied for periods when the desalination plant is in operation.
- Because the cost of producing potable water can vary substantially depending on the source and quality of the untreated supply (e.g. seawater, brackish water, high-nitrate well water), BWA recommends the City adopt a maximum allowable surcharge via the Proposition 218 process based on the most expensive cost of water production: untreated seawater. This would give the City authorization and flexibility to levy a surcharge up to the maximum allowable level as needed.
- The proposed maximum surcharge is based on the cost of producing drinking water from seawater. These costs would be partially offset by reduced purchases from the State Water Project. A preliminary draft of the maximum surcharge based on treatment of seawater is as estimated as follows:

- Cost of seawater treatment totals approximately \$1,600 per AF or about \$3.70 per hcf. This total would be offset by a) roughly \$45 per AF in variable State Water Project expenses, and b) \$250 per AF of staffing expenses which are not incremental costs, but simply a transfer of existing staffing costs. This results in a total offset of about \$0.70 per hcf and a net maximum surcharge of \$3.00 per AF.
 - For comparison, the total cost of treating brackish water is about \$1,000 per AF, approximately \$600 per AF lower than seawater treatment. The incremental costs for treating brackish water, less applicable offsets, would result in a net surcharge of about \$1.60 per AF.
- The Proposition 218 notice and Resolution adopting the surcharges should allow for automatic annual inflationary adjustments to keep the charge in line with future costs of water treatment, which include substantial costs for electricity and chemicals.

Water Shortage Emergency Rates

- BWA recommends consideration of Water Shortage Emergency Rates designed to help the water enterprise remain financially stable during periods of emergency water shortages and reduced water sales. Water Shortage Emergency Rates can be phased in by future Council authorization in response to the escalating water shortage stages identified in the Water Shortage Contingency Plan of the 2010 UWMP.
- The City is currently in a Stage 3 Water Shortage and has implemented conservation requirements for “Severely Restricted Water Supply Conditions”. More severe water shortage stages could require additional cutbacks in customer demand and result in future revenue shortfalls. As such, the City could adopt Water Shortage Emergency Rates that could be triggered with a Stage 4 or 5 Water Shortage.
- Water Shortage Emergency Rates can be adopted along with regular water rate increases via the Proposition 218 process in order to give the City authority to implement emergency rates when needed. If adopted, the City can opt to phase in emergency rates as needed provided the rates do not exceed the maximum levels noticed and adopted via the Proposition 218 process.
- If ever implemented, Water Shortage Emergency Rates should be gradually phased out as water sales return to normal levels. Emergency Rates should not immediately be rescinded when a water shortage stage is declared over as it typically takes additional time for water sales to return to normal-year levels.
- The City has already taken substantial steps to help ensure adequate water supply during periods of drought. According to the 2010 Urban Water Management Plan (UWMP), “it is

not anticipated that the City will face a chronic shortage condition at which the City would need to implement any additional measures to reduce the demand” other than basic conservation measures outlined in the UWMP. The UWMP only foresees the need for more extreme measures, such as water rationing, during catastrophic interruptions that would reduce water supplies by 50% or more.

Automatic Pass-Through for State Water Contract Costs

- State Water Contract costs currently account for roughly half of annual water enterprise expenses. These costs may increase substantially in future years due to implementation of the \$25 billion Bay Delta Conservation Plan. The timing of the future expenditures and impacts on the City and other recipient of State Water Project water are not currently known. The financial projections incorporated 5% annual cost escalation for State Water Contract expenses. While substantial cost increases may not impact the City until after the next five years, the City can consider adopting an automatic pass-through to account for unanticipated increases in State Water Contract costs above the modest projected increases incorporated in the draft rate projections.
- California Government Code Section 53756 became effective on January 1, 2009 and authorizes public agencies providing water, sewer, and garbage services to adopt automatic pass-through rate adjustments to account for a) cost inflation, and b) increases in wholesale water charges or wastewater treatment charges. Pass-throughs must be adopted via the Proposition 218 process and can be effective for up to five years without additional Proposition 218 authorization. The Proposition 218 Notice informing ratepayers of the proposed pass-throughs must include a clearly defined formula indicating how any inflationary or wholesale adjustments will be implemented. After adoption of a pass-through formula, agencies do not need to go through the Proposition 218 process to implement a pass-through. However, agencies must send ratepayers a notice informing them of the pass-through not less than 30 days before the effective date of the adjustment. Regardless of the pass-through authorization, rates must continue to comply with the substantive provisions of Proposition 218 including that any inflation adjustment cannot exceed the cost of providing service.

3. SEWER FINANCIAL PLAN & RATE STUDY



Sewer Finances & Rates

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

Financial Challenges

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

- **Funding a New \$75 Million Water Reclamation Facility**
 - Based on engineering and financial evaluation of key alternatives, the City anticipates moving forward with design and construction of a new \$75 million wastewater treatment plant at the Rancho Colina 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.
- Unlike water rates, which require a large up-front increase to restore water system financial stability, sewer rates can be more gradually phased in because a) the sewer enterprise is starting from a stronger financial position, and b) the City anticipates funding the new wastewater treatment plant with SRF loans and projects that debt service for the new plant will not start until 2019/20, one year after construction is complete.
- 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 use in excess of 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.
 - Operating and capital expenses are allocated for cost recovery from the parameters of wastewater flow and strength, as designated by biological oxygen demand (BOD) and suspended solids (SS).
 - The total amount of costs allocated to each parameter is divided by the total amount of estimated loadings for each parameter, resulting in unit costs for flow, BOD and SS.
 - These unit costs are then applied to the wastewater characteristics of each customer class, resulting in rates that are equitably aligned with the wastewater characteristics of each class.
- The draft rate projections include modifications to the existing sewer rate structure 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 winter water use data and proposed cost allocations.
 - 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 home with dining is reclassified from Class D – Mod-High Strength to Class C – Moderate Strength.
- New rates were developed based on a cost of service methodology that equitably recovers costs for wastewater flow and strength from each each customer class. Costs were allocated for recovery via the wastewater treatment parameters of flow, Biological Oxygen Demand (BOD), and Suspended Solids (SS). Costs allocated to each parameter were then divided by the total estimated loadings for each parameter, resulting in unit costs for flow (\$ per hcf) and strength (\$ per pound for BOD and SS). These unit costs were then applied to the wastewater characteristics of each customer class resulting in new rates for each class based on common underlying unit costs.
- Rate adjustments from current rates to proposed maximum rates in 2019/20 were phased in over five years based on the overall level of required rate increases as determined from the financial projections. Under the proposed draft rates, rates for each non-residential customer class increase by roughly a similar dollar amount (not the same percentage amount) over the next five years.
- The minimum charge for non-residential sewer accounts 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.

Proposed Sewer Rates & Impacts

- The following table shows a schedule of proposed sewer rates for the next 5 years. Residential customers pay a fixed monthly charge per dwelling unit with reduced charges for multi-family and condominium dwelling units. Non-residential customers pay a charge based on customer class and metered water consumption, subject to a minimum charge set at the reduced charge per multi-family dwelling unit.

Proposed Sewer Rates & Impacts

	Current	Proposed					5-Year
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	Impact
RESIDENTIAL							
<i>Charge per residential dwelling unit</i>							
Single Family	\$45.59	\$55.00	\$62.50	\$70.00	\$77.00	\$83.00	\$37.41
Multi-Family/Condo	varies	44.00	50.00	56.00	61.60	66.40	varies
% of Single Family		80%	80%	80%	80%	80%	
NON-RESIDENTIAL							
<i>Rate per hcf of metered water use</i>							
Class A - Low Strength	\$4.63	\$6.50	\$7.95	\$9.37	\$10.57	\$11.40	\$6.77
Class B - Domestic Strength	5.82	7.98	9.65	11.29	12.67	13.61	7.79
Class C - Moderate Strength	8.03	10.19	11.86	13.50	14.89	15.82	7.79
Class D - Mod-High Strength	10.45	12.55	14.18	15.78	17.13	18.03	7.58
Class E - High Strength	13.38	15.89	17.84	19.75	21.36	22.46	9.08
Minimum Annual Charge	51.77	44.00	50.00	56.00	61.60	66.40	14.63

Note: 1 hcf = 100 cubic feet = approximately 748 gallons

4. OTHER RECOMMENDATIONS



Debt Financing Recommendations

- BWA strongly recommends the City pursue low-cost, subsidized funding from the Clean Water State Revolving Fund (SRF) 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.
 - The SRF financing program will soon be administering disbursement of California Proposition 1 financing, which will provide 1% interest rate loans for recycled water projects as well as some grant funding for economically disadvantaged communities. Due to the 4 to 5 year anticipated timing for planning, designing, and constructing a new wastewater treatment plant, it is unknown if the City's project will be eligible for funding from this upcoming financing program.
 - 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 too. Many agencies mail notices to all affected property owners only, some mail to both property owners and tenant ratepayers responsible for paying the bill, and a few agencies only send the notice to ratepayers. However, in case of delinquency, agencies are only allowed to place a lien on the property if the notice was mailed to the property owner.
 - BWA recommends the notice go beyond the minimum legal requirements and present a clear and concise explanation why the proposed rate increases are needed. Ratepayers are more accepting of rate increases when they understand why the increases are needed.
 - 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 count every protest, even if some protests do not include all of the legally-required information.

