

**Report of the Piedmont Municipal Tax Review Committee
September 1, 2011**

Committee Members:

**David Brown
Ryan Gilbert
Tamra Hege
Steven Hollis
William Hosler
Eric Lindquist
Robert McBain
Steven Weiner
Michael Rancer, Chair**

Report Sections & Subcommittee Members

Executive Summary	Page 3
Supplementary Minority Statement	9
Revenues (Hosler & Hege)	16
Operating Expenditures (Weiner, Lindquist & Rancer)	21
Capital Assets & Planning (Brown & Hollis)	33
Municipal Sewer Tax (McBain & Gilbert)	41

Executive Summary Piedmont Municipal Tax Review Committee Report

Overview and Essential Recommendations

Since passage of the City's current parcel tax nearly four years ago, the condition of Piedmont's municipal finances has substantially deteriorated. Although the financial crash of 2007-09 created a difficult external environment (nationally, within California, and locally) that virtually wiped out growth in City revenues in recent years, the larger part of the problem is rooted in spending commitments (and the difficulty in predicting and controlling these commitments) that Piedmont has taken on with neither multi-year planning nor reference to future impacts. In recent years these commitments have exceeded available funding, resulting in a serious decline in fund balances. However, the greater challenge to the City is in the near future when projected expenditures threaten to so much exceed revenues that essential City priorities will be at risk.

Parcel tax revenue has become an essential component of the City's fiscal picture, totaling about \$1.5 million annually in a general fund expenditure plan of about \$21.5 million. Therefore, it will be essential to renew the parcel tax at its current level before it expires on June 30, 2013. Nonetheless, this committee, while recognizing the importance of a four-year extension of the parcel tax at the current level, has determined that current City expenditure trends are not sustainable. So the City must immediately take action to control and reduce future spending commitments while it still has the ability to do so, without adversely affecting basic priority programs such as police and fire protection, and maintenance of streets, sewer services, and other critical infrastructure investment.

It is also important to emphasize that the committee is unanimous in its conclusion that, in the current economy and with specific Piedmont fiscal conditions in mind, there is no justification for any increase in the parcel tax to make up for projected budget shortfalls in the coming years.

With these circumstances in mind, the committee therefore strongly urges the Council to defer a vote on the municipal parcel tax to the June 2012 election, giving the City extra time to address the essential budget reform issues identified in this report. Concurrently, the committee recommends the City review "best practices" and work methods in all departments to explore ways to reduce costs without sacrificing service, or to do more work at the same cost.

In summary, the committee has identified and reported (below) a set of long-term budget problems that need to be resolved even if the parcel tax is renewed. Failure to address these problems will leave the City in a precarious fiscal situation.

The Fund Balance Problem

In relying on fund balances to meet current expenditure commitments, and agreeing to undertake new commitments without an assessment of future costs, the City is on a path that is clearly not sustainable:

- Expenditures and transfers out have exceeded revenues and transfers in to the general fund (the City's main operating fund) 4 of the last 5 years.
- The primary margin between revenues and operating expenditures, which was nearly \$3 million in FY 2006, has barely been in balance in the years since.
- As a result of these trends, the general fund balance has dropped by more than 50% since FY 2006 and is now at an imprudent level (below the 15% figure that is considered adequate) versus annual expenditures.

- Additionally, other second tier funds are also at dangerously low levels given the capital and equipment needs of essential services expected over the next several years. The aggregate balances of the City's approximately 20 other funds have dropped by nearly half since 2007.
- A significant contributing factor to the problem was the need for the City to cover the overruns on the Piedmont Hills utility under-grounding project at a cost of over \$2 million, about \$500,000 of which came directly from the balance in the general fund.

The Revenue Problem

Lacking the commercial and/or industrial base of other cities with more diversified local economies, Piedmont essentially relies on a single source for most of its revenues: taxes on residential property. Approximately two-thirds of the revenue to support City operations comes from property-based taxes: real property taxes, property transfer taxes and the parcel tax. Unfortunately, real property tax revenue has grown by little more than 1% annually for the past three years. Property transfer tax revenue actually declined by almost 50% between FY 2006 and FY 2009, and, while recovering in the last two years, it is still about 25% below the peak. Parcel tax revenue has essentially been at its maximum for the past four years, with a nearly flat growth line due to very low inflation in the economy. Total City revenues over the last three years have grown by less than 2% per year on average.

The Expenditure Problem

If two-thirds of the City's revenues come from the single undiversified source of residential property, the problem is exacerbated by the fact that three-quarters of its expenditures are devoted to salaries and benefits for City employees. This assessment should not in any way be interpreted as criticism of Piedmont's public service professionals who do an outstanding job in meeting the high standards set by our citizens. However, due to decisions made by the City within the past 10 years, compensation costs have increased faster than the primary property-based revenues discussed above (and faster than any reasonable measure of City activity). Since FY 2006, the general fund salary budget has grown by over \$2 million or by about 4% per year (about 26% in total). During that same period, the benefits budget has grown by about \$1.8 million or over 7.5% per year (about 55% in total). Benefits that equaled about 19% of general fund expenditures in FY 2006 now consume about 24% of the City's main operating budget.

The primary cause of this growth in benefit costs was the City's decision in the first years of this century to opt for the highest employee pension levels offered by the state's system (CalPERS). This decision, combined with the increasing cost of health care benefits for employees and retirees, has approximately doubled the ratio of benefits to salaries in the City's compensation budget. It is important to note that, the City having chosen a high level of retirement benefits, the annual rate of contribution is no longer under City control. Rates are set by CalPERS, based on their actuarial studies and their investment returns. In the current year, for example, the City's CalPERS contribution rates are about 8.5% above last year's levies. This is because the CalPERS options are all defined benefit plans, which are lifetime guarantees to current employees, retirees and their survivors. These plans are distinct from the defined contribution plans (e.g., 401k) more common in the private sector, where employers can set their rates based on available resources and limit their exposure to future uncontrollable costs.

To put comparative numbers to these two concepts, the CalPERS rate for Piedmont's public safety employees is an amount that is more than 40% of salary, and for other employees it is over 20% of salary. In a defined contribution plan, the employer rate would almost certainly be

less than 5% of salary (not including Social Security). (It is important to note that Piedmont City employees have long had access to a similar tax-deferred savings option, known as a 457 plan, though with no City contribution to it; funds in this plan come exclusively from employee pre-tax contributions.) Non-public safety employees also participate in Social Security. The committee concludes the City must take decisive steps to end its unsustainable approach to employee benefits, as discussed in more detail later in the report.

Unmet Needs

In addition to the reality of sluggish revenue growth and accelerating expenditures, the City faces unbudgeted needs in the coming years for the replacement of critical equipment, the maintenance of facilities, and other essential capital expenditures for which it has set aside very little money. Some of the assets in question are in public use, such as recreation installations; others are needed for emergency response by police and fire; while still others are aging buildings used for administrative purposes (e.g., City Hall) that will eventually need repairs such as roof replacement or other infrastructure updating. Consultation with City staff indicates that the long-term need for capital expenditures is about \$1.3 million per year.