Low-Income Discount

- The Public Works Advisory Committee generally supported the idea of adopting a low-income discount program in Morro Bay. If the City opts to pursue a low-income discount program, BWA recommends that eligibility be based on economic criteria only.
- Based on BWA’s experience with other water and wastewater agencies throughout California, roughly 25% of statewide water and sewer agencies offer some form of a low-income discount. The amount of the discount typically ranges from 10% to 20% of the utility bill, but is occasionally lower or higher. In some cases, the discount is a fixed dollar amount (e.g. \$5 per month).
- Eligibility requirements vary from agency to agency. While some agencies independently verify a customer’s income, BWA would instead recommend the City piggy-back on some other low-income discount program – such as the PG&E CARE program -- to avoid the administrative effort of having to determine program eligibility. For example, customers who provide proof of eligibility in the CARE program would qualify for the City’s low-income discount. Qualification for the discount should be verified annually; the discount should not automatically extend forever.
 - PG&E CARE program eligibility is based on income thresholds per number of people per home. Current maximum income levels for eligibility are as follows:
 - \$31,460 for 1 or 2 people
 - \$39,580 for 3 people
 - \$47,700 for 4 people, etc.

- Other eligibility criteria can include participation in various federal assistance programs (such as AFDC, SSI/SSP, food stamps, and/or other programs) and other utility discount programs such as if offered by the customer's telephone company.
 - There are some additional details that would have to be resolved, such as how to provide the discount to a unit in a multi-family or mixed use property with a single master-meter bill.
-

Water Financial Plan & Rate Study

Tables & Charts

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

Minimum Monthly Charge \$16.43

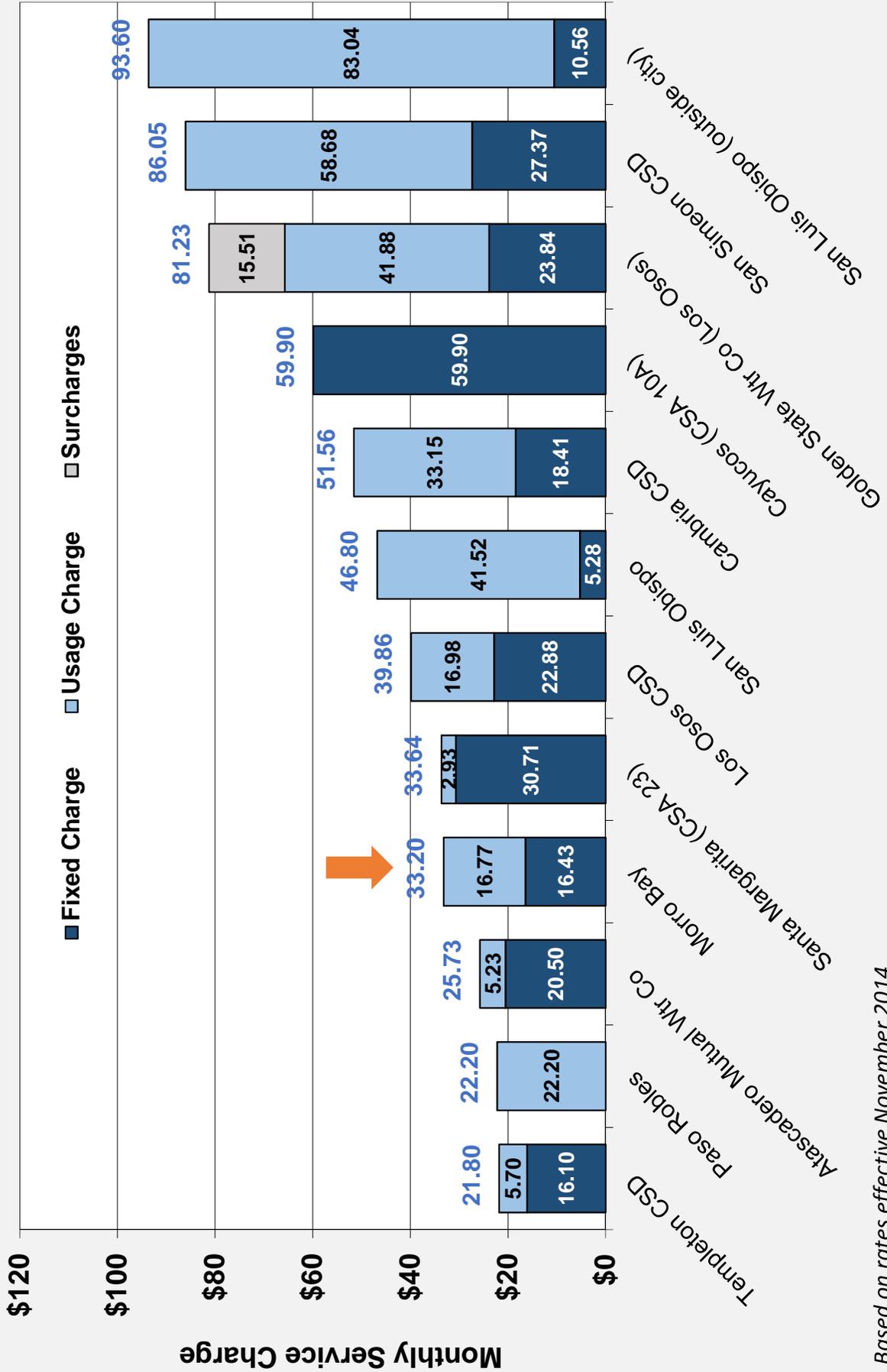
Water Quantity Charges

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

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

Monthly Residential Water Rate Survey

With 6 hcf monthly water use



Based on rates effective November 2014

Table 2
City of Morro Bay
Historical Monthly Water Rates

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

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

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

City of Morro Bay Historical Monthly Water Bills (6 hcf monthly water use)

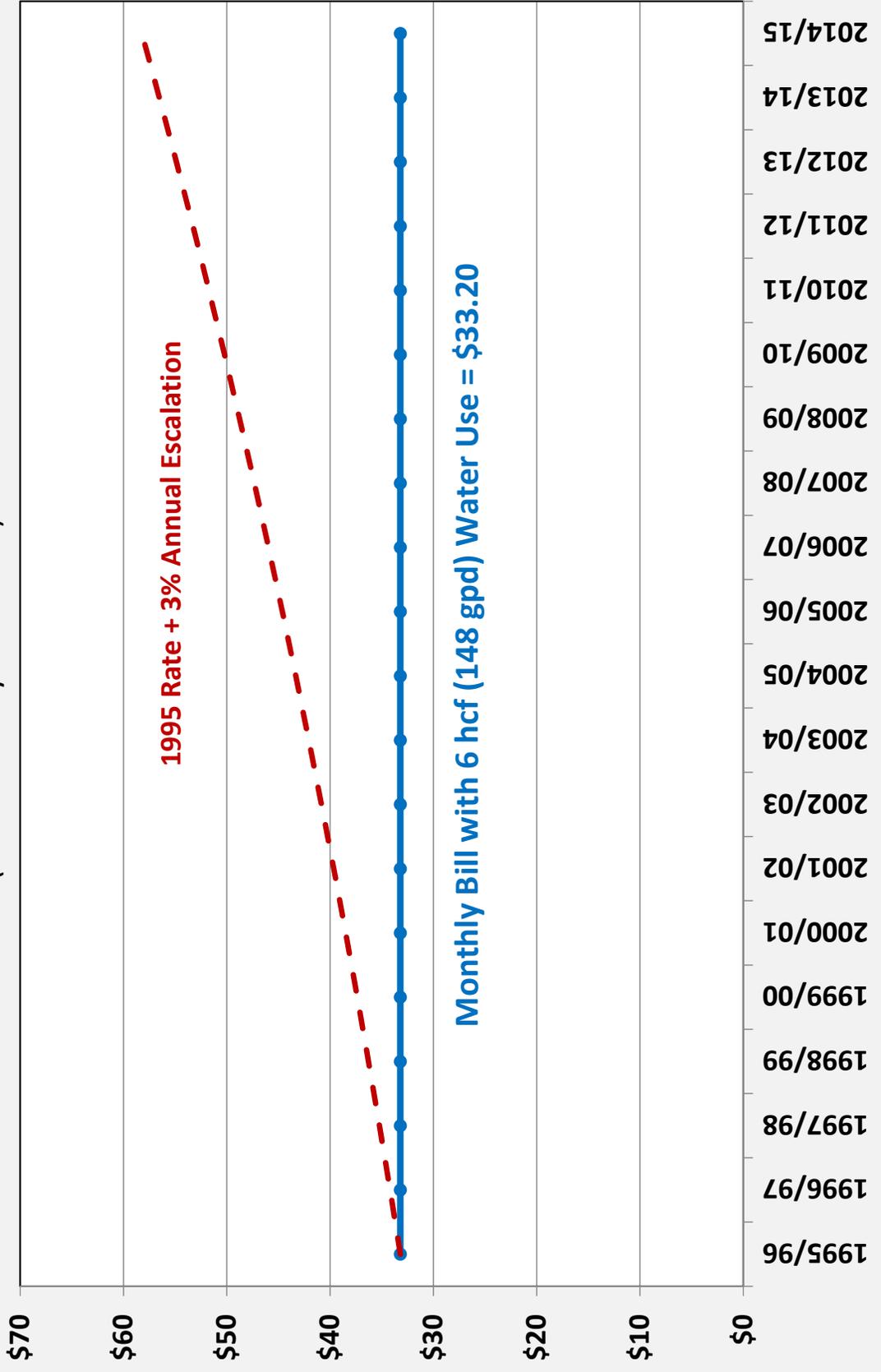


Table 3
City of Morro Bay
Historical Water Utility Finances & Budget

	Actual 2009/10	Actual 2010/11	Actual 2011/12	Budget 2012/13	Amended Budget 2013/14	Proposed Budget 2014/15
Beginning cash balance						
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
Revenue and reserve transfers						
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
Expenses						
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)
Revenues Less Expenses	(593,765)	691,178	(905,064)	(111,188)	(1,607,993)	(2,225,341)
Ending Cash Balance						
1. Equipment replacement fund	252,986	286,451	288,622	289,801	289,801	289,801
2. Operation fund	(455,458)	375,192	(114)	(236,133)	0	0
3. CIP fund	<u>4,984,596</u>	<u>4,852,454</u>	<u>4,360,525</u>	<u>4,135,073</u>	<u>2,290,947</u>	<u>65,606</u>
Total	4,782,124	5,514,097	4,649,033	4,188,741	2,580,748	355,407

Table 4
City of Morro Bay
Water Capital Improvement Program

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Total
UNESCALATED CAPITAL EXPENSES											
Vehicles											
2004 Chevrolet Silverado Pickup 05/20/04		35,000									35,000
2005 Chevrolet Silverado Pickup 05/21/04			35,000								35,000
Capital Improvements											
Nutmeg Tank construction		2,000,000									2,000,000
Chorro Valley Stream gauges		250,000									250,000
Desalination plant decanting facilities		500,000									500,000
Desalination plant capacity improvements		250,000									250,000
Desalination plant structural improvements		100,000									100,000
Various master plan improvements	350,000	350,000	350,000	350,000	350,000						1,750,000
Convert meter reading to AMR		150,000	200,000	250,000							600,000
Additional 750k gal storage tank at Kings				500,000	500,000						1,000,000
Placeholder for Future Water System Improvements											
				500,000	500,000	500,000	500,000	500,000	500,000	500,000	2,500,000
Recycled Water System, Phase 2 (escalated cost)											
							12,500,000	12,500,000			25,000,000
Total Unescalated	350,000	3,635,000	585,000	600,000	850,000	1,000,000	13,000,000	13,000,000	500,000	500,000	34,020,000
CAPITAL EXPENSES WITH COST ESCALATION											
Annual Cost Escalation		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	
Cost Escalator	1.000	1.030	1.061	1.093	1.126	1.159	1.194	1.230	1.267	1.305	
Subtotal Water Capital Projects	350,000	3,744,000	621,000	656,000	957,000	1,159,000	597,000	615,000	633,000	652,000	9,984,000
Recycled Water System, Phase 2	0	0	0	0	0	0	12,500,000	12,500,000	0	0	25,000,000
Total with Cost Escalation	350,000	3,744,000	621,000	656,000	957,000	1,159,000	13,097,000	13,115,000	633,000	652,000	34,984,000

Table 5
 City of Morro Bay
 SRF Loan Debt Service Estimates

	Phase 2 Recycled Water System
Funding Target	\$25,000,000
SRF Loan Amount	
Eligible Project Costs ¹	25,000,000
Accrued Interest During Construction ²	<u>625,000</u>
Total Loan Amount	25,625,000
Loan Terms	
Term (years)	30
Interest Rate ³	3.00%
Annual Loan Payment⁴	1,307,000
Total Payments Over Loan Term	39,210,000
Reserve Fund Requirement⁵	1,307,000

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

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

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

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

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

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

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

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

Table 7 Morro Bay - Water Cash Flow Projections

Years 1-5

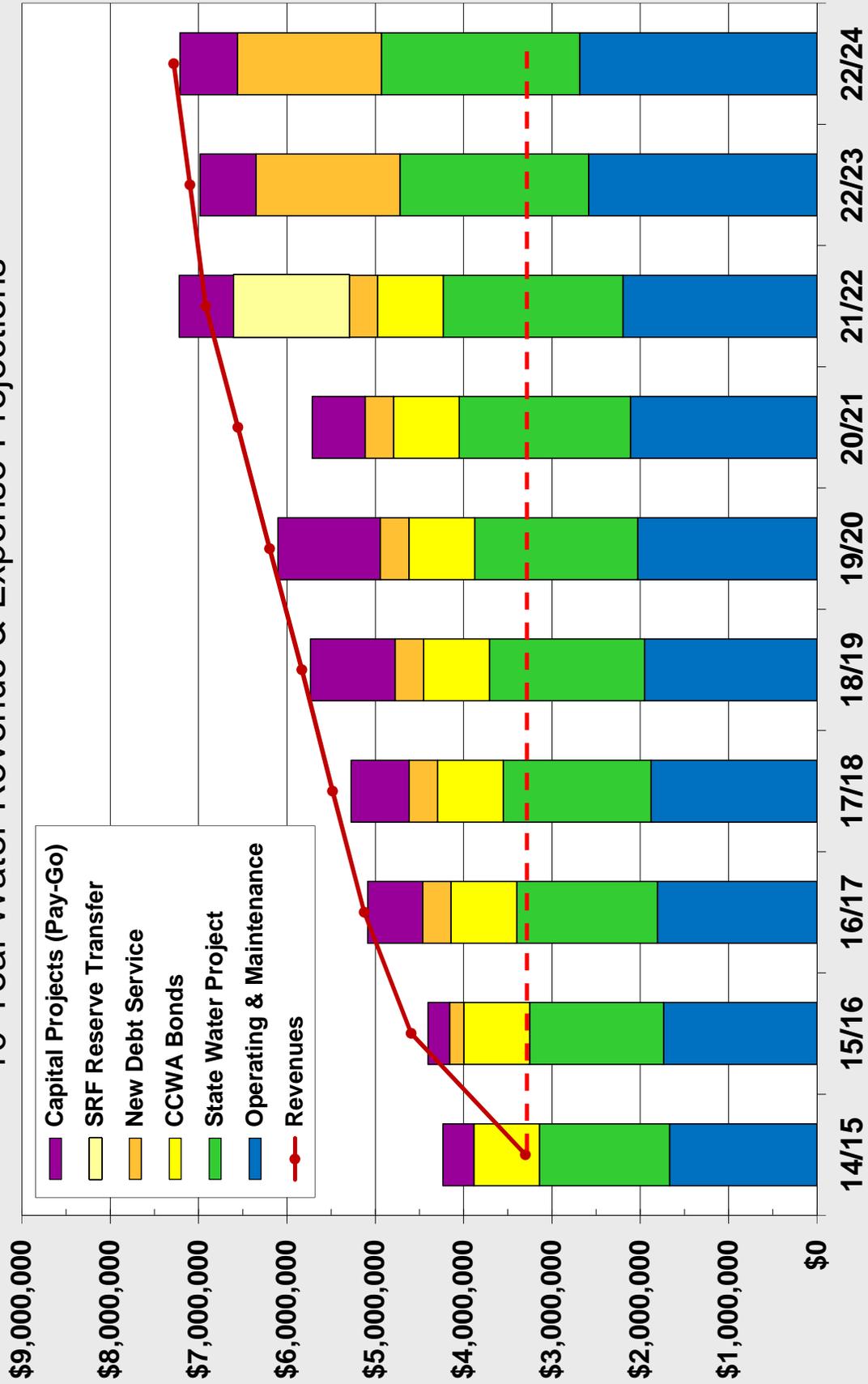
	Budget	Projected			
	2014/15	2015/16	2016/17	2017/18	2018/19
Effective Date of Rate Adjustment	07/01/14	07/01/15	07/01/16	07/01/17	07/01/18
Fixed Monthly Service Charge	\$16.43	\$23.00	\$26.00	\$28.00	\$30.00
Fixed Rate Recovery Net of Delinquencies	98%	98%	98%	98%	98%
Beginning Accounts	5,424	5,424	5,434	5,444	5,454
Growth: Single Family Homes or Equivalents	-	10	10	10	10
Future Water Sales Elasticity	-	(0.15)	(0.15)	(0.15)	(0.15)
Change in Annual Water Consumption		-7.5%	-2.0%	-1.2%	-1.1%
Water Development Impact Fee	\$2,900	\$2,960	\$3,020	\$3,080	\$3,140
Debt Svc per \$1M of Funding (15Yr, 4%)	-	\$92,000	\$92,000	\$92,000	\$92,000
Interest Earnings Rate	0.25%	0.25%	0.50%	1.0%	1.0%
State Water Project Cost Escalation	-	3.0%	5.0%	5.0%	5.0%
Operating Cost Escalation	-	4.0%	4.0%	4.0%	4.0%
Beginning Fund Reserves	\$2,580,000	\$1,644,000	\$1,836,000	\$1,873,000	\$2,082,000
REVENUES					
Fixed Service Charges	1,048,000	1,468,000	1,663,000	1,794,000	1,926,000
Water Consumption Charges	<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
EXPENSES					
Operating & Maintenance					
Water System Personnel	741,000	771,000	802,000	834,000	867,000
Supplies & Services	648,000	674,000	701,000	729,000	758,000
State Water Project Payments	1,473,000	1,517,000	1,593,000	1,673,000	1,757,000
Share of CCWA 2006 Bonds (Thru Oct-2021)	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
City Debt Service					
Projected Loan for City CIP Projects	0	161,000	322,000	322,000	322,000
SRF Loan for Recycled Water Phase 2	<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
Capital Improvements					
Water CIP Projects: Cash Funded	350,000	244,000	621,000	656,000	957,000
Water CIP Projects: Debt Financed	0	3,500,000	0	0	0
Recycled Water System Phase 2 Est.	<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
Revenues Less Expenses	(936,000)	192,000	37,000	209,000	98,000
Transfer for SRF Reserve Requirement	-	-	-	-	-
Ending Fund Reserves	1,644,000	1,836,000	1,873,000	2,082,000	2,180,000
Min Fund Rsrv Target (25% O&M + \$1M)	1,971,000	1,999,000	2,036,000	2,074,000	2,114,000
Debt Service Coverage on City Debt	-	3.71	3.04	3.69	4.28
Coverage on Contract Pymts (Min ≥1.25)	0.74	1.26	1.42	1.49	1.55