Where Is the Budget Headed From Here?

The Municipal Tax Review Committee (MTRC) has attempted to develop a workable projection of City revenues and expenditures over the coming years of the current decade. It is important to note that this is not a prediction or a forecast, but, instead, is a set of reasonable assumptions about the growth of revenues and expenditures based both on the very difficult economy of the past five years and on the longer term trends that seem to underlie certain categories of revenue and expenditure. Our projection is basically an outline of a multi-year financial plan, which is something the City has not routinely used to help guide its budgeting. Details of the projection are summarized in the report chapters on revenues and expenditures. Our conclusions are as follows:

- Based on our projections, which include renewed revenue growth but also more sustainable funding for capital and equipment replacement items, it is unlikely the City will be able to meet its current commitments and maintain essential services, even with an extension of the parcel tax and considering that we have already assumed significantly lower salary and benefit growth rates than have been historically seen over the last 10 to 20 years.
- Based on the revenue assumptions (which include parcel tax renewal at the current level, to be levied at its full amount every year) and the need to replenish reserve funds, we estimate that the City is facing a shortfall of about \$6 million over the life of the next parcel tax.
- Piedmont has a long history of providing exceptional “priority services” for its citizens, such as prompt and responsive public safety, well-maintained streets, sewer systems, parks and City spaces; all with prudent financial management and access to government officials. However, it has also taken on commitments and risks that it cannot sustain over the longer term. Beyond the issue of employee benefits, there are several that stand out:
 - It has committed \$380,000 to provide a 50% subsidy to year-round pool operation.
 - There are no procedures in place to prevent a repeat of the Piedmont Hills under-grounding overrun, not only on other under-grounding projects, but on other large capital projects as well.
 - Of particular current concern for the future because operating costs are as yet unknown is the proposed sports facility at Blair Park, which has both large capital costs as well as substantial but as yet undetermined operating and maintenance costs. This committee offers no conclusion whatsoever about the wisdom or value of Blair Park project. We limit our comments to an assessment that the City does not

- and will not have the resources to subsidize the construction, operation, maintenance, or future capital renovations of such a facility without cutting the budget elsewhere.
- Looming on the horizon but not addressed in this report are other potential commitments of unknown magnitude including a possible increase in the payment of the library fee to Oakland and the possible development of a community arts center at 801 Magnolia. These and other proposed obligations can only worsen the City's fiscal condition.
- Given the above, the committee agreed unanimously to the following conclusion:
 - The current and long-term financial problem facing the City is not a revenue problem but is instead primarily an expenditure problem. There is agreement that a continuation of the parcel tax is necessary and supportable assuming the City takes certain actions to control long-term costs.** Specific recommendations on expenditure controls are laid out below in two groupings.

Recommendations for Improved Financial Controls and Decision Making

- To better improve fiscal controls and discipline going forward, and to help the current and future City Councils make better financial decisions in good and bad times, we recommend instituting a five-year annual planning process, created by City staff, that will enable City Councils to see a clearer picture of the fiscal impacts of their decisions.
- The City should establish a new Municipal Financing Planning Committee ("MFPC") made up of volunteer citizens (serving staggered terms) to annually review the five-year plan and provide guidance to the Council. The MFPC charter would focus on providing for the long-term sustainable financial future of the City. This new committee would not replace the quadrennial parcel tax committee, but would meet only a limited number of times each year to review the 5-year plan and provide a "check" of the plan for the Council, as well as to provide a financial review of any new program commitments in excess of \$250,000 annually.
- Economic cyclicalities are a certainty and steps should be taken to characterize revenues received over specified levels and long-term growth rates as "temporary" with such amounts listed as such in budget documents and Council presentations and ideally specifically set aside in reserves. We believe City staff already tries to operate this way, but a more specific presentation would highlight the amounts as non-sustainable for future City Councils and identify the risks of committing these revenues for long-term commitments.
 - Transfer Tax – Starting from a base of \$2.5 million per year, any annual growth above 2% should be considered temporary revenue
 - Property tax revenues growing over the FY 2010-11 base year at more than 4% should be considered temporary revenue
 - These levels should be periodically reviewed by future Municipal Tax Review Committees
- The committee recommends that the City undertake a prioritizing of City services and modify the detailed budget presentation designating certain services (costs, etc) as "mission-critical" and other services as not in that category in order to assist future Councils to create a priority of funding
- The City should adopt formal objectives for the appropriate fund balance levels of funds related to capital and equipment replacement and use these levels as guidelines in allocating revenues.

In the wake of failure to properly control the costs of the Piedmont Hills under-grounding project, the City must establish procedures for executing large capital undertakings (costing over \$250,000) to the highest standards of professional project management, covering all phases including design, specification, contracting, construction and inspection, consistent with recommendations by the League of Women Voters in their review of the Piedmont Hills over-run and by the members of the Council's Audit Subcommittee.

Specific Expense Reduction Recommendations

- The committee has discussed several areas where expenses can be reduced from current trend lines:
 - Employee costs – specifically benefits
 - Net cost of non-essential services
 - Possible staffing changes, where it is possible to make directly relevant comparisons to a similar but lower-cost city (e.g., Albany, with whom Piedmont shares a Fire Chief).
- As noted above, employee benefits have substantially outgrown revenues and any reasonable measure of service, as well as other categories of expenditure over the past decade, and although the City employees provide excellent service, the benefit costs are not sustainable into the future. The committee recommends significant immediate action with regard to employee pension and other benefits to freeze these costs and to ultimately make changes that reduce the costs as a percent of salaries. Although the committee was not able to study the costs and implications of various potential benefit plans in depth, the committee recommends the City undertake a thorough review of long term projected pension and other benefit costs given likely conservative investment returns, medical cost growth rates, actuarial studies based on likely hiring, etc., and implement one or more of the following with the goal of capping employee benefit costs at the current level of \$5.18 million per year:
 - Institute a two-tier benefit system that at a minimum would apply lesser (and less expensive) CalPERS pension options to new employees. Since the City already offers a deferred compensation program (similar to a 401k), employees will still have the option of supplementing their pension plans with a tax-deferred private savings vehicle.
 - Negotiate to reduce current retirement benefit costs/growth rates by increasing employee contribution levels and strengthening the current partial cap on the City's contribution so that the City's benefits budget allocation remains constant going into the future.
 - Implement staffing and organizational changes that would maintain current services but at lesser costs. Although the committee does not recommend cuts in services, it does understand that making the changes proposed could result in service disruptions/hiring difficulties during any adjustment period. The goal is to reduce overall compensation cost growth rates and reduce the uncontrollable components of those costs – salary and defined contribution costs are controllable, defined benefit costs are not.
- In addition to employee benefit commitments, the City is currently evaluating or has recently undertaken several new programs including as noted above: operation and subsidy of the swimming pool, a possible major new sports complex at Blair Park, and continuing/expanding the library commitment, as well as other services/projects. Although the committee recognizes the multi-dimensional nature of the discussions around these programs, the committee feels it is very important for the City to understand the differences between these services and essential City functions from a fiscal perspective. Further, the City should take steps to make sure the costs of any new commitments are fully understood and paid for out of user fee revenues and not general fund revenues/parcel tax. Specifically,
 - General fund subsidies for the pool should be reduced to zero both in terms of actual costs and potential liabilities, or offsetting cuts made elsewhere in the budget if a pool subsidy is to be continued.
 - Blair Park should be structured so as to have zero impact on the future budget in terms of actual construction, long-term operation, capital maintenance and replacement; before committing to build the Blair Park facility, the City must secure a