Table 7 Morro Bay - Water Cash Flow Projections					Years 6-10	
	Projected					Esc Factor
	2019/20	2020/21	2021/22	2022/23	2023/24	
Effective Date of Rate Adjustment	07/01/19	07/01/20	07/01/21	07/01/22	07/01/23	
Fixed Monthly Service Charge	\$32.00	\$34.00	\$36.00	\$37.00	\$38.00	
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%	-0.6%	-0.6%	-0.3%	-0.3%	
Water Service Connection Fee	\$3,200	\$3,260	\$3,330	\$3,400	\$3,470	2.0%
Debt Svc per \$1M of CIP Project Funding	\$92,000	\$92,000	\$92,000	\$92,000	\$92,000	
Interest Rate	1.0%	1.0%	1.0%	1.0%	1.0%	
State Water Project Cost Escalation	5.0%	5.0%	5.0%	5.0%	5.0%	
Operating Cost Escalation	4.0%	4.0%	4.0%	4.0%	4.0%	
Beginning Fund Reserves	\$2,180,000	\$2,273,000	\$3,114,000	\$2,813,000	\$2,928,000	
REVENUES						
Fixed Service Charges	2,058,000	2,191,000	2,324,000	2,393,000	2,462,000	
Water Consumption Charges	<u>4,011,000</u>	<u>4,235,000</u>	<u>4,458,000</u>	<u>4,569,000</u>	<u>4,680,000</u>	
Subtotal Water Rate Revenues	6,069,000	6,426,000	6,782,000	6,962,000	7,142,000	
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>34,000</u>	<u>31,000</u>	<u>32,000</u>	
Subtotal	6,194,000	6,554,000	6,919,000	7,098,000	7,281,000	
Debt Proceeds: City CIP Projects	0	0	0	0	0	
SRF Loan: Recycled Water, WRP Phase 2	0	12,500,000	12,500,000	0	0	
EXPENSES						
Operating & Maintenance						
Water System Personnel	902,000	938,000	976,000	1,015,000	1,056,000	
Supplies & Services	788,000	820,000	853,000	887,000	922,000	
State Water Project Payments	1,845,000	1,937,000	2,034,000	2,136,000	2,243,000	
Share of CCWA 2006 Bonds (Thru Oct-2021)	745,000	745,000	745,000	0	0	
General Fund Cost Allocation	340,000	354,000	368,000	383,000	398,000	
Recycled Water Operations	<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	
Debt Service						
Projected Loan for City CIP Projects	322,000	322,000	322,000	322,000	322,000	
SRF Loan for Recycled Water Phase 2	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,307,000</u>	<u>1,307,000</u>	
Subtotal	322,000	322,000	322,000	1,629,000	1,629,000	
Capital Improvements						
Water CIP Projects: Cash Funded	1,159,000	597,000	615,000	633,000	652,000	
Water CIP Projects: Debt Financed	0	0	0	0	0	
Recycled Water System Phase 2 Est.	<u>0</u>	<u>12,500,000</u>	<u>12,500,000</u>	<u>0</u>	<u>0</u>	
Subtotal	1,159,000	13,097,000	13,115,000	633,000	652,000	
Total Expenses	6,101,000	18,213,000	18,413,000	6,983,000	7,212,000	
Revenues Less Expenses	93,000	841,000	1,006,000	115,000	69,000	
Transfer for SRF Reserve Requirement	-	-	(1,307,000)	-	-	
Ending Fund Reserves	2,273,000	3,114,000	2,813,000	2,928,000	2,997,000	
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	5.47	6.03	1.46	1.44	
Debt Coverage on Contract Pymts (≥1.25)	1.61	1.66	1.70	2.11	2.05	

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

Fiscal Year	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24
Rate Increase Target Effective July 1	-	40%	13%	7.7%	7.1%	7%	6%	6%	3%	3%
Beginning Fund Reserves	\$2.6	\$1.6	\$1.8	\$1.9	\$2.1	\$2.2	\$2.3	\$3.1	\$2.8	\$2.9
REVENUES										
Water Rate Revenues	3.2	4.5	5.0	5.4	5.7	6.1	6.4	6.8	7.0	7.1
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	-	-	-	-	12.5	12.5	-	-
Total	3.3	8.1	5.1	5.5	5.8	6.2	19.1	19.4	7.1	7.3
EXPENSES										
Operating Expenses	3.9	4.0	4.1	4.3	4.5	4.6	4.8	5.0	4.7	4.9
Debt Service	0.0	0.2	0.3	0.3	0.3	0.3	0.3	0.3	1.6	1.6
Capital Expenditures	0.4	3.7	0.6	0.7	1.0	1.2	13.1	13.1	0.6	0.7
Total	4.2	7.9	5.1	5.3	5.7	6.1	18.2	18.4	7.0	7.2
Revenues Less Expenses	(0.9)	0.2	0.0	0.2	0.1	0.1	0.8	1.0	0.1	0.1
Transfer to SRF Rsrv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(1.3)	0.0	0.0
Ending Fund Reserves	1.6	1.8	1.9	2.1	2.2	2.3	3.1	2.8	2.9	3.0
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	5.47	6.03	1.46	1.44
CCWA Contract Coverage	0.74	1.26	1.42	1.49	1.55	1.61	1.66	1.70	2.11	2.05

City of Morro Bay 10-Year Water Revenue & Expense Projections



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

Table 8
 City of Morro Bay
 Estimated Water Use by Tier

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

Table 9
 City of Morro Bay
 Water Sales by Tier

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

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

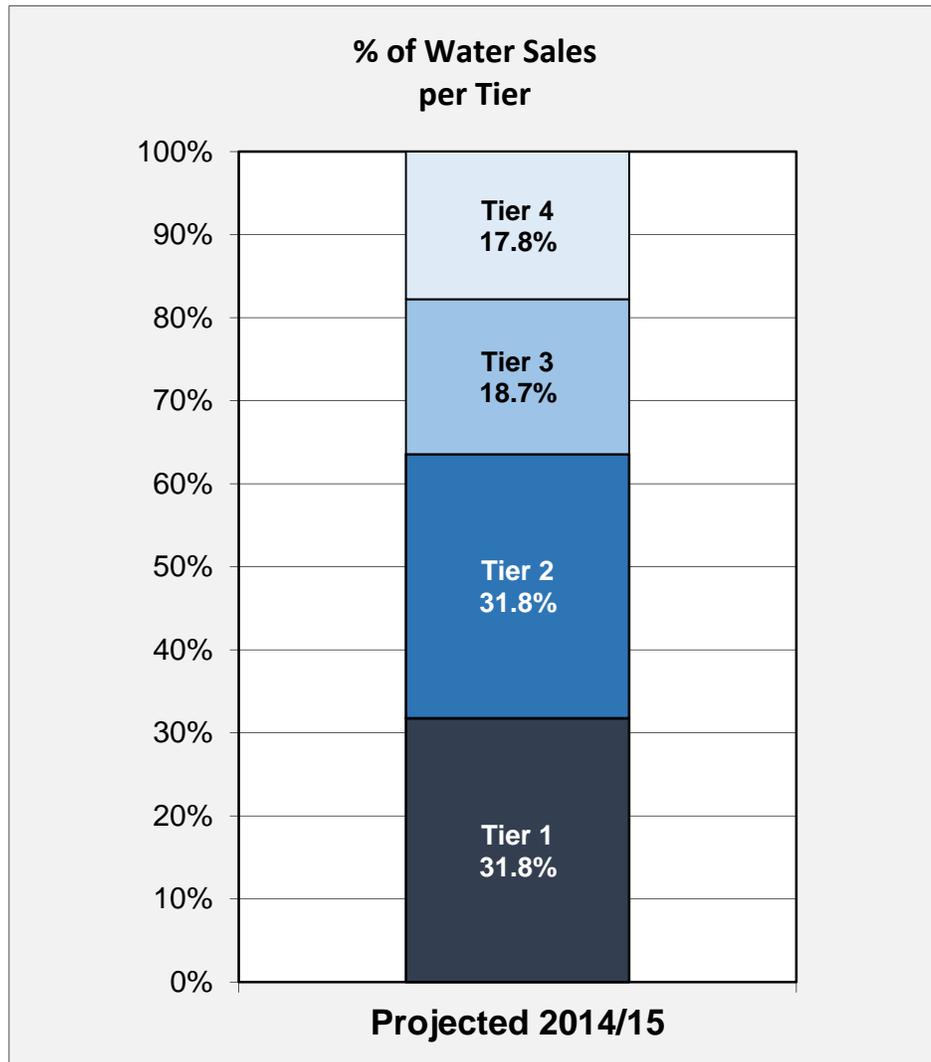


Table 10
City of Morro Bay
Projected Water Use by Tier

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

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

Table 11
 City of Morro Bay
 5-Year Capital Improvement Program Cost Allocation

	CIP Expenditures by Year (Current \$)							Cost Allocation %		Cost Allocation \$	
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	Total	All Use	Peak Use	All Use	Peak Use
UNESCALATED CAPITAL EXPENSES											
Vehicles											
2004 Chevrolet Silverado Pickup 05/20/04		35,000					35,000	100%	0%	35,000	0
2005 Chevrolet Silverado Pickup 05/21/04			35,000				35,000	100%	0%	35,000	0
Capital Improvements											
Nutmeg Tank construction		2,000,000					2,000,000	90%	10%	1,800,000	200,000
Chorro Valley Stream gauges		250,000					250,000	100%	0%	250,000	0
Desalination plant decanting facilities		500,000					500,000	0%	100%	0	500,000
Desalination plant capacity improvements		250,000					250,000	0%	100%	0	250,000
Desalination plant structural improvements		100,000					100,000	0%	100%	0	100,000
Various master plan improvements	350,000	350,000	350,000	350,000			1,750,000	75%	25%	1,312,500	437,500
Convert meter reading to AMR	150,000	200,000	250,000				600,000	75%	25%	450,000	150,000
Additional 750k gal storage tank at Kings				500,000			500,000	90%	10%	900,000	100,000
Placeholder for future CIP projects						500,000	500,000	70%	30%	350,000	150,000
Total Unescalated	350,000	3,635,000	585,000	600,000	850,000		7,020,000	73%	27%	5,132,500	1,887,500

Table 12
 City of Morro Bay
 Peak Demand vs. Average Monthly Use

Calendar Year	Peak Monthly Use (hcf) ¹	Avg Monthly Use (hcf)	Peak / Avg Ratio	Peak % Over Avg
2004	56,877	45,723	1.244	24.4%
2005	53,459	44,080	1.213	21.3%
2006	55,160	44,250	1.247	24.7%
2007	58,018	46,302	1.253	25.3%
2008	58,149	46,567	1.249	24.9%
2009	53,063	45,477	1.167	16.7%
2010	54,353	45,562	1.193	19.3%
2011	51,310	42,396	1.210	21.0%
2012	50,046	42,225	1.185	18.5%
2013	52,528	43,054	1.220	22.0%
10-Year Avg	54,296	44,564	1.218	21.8%
5-Year Avg	52,260	43,743	1.195	19.5%

¹ Based on average of 2 highest use months per year.