- professional estimate of construction and maintenance costs, and commit to a user fee schedule that will recover all operating costs.
- In the event there is evidence of a strong community interest in subsidizing these sorts of user-specific programs, the City should consider seeking a public vote for individual parcel taxes to support them, recognizing that the two-thirds vote required for passage would be the ultimate measure of public support

Parcel Tax Recommendation

Although the committee in concept supports renewal of the parcel tax to be levied in its full amount and structure, the committee had much discussion concerning whether or not conditions should be placed on its recommendation. Fundamentally, the City's projected revenues and current expense commitments don't align and the committee recognizes that passing the current parcel tax without addressing expense commitments is not fiscally prudent. Further, the committee understands that certain expense reductions recommended above will take time and negotiations to implement – more time than is provided by the committee's current schedule for submitting its report. The committee has grave concerns that without implementing the above steps, not only will the parcel tax not cover planned expenditures, but also that renewal itself is at risk if the public lacks confidence in the City's fiscal management. The committee therefore suggests that the Council may want to defer the parcel tax vote from the current planned February date and instead put it on the ballot at a later time, preferably **June** 2012 (but November if necessary), to coincide with state elections. The City can use that extra time to accomplish the key spending constraints proposed in this report. This delayed election would apply only to the general parcel tax, not to the sewer tax proposal discussed immediately below.

Sewer Tax Recommendation

As described in separate chapter in this report, Piedmont (as a constituent in East Bay MUD) is under mandate from the federal Environmental Protection Agency to make substantial additional investments to maintain and improve the town's sewer system, and to monitor system quality to a higher level in future years. The City's sewer rehabilitation and replacement have been successful so far and are about halfway completed. Thus there is light at the end of the tunnel once the EPA mandate has been met. Consistent with the recommendations in the sewer system chapter of this report, the MTRC recommends a 50% surcharge on the sewer tax rate, to be levied for not more than 10 years, through the end of the EPA-mandated construction period and with the goal of maintaining reserves in the City's sewer fund return at their historic level of about \$2 million. Even if the general parcel tax vote is deferred until June (see section above), the sewer tax measure should proceed on the February ballot, to ensure that Piedmont has sufficient funds to meet the EPA mandates.

The committee also recommends that City Council should clarify the definition of legal uses of the Sewer Fund, particularly the question of whether storm drains and sewers may be constructed and maintained with Sewer Fund money.

August 17, 2011

To: The City Council and citizens of Piedmont
From: Ryan Gilbert, Tamra Hege, Eric Lindquist, and Steve Weiner
Subject: Supplementary Statement to the Report of the Municipal Tax Review Committee

Preconditions for Voter Approval of a Continued Piedmont Parcel Tax

Summary

While there is unanimous agreement among the 9 members of the MTRC on the fundamental financial recommendations, there is disagreement as to whether the City Council should be expected to make specific changes in budgets and financial management as a precondition to voter approval of continuation of the parcel tax. In this statement, those members of the MTRC who will not endorse voter approval until specific expectations are met by the Council, present five expectations for Council action.

Unless and until reforms are made in the City Council's financial management, voters should withhold approval of a continued parcel tax. The major gaps in the Council's current management relate to employee fringe benefits; assuring proper financial reserves to meet predictable future needs; setting and adhering to budget priorities; and managing and minimizing financial risk in the conduct of municipal construction projects. In turn, these gaps reflect a more fundamental problem: the failure of the Council to plan the finances of the City within the context of five-year budget projections and analyses.

Introduction

Maintaining strong municipal services (police, paramedic and fire, streets, parks and sewers) is a crucial element in Piedmont's quality of life. Correspondingly, maintaining the City's ability to pay for high priority services, especially in a time of economic trouble and massive budget cuts at the state level and in other Bay Area cities, is vital.

The advisability of continuing the City's (property) parcel tax beyond its current expiration date of July 1, 2013 is the issue under study by the Municipal Tax Review Committee. Whether voters should approve continuation of the parcel tax necessarily requires an examination of the City's overall financial condition and management.

The MTRC prepared projections of the City's likely financial condition over the next nine years (including the period of 2013-2017 when a renewed parcel tax would be in effect.) These projections were prepared after considerable time spent discussing and agreeing upon reasonable assumptions and after much deliberation by the MTRC in concert with City management. We believe the MTRC is unanimous in approving these projections as our best effort to project the financial path of the City of Piedmont. The conclusion to be drawn from these projections is that the City is on a path that is clearly not sustainable.

The MTRC's "base case" projection shows that the continuation of current budgetary trends will lead to an accumulated City deficit on July 1, 2017 (the ending date of a continued parcel tax if approved by the voters) of \$2.2 million dollars, \$6.0 million dollars short of an adequate general fund reserve. These forecasts are troubling and should be a cause of deep concern not only to the Council but also to every Piedmonter.

In contrast, the “flat benefit expenditure” revenue and expenditure¹ projection produces a general fund reserve of approximately \$3.2 million on July 1, 2017 (an improvement of \$5.4 million over the continuation of current budgetary trends). Please note that the expectations for change in City policy and practice, as presented in this report, will produce adequate reserves for the City by the 2017-2018 fiscal year.

While there is unanimous agreement among the 9 members of the MTRC on the fundamental financial recommendations, there is disagreement as to whether the City Council should be expected to make specific changes in budgets and financial management as a precondition to voter approval of continuation of the parcel tax. In this statement, those members of the MTRC who will not endorse voter approval until specific expectations are met by the Council, present five expectations for Council action.

Unless and until reforms are made in the City Council's financial management, voters should withhold approval of a continued parcel tax. The major gaps in the Council's current management relate to employee fringe benefits; assuring proper financial reserves to meet predictable future needs; setting and adhering to budget priorities; and managing and minimizing financial risk in the conduct of municipal construction projects. In turn, these gaps reflect a more fundamental problem: the failure of the Council to plan the finances of the City within the context of five-year budget projections and analyses.