Table 14
City of Morro Bay
Water Rate Derivation

	Projected Water Rates (with 5-Year Phase-In)					
	07/01/15	07/01/16	07/01/17	07/01/18	07/01/19	
FIXED MONTHLY SERVICE CHARGES						
Fixed Monthly Service Charge	\$23.00	\$26.00	\$28.00	\$30.00	\$32.00	
Accounts Billed	<u>5,429</u>	<u>5,439</u>	<u>5,449</u>	<u>5,459</u>	<u>5,469</u>	
Total Fixed Charges	\$1,498,404	\$1,696,968	\$1,830,864	\$1,965,240	\$2,100,096	
Collection Rate	<u>98%</u>	<u>98%</u>	<u>98%</u>	<u>98%</u>	<u>98%</u>	
Estimated Revenues	\$1,468,436	\$1,663,029	\$1,794,247	\$1,925,935	\$2,058,094	
WATER QUANTITY CHARGES						
Projected Revenue Target	\$3,028,000	\$3,356,000	\$3,572,000	\$3,786,000	\$4,011,000	
Water Sales per Tier (hcf)						
Tier 1	0 - 3 hcf	152,700	150,907	149,862	148,899	148,303
Tier 2	4 - 10 hcf	148,147	145,248	143,572	142,034	141,087
Tier 3	11- 50 hcf	85,142	83,060	81,862	80,766	80,093
Tier 4	>50 hcf	<u>79,495</u>	<u>77,162</u>	<u>75,827</u>	<u>74,608</u>	<u>73,862</u>
Total (hcf)		465,484	456,377	451,123	446,307	443,345
Water Quantity Charges (\$/hcf)						
Tier 1	0 - 3 hcf	\$3.00	\$4.00	\$5.00	\$5.50	\$6.00
Tier 2	4 - 10 hcf	6.00	\$7.00	\$7.50	\$8.00	\$8.50
Tier 3	11- 50 hcf	9.00	\$9.50	\$10.00	\$10.50	\$11.00
Tier 4	>50 hcf	12.00	\$12.50	\$13.00	\$13.50	\$14.00
Revenues by Tier						
Tier 1	0 - 3 hcf	\$458,100	\$603,628	\$749,310	\$818,945	\$889,818
Tier 2	4 - 10 hcf	888,882	1,016,736	1,076,790	1,136,272	1,199,240
Tier 3	11- 50 hcf	766,278	789,070	818,620	848,043	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		3,067,200	3,373,959	3,630,471	3,810,468	4,004,149
Difference \$ (Rev Est - Target)		39,200	17,959	58,471	24,468	(6,852)
Difference % of Target		1.3%	0.5%	1.6%	0.6%	-0.2%

Table 15
 City of Morro Bay
 Projected Water Rates

		Current	Projected Water Rates				
			07/01/15	07/01/16	07/01/17	07/01/18	07/01/19
Fixed Monthly Service Charge		\$16.43	\$23.00	\$26.00	\$28.00	\$30.00	\$32.00
Water Quantity Charges (\$/hcf)							
Tier 1	0 - 3 hcf	\$0.00	\$3.00	\$4.00	\$5.00	\$5.50	\$6.00
Tier 2	4 - 10 hcf	5.56 - 5.74	6.00	7.00	7.50	8.00	8.50
Tier 3	11- 50 hcf	5.77 - 7.81	9.00	9.50	10.00	10.50	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

Water Quantity Charges (\$ per 100 gallons)

For informational purposes only

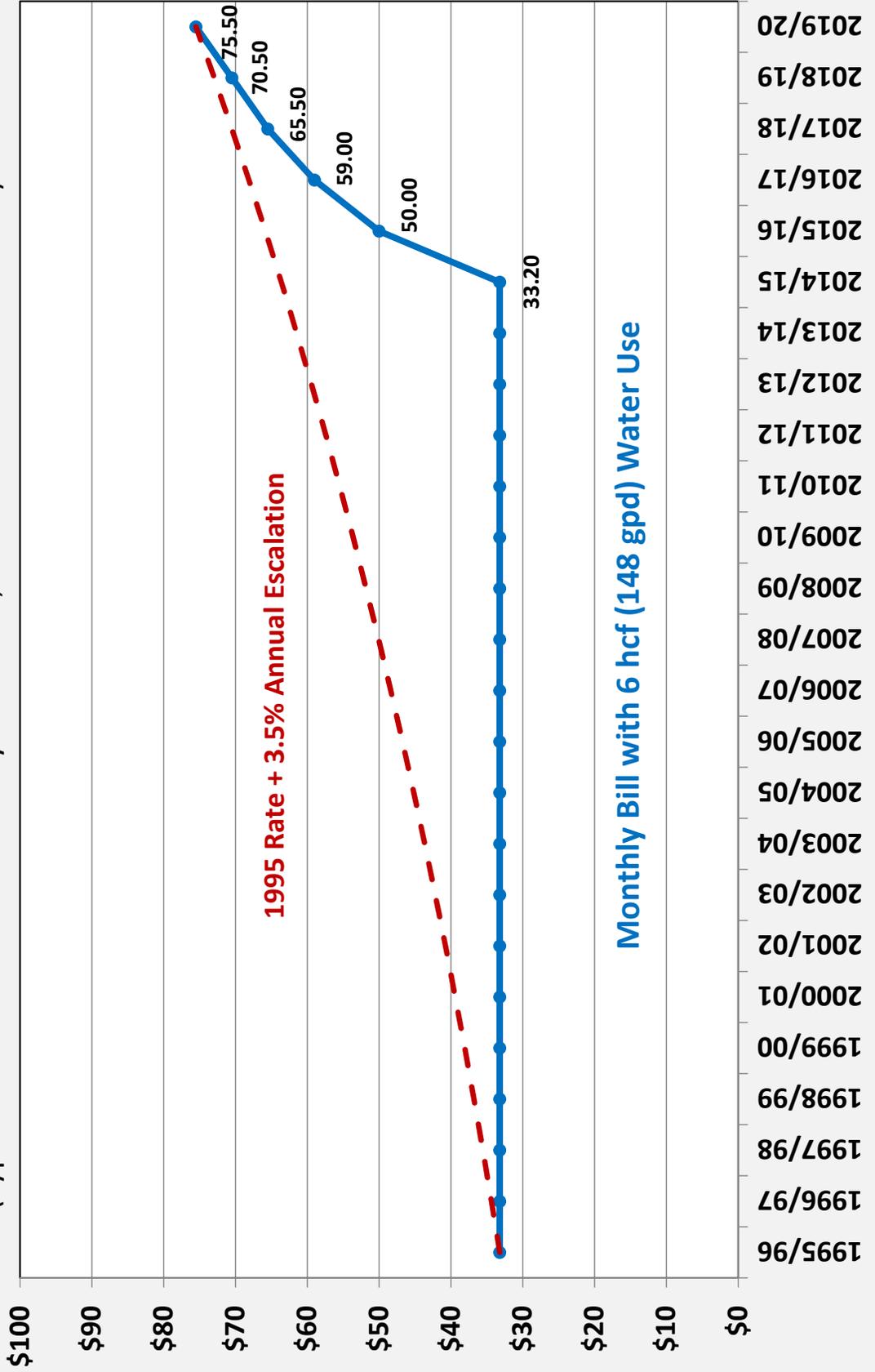
Tier 1	0 - 3 hcf	\$0.00	\$0.40	\$0.53	\$0.67	\$0.74	\$0.80
Tier 2	4 - 10 hcf	0.74 - 0.77	0.80	0.94	1.00	1.07	1.14
Tier 3	11- 50 hcf	0.77 - 1.04	1.20	1.27	1.34	1.40	1.47
Tier 4	>50 hcf	1.05 - 1.83	1.60	1.67	1.74	1.80	1.87