Fringe benefits

Expectation I: The Council will commission an expert, independent analysis of employee benefit obligations and that the Council (1) publicly adopt a clear limit, including a possible dollar cap, on the costs of employee fringe benefits and (2) demonstrate that the limit they adopt is consistent with the long-term financial viability of the City. (See p.6 regarding multi-year financial forecasts).

Retirement costs for public employees are now much in the news. And for a good reason: many state and local governments have been overly generous in their promises of future retirement benefits and now find themselves suffocating under the unfunded liabilities that have resulted.

This is not a new problem in Piedmont, but it has been made worse in the last decade. In 1995-96, employee fringe benefits (primarily health benefits for current and retired employees and contributions to employee retirement plans) amounted to 29% of the amount paid in employee salaries. This was a fringe benefit ratio reasonably common in private and nonprofit organizations. In 2003-04 the fringe benefit ratio was 33%. In the current year, these fringe benefit costs are at 53% of the amount spent on salaries. In absolute numbers, annual fringe benefit costs have gone from \$1.387 million in 1995-96 to an estimated \$5.181 million in 2012, an increase of 374%, an average increase of 8.6% per annum. In the same time period, salary costs have increased by only 208%, an average increase of 4.7% per annum.

Clearly, fringe benefit costs have been increasing nearly twice as fast as salaries. The increase in fringe benefit costs was accelerated in 2004 and 2008 as a result of Council decisions to sweeten retirement benefits for City employees in the state's PERS retirement system. For example, public safety employees in Piedmont now have a pension plan providing a pension of

¹ The “flat expenditure” projection assumes that no increase in total city spending for employee fringe benefits after the current fiscal year. See p. 3

3% of salary, at age 50, multiplied by the number of years of service. A Piedmont public safety employee employed by the City after 25 years of service, retiring at age 50 (with several decades of life expectancy remaining) will receive 75% of his or her final salary per year in retirement (3% multiplied by 25) with annual cost of living adjustments.

As previously noted, in 2003-2004, fringe benefit costs were at 33 % of salaries. If that fringe benefit ratio had been maintained, then the City of Piedmont would now be paying \$1,954,000 less than it is currently paying for fringe benefits. By comparison, the entire proceeds of the City's parcel tax for this fiscal year is estimated to be \$1,550,000. It is fair to say that the ramp-up in employee fringe benefits is a major reason why the parcel tax ² is now viewed by many as a permanent element in the financing of the City of Piedmont. This is unacceptable.

We are informed that the City Administrator is now in negotiations with employee organizations on new contracts, including fringe benefits. We are also informed that the City's goal in these negotiations is to achieve greater employee contribution to the cost of fringe benefits. We don't know the specific changes under consideration. To this point, the Council has not stated what its goals are in reducing City costs for fringe benefits. But we can say that marginal steps to ease the taxpayer's burden for fringe benefits are not sufficient.

In our view, what is needed is a firm cap on City expenditures for fringe benefits. Given the extraordinary increases in taxpayer costs for employee fringe benefit plan in recent years, we favor serious consideration of a City policy that Piedmont taxpayers not continue to increase our cost for fringe benefits beyond the 2011-12 budgeted amount of \$5.18 million and that additional costs for a very generous fringe benefit plan, in future years, will be borne solely by employees. The Council has a number of options for achieving such a cap (including but not limited to greater employee contributions to their fringe benefits and a two-tiered retirement system that provides less generous retirement benefits for future employees.)

Reserves

Expectation II: The Council will adopt a requirement that a transfer to three reserve funds (equipment replacement, capital improvement, and physical facility maintenance) of at least \$1.3 million per year will be made in the annual budgeting process.

The City of Piedmont maintains separate funds (in effect, savings accounts) for a variety of purposes. Collectively, these funds are known as the City's "governmental funds" and they include a "general" or "unreserved" fund. Since June 2007 the governmental funds held by the City of Piedmont have dropped dramatically from \$15.8 million to an estimated \$8.5 million at June 2012.

The issue of reserves came into sharp relief in early 2010 when in excess of a \$2 million cost overrun from the Piedmont Hills undergrounding project was paid from the City's reserves. The current City general reserve is now \$ 2.19 million, well below the 15% (of annual expenditures) reserve that the MTRC believes is prudent.

The City has no general policy for the maintenance of reserves and thus makes contribution to various reserve funds on an annual, "as needed" basis and when funds are available in the current year City budget. Of major concern is the lack of any reserve fund for the maintenance

² The property tax, the property transfer tax and the parcel tax combined account for 66% of City of Piedmont revenues.

and repair, such as roof replacement, of City-owned buildings including City Hall, the police department and the fire department. The failure to set aside funds for the inevitable maintenance and repair costs leads to a temptation to postpone needed repairs and face more costly and disruptive projects in the future. We recommend that a combined total \$1.3 million be transferred each year from City revenues into the equipment reserve (\$300,000), the capital improvement reserve (\$200,000) and a new reserve for maintenance of physical facilities (\$800,000).

Because strengthening these reserve funds is a matter of prudent financial management, the MTRC included these transfers in all of its financial projections.

Risk Management and Spending Priorities

Expectation III. After public hearings, the City Council will promptly make a public statement as to the changes in City policy that are required and make those changes drawing, as appropriate, from the recommendations of the League of Women Voters' Task Force on Undergrounding and the members of the Council's Audit Subcommittee

Expectation IV. The City Council will secure and publicly release an independent, expert estimate of the initial construction costs for Blair Park and a forecast of ongoing maintenance costs including the planned replacement of the artificial turf playing fields and the maintenance of sewer lines and other public infrastructure associated with Blair Park. These construction and ongoing cost estimates will include the cost of City employee time directly devoted to Blair Park. The City Council will officially resolve that no construction will begin on Blair Park until a) the sponsors of Blair Park project have transferred to the City sufficient funds to pay estimated construction costs as determined by independent experts; b) the sponsors agree that the City will impose fees for the use of the park sufficient to cover all ongoing costs including capital replacement, c) the sponsors agree to pay all City legal fees if, as anticipated, legal action is initiated to challenge or stop the Blair Park project and d) the City adopts a policy that, under no circumstances, will the City subsidize the operation of Blair Park.

Expectation Five: The City Council will resolve that no City subsidies will be paid for the operation of the swimming pool after July 1, 2012 unless there are offsetting reductions elsewhere in the City budget of an amount equal to the subsidy for the pool.

In March 2011 the Piedmont League of Women Voters Task Force to Investigate and Report on the Piedmont Hills Undergrounding District issued a report that documented the City's lack of preparedness in conducting undergrounding projects and the causes of a \$2- \$3 million cost overrun including legal fees. This cost was borne by all Piedmont taxpayers even though the vast majority of Piedmonters are not residents of the undergrounding district in question. The importance of understanding and reducing risks on City construction projects is made even more pressing as the Council moves into the latter phases of approval of a much larger and more complex project in Blair Park.

The undergrounding cost overrun was a major financial setback for the City. One would have hoped that this setback would have created a sense of urgency within the City Council to conduct a thorough inquiry, publish its findings, and undertake whatever remedial steps were required to prevent such errors and overruns on future City construction projects. Such a sense of urgency has not been evident. The Council formed an Audit Subcommittee to study the cost overrun on March 1, 2010. It took 17 months, after the public revelation of the overrun, for the Audit Subcommittee to publish its "draft final report," four months after the League of Women

Voters report. Even after this extended delay, the Subcommittee was unable to set forth a coherent set of recommendations, but rather, provides a list of more than 30 recommendations proposed by individual committee members but with no unified sense of direction for future City policy.

Of similar concern, major civic controversy has arisen over the proposed Blair Park project to provide new athletic fields. The Blair Park project is relevant to the work of the MTRC only to the extent that such a project will have effects upon City finances. The MTRC offers no conclusion whatsoever about the wisdom or value of the Blair Park Project. We limit our comments to an assessment that the City does not and will not have the resources to subsidize the construction, operation, maintenance or future capital renovations of such a facility.

In this regard, the sponsors of the Blair Park project have estimated the cost of initial construction, including provisions for pedestrian and auto traffic, as approximately \$6 million. The sponsors of Blair Park have assured the public and the MTRC that they will bear the full costs of construction and that the ongoing maintenance of the Blair Park complex will be borne by donations and user fees from both the current sponsors and user fees from others. Thus, the proponents of Blair Park say that the project will not impose costs on the City either in the short or long run. To date, there has been no independent assessment of the initial construction costs nor is there any guarantee that the full costs of construction will be donated. This leaves open the possibility that taxpayers will, as was the case with undergrounding, be forced to pay to complete a project initially described as free of cost to the City.

On July 1, 2011 the City Council took over operation of the City's swimming pool that had previously been managed by the Piedmont Swim Club. The City now anticipates that, over and above fees paid by the users of the pool, that this new arrangement will cost the City approximately \$380,000 per year. Additionally, no reserves have been set aside for pool facility maintenance or refurbishment³. This arrangement runs contrary to the City's general policy that recreation facilities should be paid for by users. Expectation V, stated above, remedies this problem.

Multi-year Planning Process for City Finances

In considering options for assuring the City's financial strength, the MTRC established a minimum requirement that the City be able to (1) meet its basic expenses in coming years; (2) provide \$1.3 million per year toward funding the inevitable costs of equipment replacement, capital improvements and maintenance of the City's physical facilities; and (3) achieve a general fund reserve of at least 15% of the annual budget by the end of the fiscal year 2016-2017 (\$3.8 million for a projected 2016-2017 budget of \$25.4 million in expenditures).

As noted earlier, projections prepared by MTRC are critical to our findings and recommendations:

The "base case" scenario would continue the existing pattern of City expenditures including approximately \$380,000 in a City subsidy for the swimming pool. In the base case scenario we also assume:

- No layoffs of City employees, no reduction in the number of employees, no furloughs of employees and employee salary increases of 2% per annum for the period 2013-2017.

³ The swimming pool is 45 years old.

- Fringe benefits continue to grow at a rate 3% above the rate of total salary increases (this would bring fringe benefits to more than 60% of the salary expenditure in 2016-17)
- No City subsidy for the construction or operation of Blair Park
- Voter approval of a four-year extension of the current parcel tax

The “base case” projection shows an excess of expenditures over revenues for each future year leading to an accumulated general fund deficit of \$2.2 million at the end of the 2016-17 fiscal year. This end result would thus fall short of the required 15% reserve by \$6.0 million (\$2.2 million plus \$3.8 million needed for a 15% reserve). Thus, the current trends in municipal expenditure are unsustainable even with continuation of a parcel tax.

In order to achieve the minimum acceptable financial condition by July 1, 2017 we then considered a “flat benefits expenditure” scenario that differs from the “base case” in two important respects:

- The City subsidy for the swimming pool will cease by July 1, 2012
- City expenditures for employee fringe benefits would be capped at \$5.18 million and not allowed to grow beyond that number (as described above on p.3)

The “flat benefits expenditure” scenario produces a cumulative general fund reserve of \$3.3 million by July 1, 2017, an amount that falls short of the 15% general fund reserve requirement by only \$300,000. However, by the end of 2017-2018 fiscal year the City would have achieved a general fund reserve that exceeds the 15% by more than \$1 million. Note, in particular, that implementing the “flat benefits expenditure” scenario reduces the cost of employee fringe benefits from 53% of the salary budget in the current fiscal year to 48% in 2017-2018 and that this percentage continues to decline thereafter.

The “flat benefits expenditure” scenario thus became the basis for the recommendations for changes in City spending, reserve funds and risk management described earlier in this letter.

Conclusion

The City Council acts upon annual City budgets without engaging in the multi-year projections and analysis that provide the basis for MTRC’s recommendations. We believe that such projections are essential for sound financial management and a five-year planning process should be instituted as part of the City staff’s preparation of the 2012-13 municipal budget.

Several members of the MTRC disagree with the stance we have taken in this letter although not with the two financial forecasts that form the basis of our recommendations. In part, their disagreement is based upon a belief that the Council can not meet the five expectations before the deadline for ballot arguments (November 18, 2011) for a February, 2011 parcel tax vote. If time pressure in meeting our five expectations is an issue for the Council, then we would support postponing the parcel tax vote until either June 2012 or November 2012 when statewide elections will be held. Even if the public vote were delayed until November 2012 there would still be more than seven months remaining before July 1, 2013 when the current parcel tax expires.

In recent years the Piedmont City Council has failed to maintain adequate reserves to meet essential expenses; it has failed to properly anticipate the risks of a major construction project or to adopt policies to avert cost overruns in the future; and it has undertaken new expenses, most notably for employee compensation, without adequately weighing the long-term costs. These facts contribute to a lack of confidence in the Council’s financial management and planning.

Two necessary actions emerge from our analysis:

- 1) A continuation of the current parcel tax for the 2013-2017 period; and
- 2) More proactive and disciplined management of the City's finances starting with meeting the five expectations presented in this letter

To do one, without the other, would be a serious mistake.

Revenues

Introduction

Since the turn of the century, economic volatility has increased significantly from the 20 years before with 2 booms and 2 busts. During this period, Piedmont general fund revenues (excluding transfers in) grew at an average annual rate of 4.9% outpacing inflation, which was 2.3% per year on average.