Table 16
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	26.00	30.00	33.00	35.50	38.00	21.57	0.71
2	16.43	29.00	34.00	38.00	41.00	44.00	27.57	0.91
3	16.43	32.00	38.00	43.00	46.50	50.00	33.57	1.10
4	21.99	38.00	45.00	50.50	54.50	58.50	36.51	1.20
5	27.58	44.00	52.00	58.00	62.50	67.00	39.42	1.30
6	33.20	50.00	59.00	65.50	70.50	75.50	42.30	1.39
7	38.85	56.00	66.00	73.00	78.50	84.00	45.15	1.48
8	44.53	62.00	73.00	80.50	86.50	92.50	47.97	1.58
9	50.24	68.00	80.00	88.00	94.50	101.00	50.76	1.67
10	55.98	74.00	87.00	95.50	102.50	109.50	53.52	1.76
11	61.75	83.00	96.50	105.50	113.00	120.50	58.75	1.93
12	67.55	92.00	106.00	115.50	123.50	131.50	63.95	2.10
13	73.38	101.00	115.50	125.50	134.00	142.50	69.12	2.27
14	79.24	110.00	125.00	135.50	144.50	153.50	74.26	2.44
15	85.13	119.00	134.50	145.50	155.00	164.50	79.37	2.61
16	91.06	128.00	144.00	155.50	165.50	175.50	84.45	2.78
17	97.01	137.00	153.50	165.50	176.00	186.50	89.50	2.94
18	102.99	146.00	163.00	175.50	186.50	197.50	94.52	3.11
19	109.00	155.00	172.50	185.50	197.00	208.50	99.51	3.27
20	115.04	164.00	182.00	195.50	207.50	219.50	104.47	3.43
21	121.17	173.00	191.50	205.50	218.00	230.50	109.34	3.59
22	127.39	182.00	201.00	215.50	228.50	241.50	114.12	3.75
23	133.70	191.00	210.50	225.50	239.00	252.50	118.81	3.91
24	140.07	200.00	220.00	235.50	249.50	263.50	123.44	4.06
25	146.54	209.00	229.50	245.50	260.00	274.50	127.97	4.21
26	153.09	218.00	239.00	255.50	270.50	285.50	132.42	4.35
27	159.70	227.00	248.50	265.50	281.00	296.50	136.81	4.50
28	166.37	236.00	258.00	275.50	291.50	307.50	141.14	4.64
29	173.10	245.00	267.50	285.50	302.00	318.50	145.41	4.78
30	179.93	254.00	277.00	295.50	312.50	329.50	149.58	4.92
31	186.81	263.00	286.50	305.50	323.00	340.50	153.70	5.05
32	193.75	272.00	296.00	315.50	333.50	351.50	157.76	5.19
33	200.75	281.00	305.50	325.50	344.00	362.50	161.76	5.32
34	207.82	290.00	315.00	335.50	354.50	373.50	165.69	5.45
35	214.94	299.00	324.50	345.50	365.00	384.50	169.57	5.57
36	222.09	308.00	334.00	355.50	375.50	395.50	173.42	5.70
37	229.31	317.00	343.50	365.50	386.00	406.50	177.20	5.83
38	236.58	326.00	353.00	375.50	396.50	417.50	180.93	5.95
39	243.88	335.00	362.50	385.50	407.00	428.50	184.63	6.07
40	251.24	344.00	372.00	395.50	417.50	439.50	188.27	6.19
50	327.37	434.00	467.00	495.50	522.50	549.50	222.14	7.30
75	533.21	734.00	779.50	820.50	860.00	899.50	366.29	12.04
100	755.68	1,034.00	1,092.00	1,145.50	1,197.50	1,249.50	493.82	16.24
200	1,747.86	2,234.00	2,342.00	2,445.50	2,547.50	2,649.50	901.64	29.64

City of Morro Bay Historical & Projected Monthly Water Bills

(Typical home with 6 hcf monthly water use; assumes no decrease in use)



Sewer Financial Plan & Rate Study

Tables & Charts

Table 1
City of Morro Bay
Historical Monthly Sewer Rates

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

City of Morro Bay Historical Monthly Residential Sewer Bills

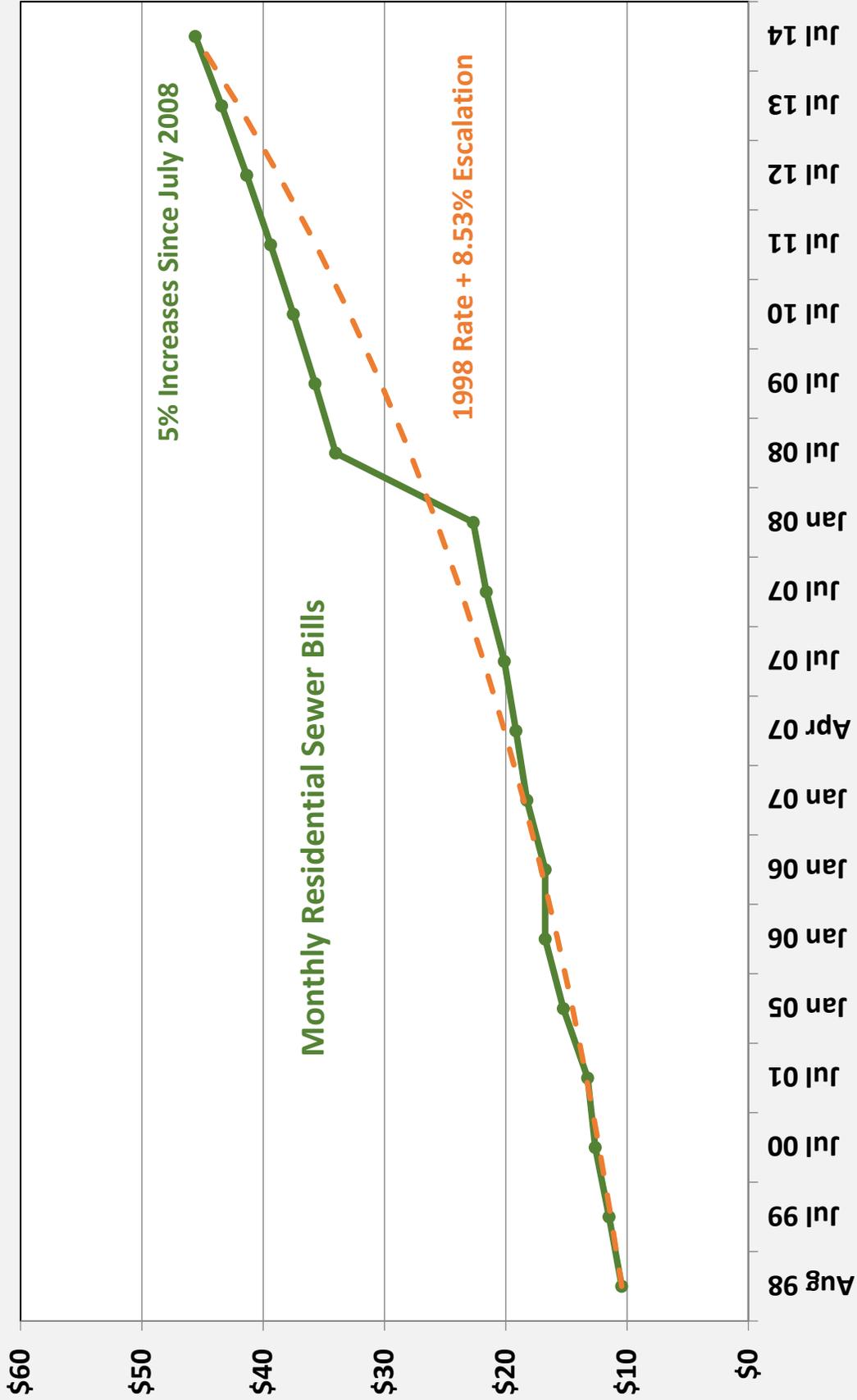


Table 2
City of Morro Bay
Historical Sewer Utility Finances & Budget

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

Table 3
City of Morro Bay
Sewer Capital Improvement Program

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

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

Estimated Cost Share

Morro Bay	75%	750,000	2,250,000	4,500,000	30,000,000	18,525,000	56,025,000
Cayucos	25%	250,000	750,000	1,500,000	10,000,000	6,175,000	18,675,000