Table 1 below shows the various components of Piedmont general fund revenues for the current budget year 2011-12 as well as average growth rates and standard deviations over the last 12 years. The chart leads to several essential observations:

1. Property related revenues (Property Tax, Transfer Tax and the Parcel Tax) provide 66.2% of general fund revenues – this level has been consistent over the last 12 years.
2. The largest component of revenue, Property Tax, has shown substantial growth outpacing almost all other revenue sources. In addition, Property Tax generally has very low volatility as shown by the standard deviation of annual growth
3. Transfer tax growth rates are by the far the most volatile of any major revenue category but have shown very little overall growth over the last 12 years.
4. Charges for Current Services, made up mostly of recreation department fees and planning/plan check fees, have shown the highest level of growth and are generally more controllable by the City.

Table 1 - Revenue Growth and Volatility From 1999-2000 to 2010-11

	2011-12 Budget Amount	Percent of Budget	Average Growth Rate	Standard Deviation	Lowest Annual Growth Rate	Highest Annual Growth Rate
Property Tax	\$9,200,000	45.9%	6.1%	4.9%	0.2%	15.8%
Transfer Tax	2,500,000	12.5%	1.1%	21.8%	-32.6%	35.7%
Parcel Tax	1,552,950	7.8%	6.3%	N/A	N/A	N/A
Other Taxes and Franchises	2,303,300	11.5%	5.3%	5.6%	-2.8%	17.0%
License and Permits	398,000	2.0%	3.0%	13.5%	-20.3%	24.4%
Revenue from Use of Money or Property	365,000	1.8%	-0.3%	16.0%	-31.0%	23.5%
Revenue from Other Agencies*	1,163,000	5.8%	3.8%	3.6%	-18.6%	49.8%
Charges for Current Services	2,547,031	12.7%	8.3%	7.7%	-1.2%	22.2%
Other Revenue	74,000	0.4%	-8.8%	105.1%	-300.6%	97.8%
Sub-Total: General Fund Revenues	\$20,103,281		4.9%	5.6%	-5.0%	15.8%
* Revenues from Other Agencies standard deviation from '05 forward						

Property Related Revenue

Much has been written about Piedmont's reliance on property related revenues. This reliance has remained consistent over the last 12 years. Piedmont is relatively extreme among California cities in this regard but not significantly different from other small, relatively affluent, mostly residential communities. Table 2 below provides the California cities that have comparable or higher levels of dependence on property related revenues:

Table 2 – Property Related Revenue as a Percentage of Total Revenues

Belvedere	87%
Ross	73%
Rolling Hills (LA)	78%
Hillsborough	75%
Palos Verdes Estates	72%
Atherton	72%
Isleton	69%
Patterson	68%
Mill Valley	67%
San Marino	67%
Hidden Hills	65%
Los Altos Hills	63%
<i>Based on 2008 State Controller Data</i>	

Piedmont Property Tax

Property tax received by the general fund is expected to total about \$9.2 million in FY 2011-12, or 45.9% of the budget. Table 3 below shows property tax revenues and annual growth rates for Piedmont since 2000. Despite two recessions including a severe housing decline, property tax revenues have maintained a positive growth in every year with a compound annual growth over the period of 6.1%. This strong overall growth and relatively consistent source of revenues provided Piedmont a stable base compared to most California cities.

Table 3 – Annual Property Tax Revenues

Year	Amount	Annual Growth
2000	\$4,734,158	7.9%
2001	5,104,141	7.8%
2002	5,909,087	15.8%
2003	6,022,274	1.9%
2004	6,525,746	8.4%
2005	6,653,923	2.0%
2006	7,559,803	13.6%
2007	8,218,211	8.7%
2008	8,702,213	5.9%
2009	8,987,591	3.3%
2010	9,002,358	0.2%
2011E	9,105,000	1.1%

Many previous Municipal Parcel Tax Review reports have extensively documented Proposition 13 and how it affects property tax assessments and collections. Although concerns about housing values continue to dominate economic news and may appear to threaten Piedmont property tax revenue, Piedmont revenues have held up so far and Piedmont housing values have a substantial cushion in the form of low assessed values compared to market. Table 4 shows the base year assessed values for Piedmont as of the 2012 tax year.

As shown in the Table, almost 1 in 4 Piedmont parcels have not been re-assessed since before 1995 and the average assessed value per parcel in total is over \$750,000 compared to typical Piedmont selling prices well in excess of \$1 million. This has an important implication for the future, because as homes continue to turn over in the market, their reassessment will propel continued growth in property tax revenues, no matter how modest, on a year-to-year basis.

The large amount of parcels not re-assessed since before 2000 combined with the large disparity of assessed values per parcel between post 2000 base years and pre-2000 base years implies that Piedmont has a substantial cushion against the impact of declining real estate values.

Although the long-term outlook for property tax revenue growth is strong, in the near-term, as the overall economy remains relatively weak, we make a conservative estimate of growth in this source. The City has budgeted 1% growth for FY 2011-12, and the committee assumes a slow ramp-up from there, with 2% growth in 2012-13, and 4% for the fours thereafter, the term of the next parcel tax.

Economic cyclicity and unpredictability are certainties and steps should be taken to characterize revenues received over specified levels and long-term growth rates as “temporary” with such amounts listed as such in budget documents and Council presentations and ideally specifically set aside in reserves. A more specific presentation would highlight the amounts as non-sustainable for future City Councils and identify the risks of committing these revenues to long-term obligations.

Table 4 – Piedmont Base Year Stratification

Assessment Year	Parcels	Pct. of Parcels	Cumm.%	Assessed Value	Pct. of Assessed Values	Cumm.%	Assessed Value/ Parcel
1975-80	744	19.19%	19.19%	\$107,586,325	3.69%	3.69%	\$144,605
1981	17	0.44%	19.62%	5,795,855	0.20%	3.89%	340,933
1982	27	0.70%	20.32%	10,783,418	0.37%	4.26%	399,386
1983	19	0.49%	20.81%	8,934,181	0.31%	4.56%	470,220
1984	57	1.47%	22.28%	21,089,971	0.72%	5.29%	369,999
1985	60	1.55%	23.83%	22,123,207	0.76%	6.05%	368,720
1986	73	1.88%	25.71%	32,873,292	1.13%	7.17%	450,319
1987	67	1.73%	27.44%	30,215,967	1.04%	8.21%	450,985
1988	78	2.01%	29.45%	38,367,206	1.32%	9.53%	491,887
1989	80	2.06%	31.51%	38,720,705	1.33%	10.85%	484,009
1990	85	2.19%	33.70%	54,155,378	1.86%	12.71%	637,122
1991	79	2.04%	35.74%	48,016,884	1.65%	14.36%	607,809
1992	102	2.63%	38.37%	66,166,198	2.27%	16.63%	648,688
1993	120	3.09%	41.46%	79,597,344	2.73%	19.36%	663,311
1994	124	3.20%	44.66%	74,153,431	2.54%	21.90%	598,012
1995	87	2.24%	46.91%	54,783,370	1.88%	23.78%	629,694
1996	106	2.73%	49.64%	70,383,847	2.41%	26.19%	663,999
1997	106	2.73%	52.37%	80,184,727	2.75%	28.94%	756,460
1998	135	3.48%	55.85%	93,179,732	3.20%	32.14%	690,220
1999	161	4.15%	60.01%	140,256,414	4.81%	36.95%	871,158
2000	124	3.20%	63.20%	114,585,716	3.93%	40.88%	924,078
2001	105	2.71%	65.91%	117,452,929	4.03%	44.91%	1,118,599
2002	133	3.43%	69.34%	145,513,249	4.99%	49.90%	1,094,085
2003	139	3.58%	72.92%	155,899,652	5.35%	55.25%	1,121,580
2004	152	3.92%	76.84%	173,880,798	5.96%	61.21%	1,143,953
2005	149	3.84%	80.69%	158,307,599	5.43%	66.64%	1,062,467
2006	156	4.02%	84.71%	204,292,776	7.01%	73.64%	1,309,569
2007	180	4.64%	89.35%	232,369,973	7.97%	81.61%	1,290,944
2008	129	3.33%	92.68%	180,316,059	6.18%	87.80%	1,397,799
2009	131	3.38%	96.05%	168,776,569	5.79%	93.59%	1,288,371
2010	153	3.95%	100.00%	186,991,812	6.41%	100.00%	1,222,169
Totals and Average	3878			\$2,915,754,584			\$751,871