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

Table 5
 City of Morro Bay
 SRF Loan Debt Service Estimates

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

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

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

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

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

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

Table 6
 City of Morro Bay
 Bond Debt Service Estimates

For Comparison with SRF

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

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

Table 7 Morro Bay - Sewer Cash Flow Projections

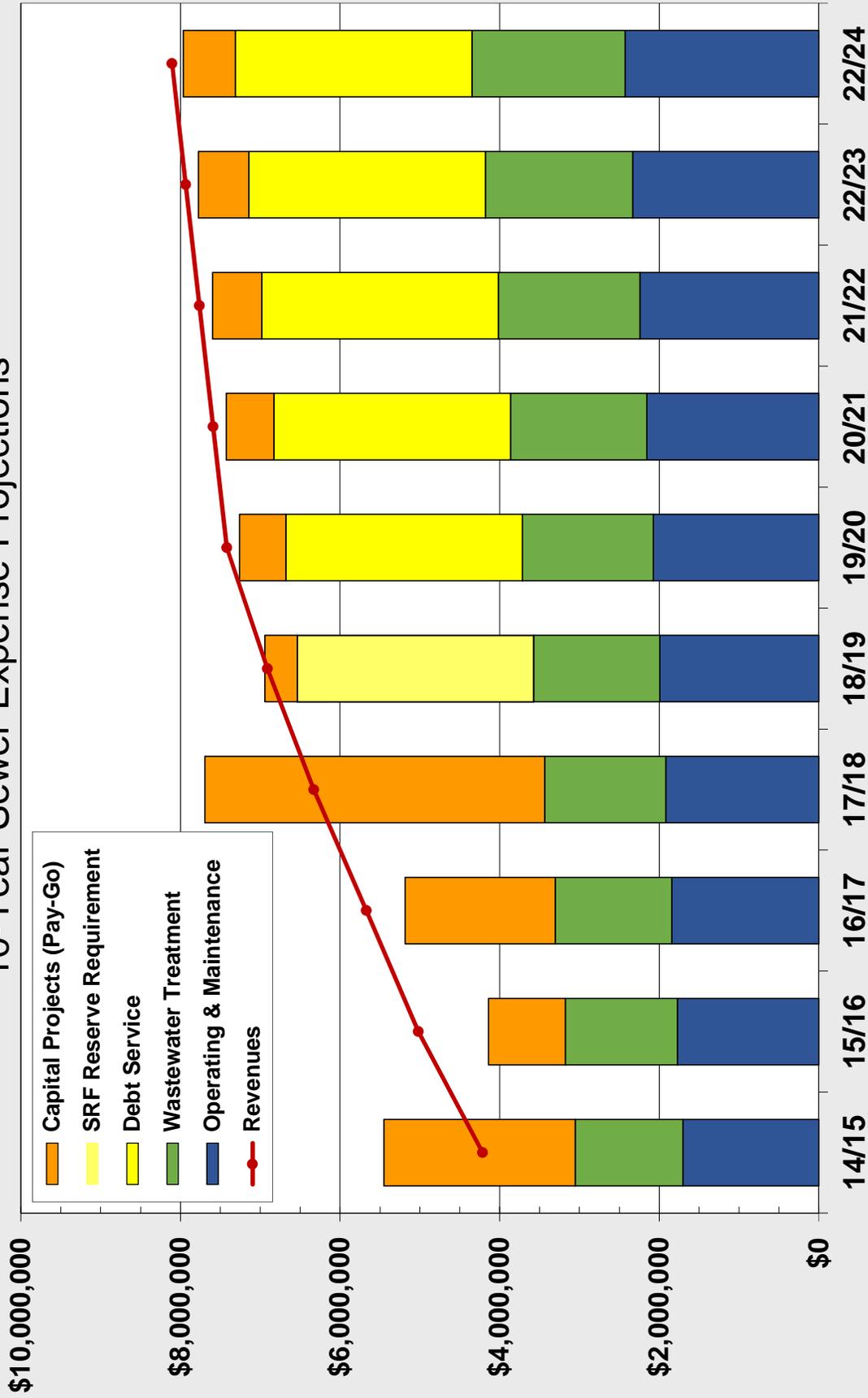
Years 6-10

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

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

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

City of Morro Bay 10-Year Sewer Expense Projections



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

Table 8
City of Morro Bay
Cost Recovery Allocation

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

Table 10
City of Morro Bay
Wastewater Loadings for Cost Recovery

	Accounts	Dwelling Units	Estimated Wastewater Flow			Strength (mg/l)		Loadings (lbs)	
			hcf	mg	gpd	BOD	SS	BOD	SS
RESIDENTIAL									
Single Family	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
NON-RESIDENTIAL									
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
TOTAL	5,346		434,541	325.06	890,570	216	216	585,428	585,428

Table 11
 City of Morro Bay
 Wastewater Loadings for Cost Recovery

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

Table 12
 City of Morro Bay
 Sewer Rate Calculations

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

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

Appendix C

Additional Utility Billing & Usage Analysis

Table C-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

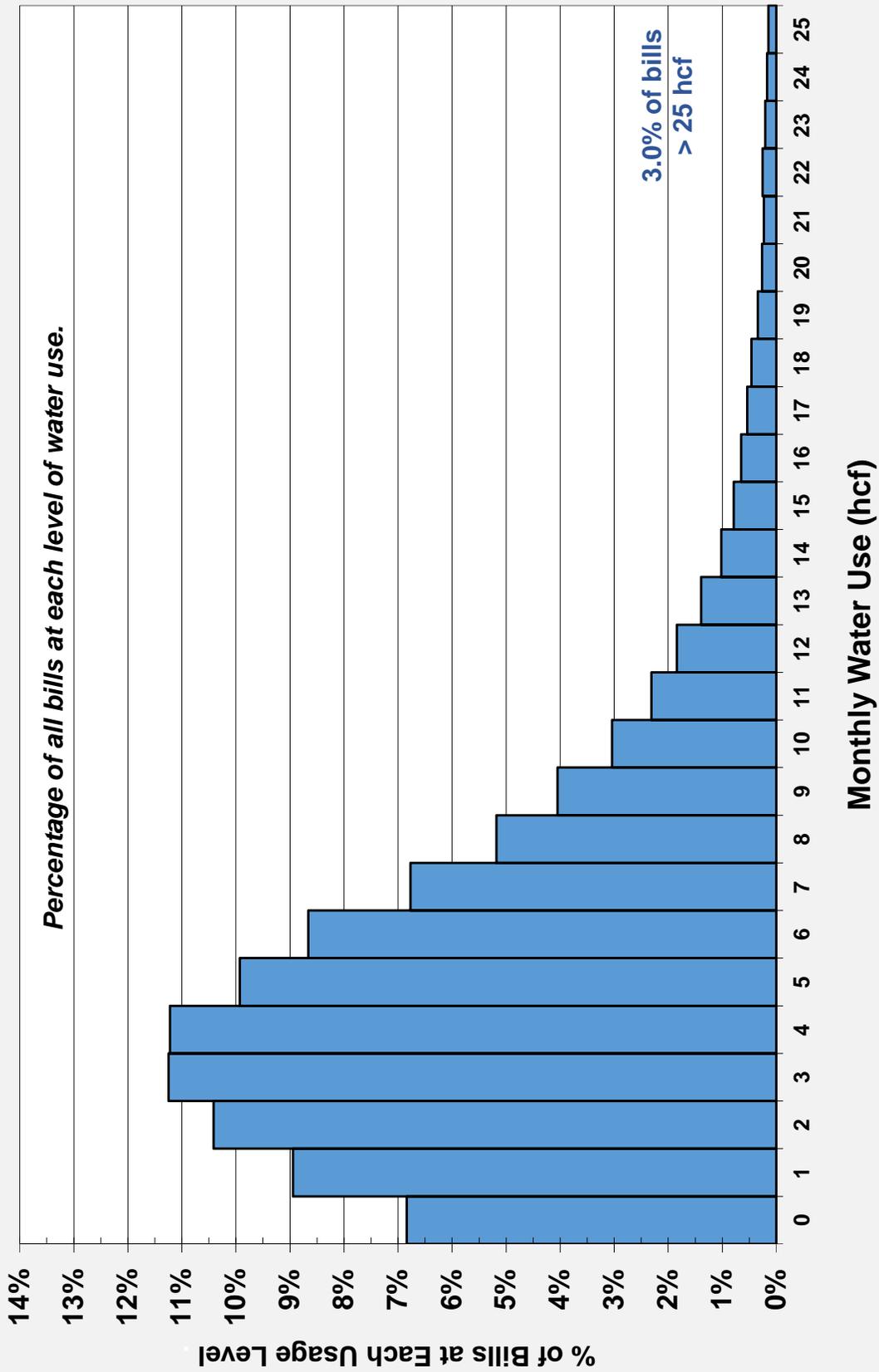


Table C-2
City of Morro Bay
Consumption Block Analysis FY2014
All Consumption

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

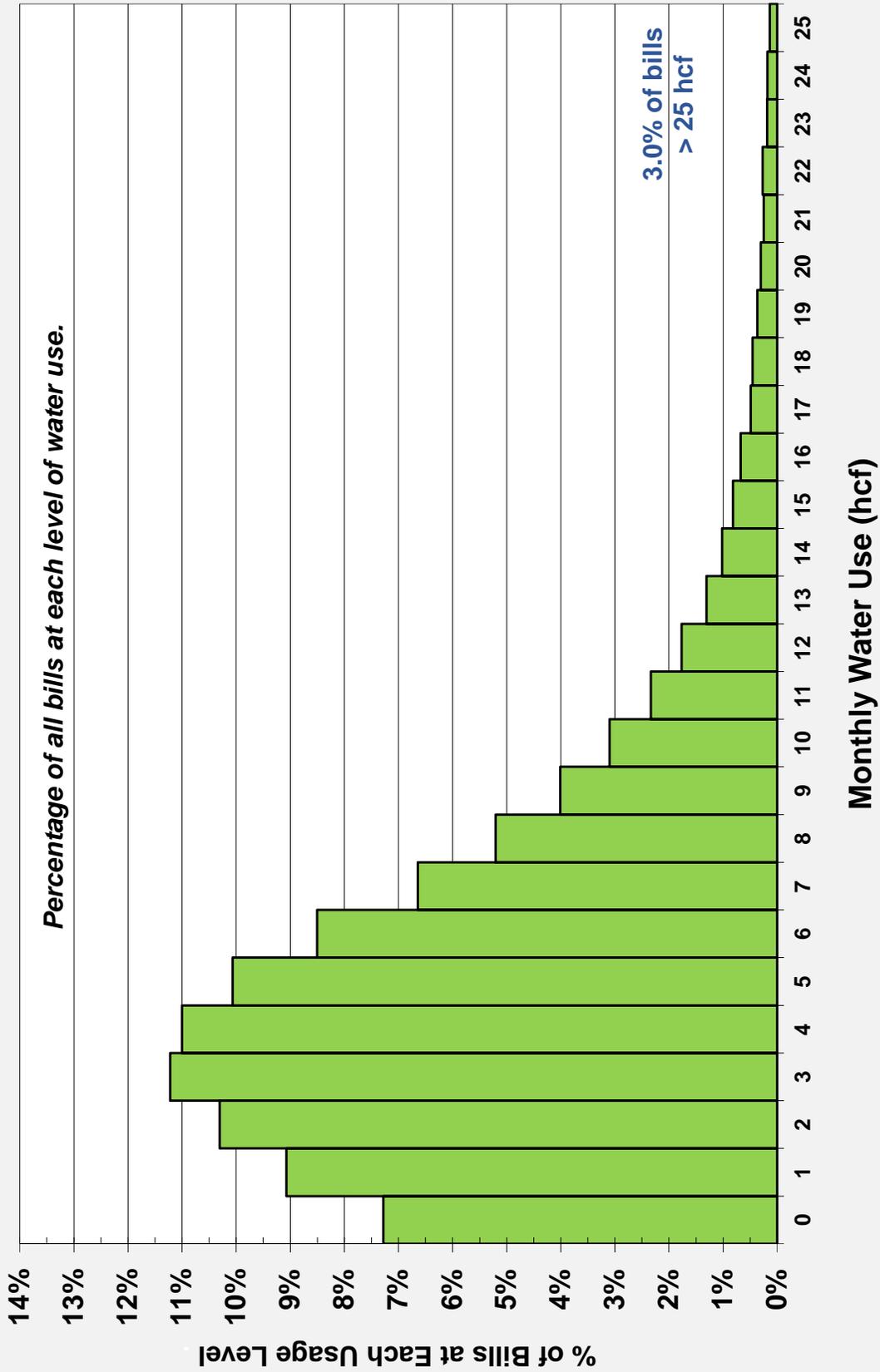


Table C-3
City of Morro Bay
Consumption Block Analysis FY2014
Residential Bills Only (Single Family & Condos)