Property Transfer Tax

Every recent Municipal Parcel Tax Review report has discussed the size and volatility of the Piedmont Real Property Transfer Tax. As Table 1 above shows, the Transfer Tax, which accounts for about one-eighth of revenues, has not grown substantially over the last decade and has shown extreme volatility from year to year making it the most volatile source of revenue for Piedmont. Table 5 below shows transfer tax amounts and annual changes beginning in the year 2000. Whereas property tax annual growth rates ranged between 0-10% in all but 2 years, transfer tax growth rates ranged between -10% and 10% in only 3 out of 12 years making forward planning very difficult. However, two items come out of the data that may be helpful in planning: (1) periods of high growth are followed by periods of decline, and (2) over the period the amounts were at or above \$2.5 million in only four years and below \$2 million in only four years. The average over the 12-year period was just under \$2.4 million per year. Given these facts and the volatility, it would seem that we could plan on a certain amount of revenue on average over the next several years, but any significant upward deviation from that would likely be non-recurring and should be "set aside" for those years when transfer taxes are below a base line number.

Table 5 - Transfer Tax Revenue Growth

Year	Amount	Annual Growth
2000	2,205,379	-0.6%
2001	1,856,516	-15.8%
2002	2,287,982	23.2%
2003	2,493,805	9.0%
2004	2,953,530	18.4%
2005	2,468,321	-16.4%
2006	3,349,732	35.7%
2007	2,930,089	-12.5%
2008	1,973,888	-32.6%
2009	1,711,739	-13.3%
2010	1,844,708	7.8%
2011E	2,500,000	35.5%

Operating Expenditures

Introduction

The vast majority, approximately 70%, of City operating expenditures, is related to employee compensation. Therefore, in Section A, a similar City comparison of employee staffing and compensation is presented and discussed. In Section B, the all-important topic of fringe benefits is addressed. In both sections, several recommendations for action by the City Council will be offered. Section C will address and discuss the topic of mission-critical services. Finally, Section D will present the operating expenditure assumptions used in developing the MTRC's two financial projections (attached as Exhibits 5 and 6). The most critical issue highlighted by the projections (which account for both anticipated revenues and likely expenditures) is that the City risks depleting its general fund reserves by the middle of the decade, even with renewal of the parcel tax.

A. Staffing and compensation Comparison With Similar Cities

On the next page is a table (Exhibit 1) comparing staffing and personnel compensation for the City of Piedmont in total and for the subcategories of police, fire and non-safety with nine cities deemed similar in safety and non-safety public service needs and requirements. The similar cities were chosen based on comparable size, population, home value, household income, and similar needs and requirements for safety and non-safety services. Due to the difficulty of obtaining exactly comparable data among the different cities, the reader will see a number of data cells marked "N/A." In other places on the spreadsheet there are notes explaining differences and variations. Consequently, this data is more useful for asking questions than for making firm assertions, though much of it does suggest some likely conclusions.

Piedmont has a long history of providing exceptional essential and vital services for its citizens including prompt and responsive public safety and well-maintained streets, sewers, parks and City spaces. The citizens of the similar cities enjoy the benefit of municipal services of a comparable quality.

In studying the data, one notes that on a comparison of metrics (e.g., expenditures per capita and per dwelling, total average compensation per full-time employee (FTE), police and fire FTE per square miles), Piedmont is a higher cost service provider. When one similar City, Hillsborough, is removed from the comparison, the results are even more evident. Although there is a comparison of the public safety workload, no comprehensive attempt was made to equilibrate service levels, staffing, wages, etc.

While factors such as years of service can affect the metrics comparison, it does appear that there is an opportunity for Piedmont to reduce staffing and compensation costs while remaining competitive with the quality of services offered by similar cities. Solutions would include lesser or no salary increases, fringe benefit cost reduction (discussed below), and/or staffing reductions. A question for the City Council: Is the City over-staffed for some services given the low level of activity in Piedmont and can the equivalent quality of essential and vital services be provided by fewer employees and at less cost?

The expenditure comparisons across similar cities suggest the answer is yes. The MTRC feels it incumbent and necessary for the City Council to address this question.

B. Fringe Benefits

The MTRC feels the fringe benefit issue is the first and primary issue that must be addressed by the City Council. Fringe benefits were a main topic of concern and discussion for the committee and rightly so. The three charts shown below explain why.

- Charts – (1) Fringe Benefit Rate;
(2) Fringe as % of City Budget
(3) Salary & Benefit Expenditures

Exhibits 2 and 3 show data related to employee benefits and costs.

Exhibit 4 provides a summary history of City/employee contract negotiations as it relates to fringe benefits. This exhibit, showing how the retirement benefit formula has evolved, explains a substantial portion of the upward trend lines shown in the three charts.

Of note:

- (1) From 1995-96 to 2011-12, fringe benefit costs have gone from \$1.387 million to an estimated \$5.181 million an increase of 374% or 8.6% per annum. In the same period, salary costs have increased by 208% or 4.7% per annum; further and more recently, from 2004-05 to 2011-12, fringe benefit costs have increased by 8.0% annually;
- (2) In 1995-96, the fringe benefit ratio (fringe benefits divided by salary) was 29%. In 2004-05, the ratio was 40% and in 2011-12, it is estimated to be 53%;
- (3) Fringe benefits equaled about 14% of total City expenditures in 1995-96 versus 17% in 2004-05, and versus 24% estimated in 2011-12;
- (4) Finally, in 2003-04, fringe benefit costs were 33% of salary – a ratio that is common in private and non-profit organizations. If that fringe benefit had been maintained, then Piedmont would now be paying about \$1.95 million less than it is currently paying for fringe benefits. By comparison, the entire proceeds of the City's parcel tax for this fiscal year is \$1.55 million.