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

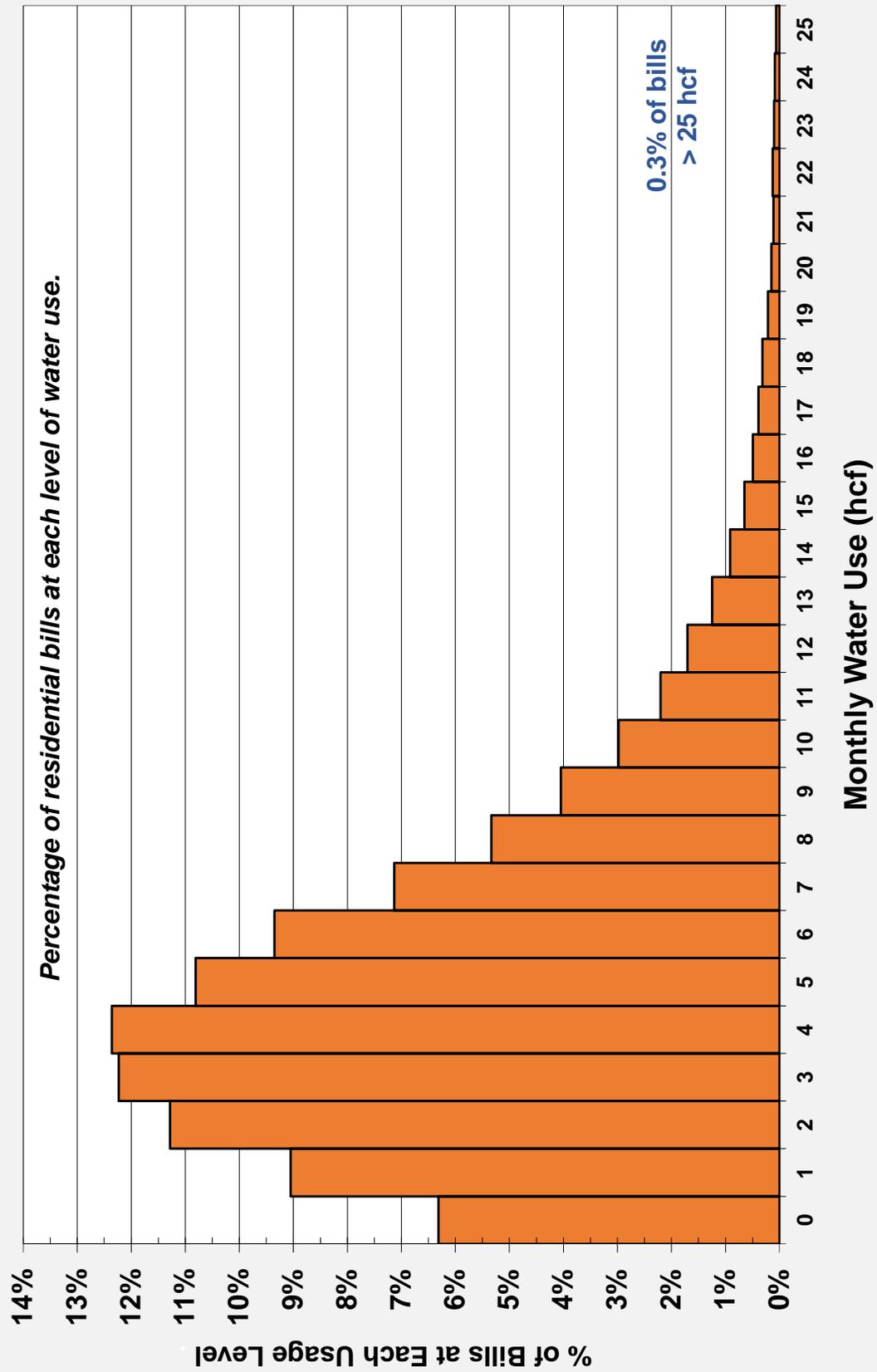


Table C-4
City of Morro Bay
Consumption Block Analysis FY2013
Residential Bills Only (Single Family & Condos)

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

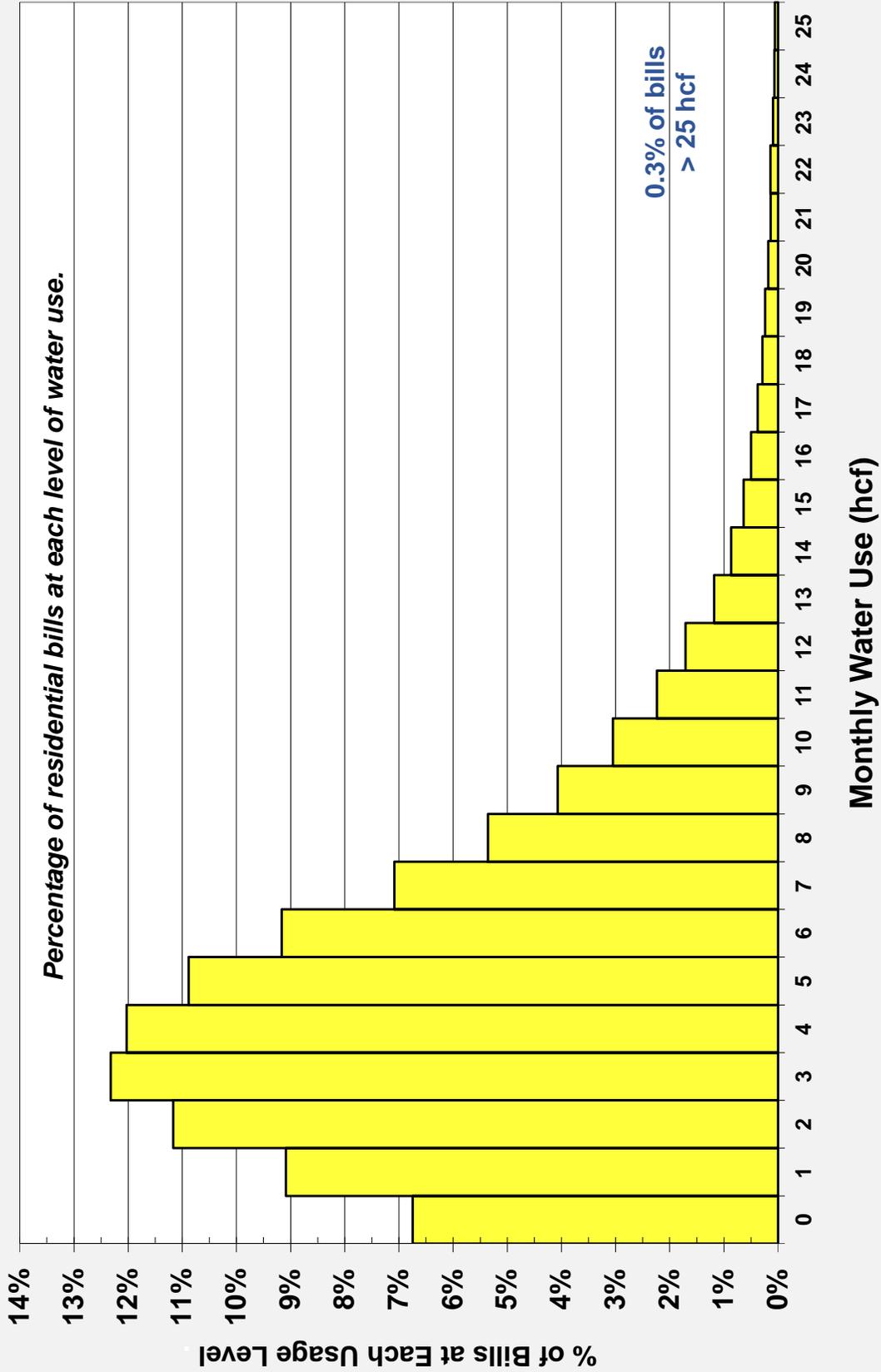


Table C-5
City of Morro Bay
Historical Accounts

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

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

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

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
RESIDENTIAL																					
Average Monthly Use per Account (hcf)																					
Single Family Residential	5.6	5.7	6.0	5.5	5.6	5.7	5.7	5.9	5.9	5.8	5.5	5.5	5.7	5.7	5.4	5.1	5.3	5.4	5.4	5.4	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	5.9	5.2
Subtotal	6.1	6.0	6.4	5.9	6.0	5.9	6.0	6.1	6.1	6.0	5.7	5.8	5.9	5.9	5.6	5.3	5.5	5.6	5.6	5.6	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	5.5

Jan-Aug only

NON-RESIDENTIAL ACCOUNTS

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
Average Monthly Use per Account (hcf)																						
Yard Meter	13.0	11.1	14.9	14.3	16.0	17.4	17.3	17.7	16.5	14.2	13.8	14.2	15.0	13.0	12.5	10.6	11.3	12.9	15.1	12.5	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	27.5	27.3	27.3
TOTAL	8.9	8.7	9.3	8.3	8.6	8.6	8.8	8.8	8.7	8.5	8.2	8.1	8.4	8.4	8.5	8.5	7.9	7.8	7.9	7.9	7.9	

Table C-8
City of Morro Bay
Water Revenues

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

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

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

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

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

Table C-11
City of Morro Bay
Sewer Revenues

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

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

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

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

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

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