Clearly, fringe benefits have substantially outgrown revenues and other categories of expenditures over the past decade, and although the City employees provide excellent service, the benefit costs are not sustainable into the future. Although the MTRC was not able to study the costs and implications of various potential benefit plans in depth, the committee recommends the City undertake a thorough review of long term projected pension and other benefit costs given likely conservative investment returns, medical cost growth rates, actuarial studies based on likely hiring, etc. The MTRC recommends significant immediate action with regard to employee pension and other benefits to cap these costs at the 2011-12 budgeted amount of \$5.18 million and to ultimately make changes that reduce these costs as a percent of salaries.

The committee is not attempting a prescriptive approach to the details of benefit management, but is recommending the Council set a sustainable overall goal for net benefit costs. Within that goal, the City could continue to manage different benefit plans for different groups of employees, as it does today.

There are a number of options for achieving this cap including but not limited to, greater employee contributions to their benefits and a two-tiered retirement system applicable for new employees.

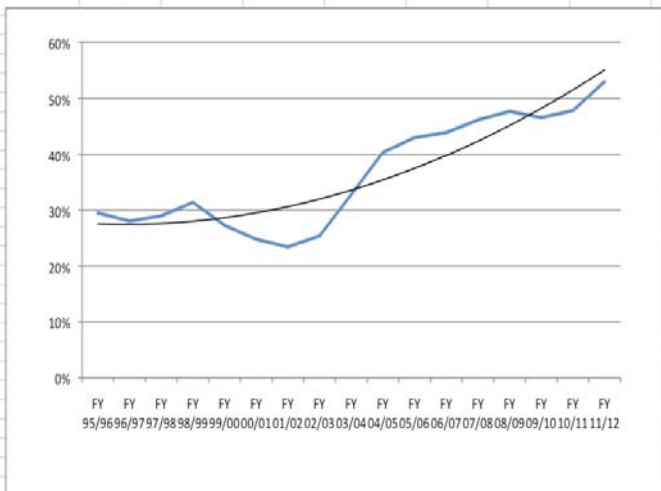
Repeating the opening statement of this section: The MTRC feels the fringe benefit issue is the first and primary issue that must be addressed by the City Council.

CHARTS 1, 2 & 3

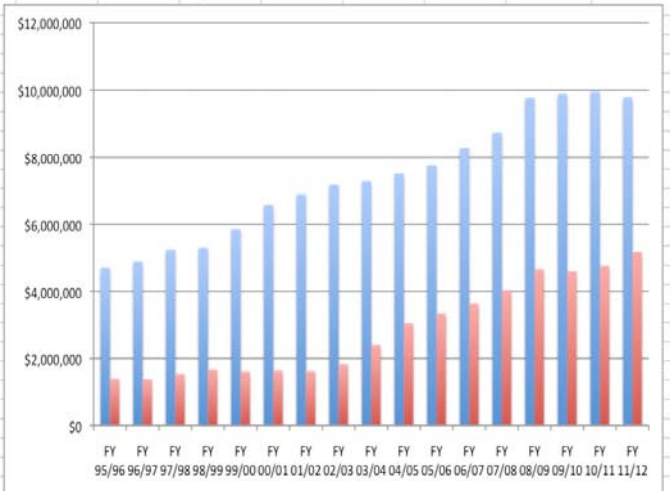
Fringe Benefit & Salary Growth 1995-96 Through 2011-12

Year	FY 95/96	FY 96/97	FY 97/98	FY 98/99	FY 99/00	FY 00/01	FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12
Salaries	\$4,702,985	\$4,892,843	\$5,244,076	\$5,296,308	\$5,857,117	\$6,578,253	\$6,889,658	\$7,185,684	\$7,286,206	\$7,506,569	\$7,763,260	\$8,281,171	\$8,736,924	\$9,762,321	\$9,890,122	\$9,956,780	\$9,781,382
Fringe	\$1,387,327	\$1,372,547	\$1,519,962	\$1,662,990	\$1,598,724	\$1,631,056	\$1,614,281	\$1,825,116	\$2,389,983	\$3,031,594	\$3,340,732	\$3,637,229	\$4,034,596	\$4,656,959	\$4,607,633	\$4,764,805	\$5,181,177
Rate	29%	28%	29%	31%	27%	25%	23%	25%	33%	40%	43%	44%	46%	48%	47%	48%	53%
Total City Expend	\$9,318,300	\$10,066,867	\$11,542,332	\$12,258,591	\$12,895,597	\$13,253,936	\$14,167,964	\$14,407,029	\$16,093,408	\$17,345,561	\$17,650,379	\$21,332,819	\$19,680,885	\$20,447,461	\$21,189,282	\$21,094,294	\$21,565,072
Fringe Share of Total	15%	14%	13%	14%	12%	12%	11%	13%	15%	17%	19%	17%	21%	23%	22%	23%	24%

Fringe Benefit Rate:



Salary & Benefit Expenditures:



Average Annual Salary Expenditure Growth Rate	4.68%
Average Annual Fringe Benefit Growth Rate	8.58%
Combined Compensation Growth Rate	5.78%

Fringe as Percent of City Budget:

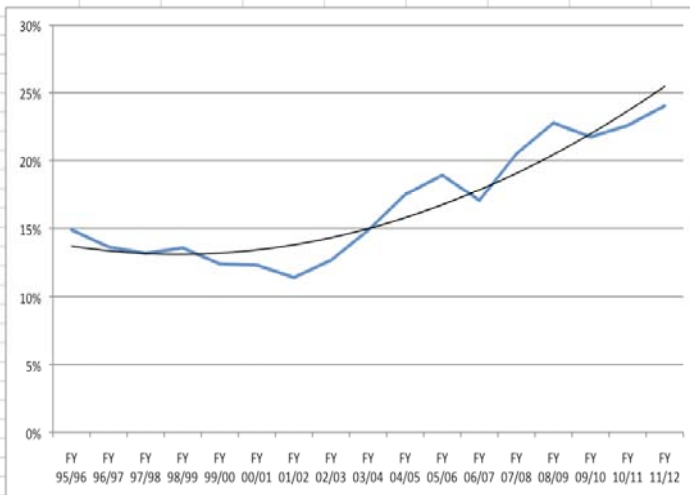


Exhibit 2
City of Piedmont Employee Benefits

Medical:		Monthly
The City of Piedmont pays up to the Kaiser rate.	Employee:	568.99
	Employee + 1:	1,137.98
	Family:	1,479.37

Dental:		Monthly
The City of Piedmont pays 100% of the premium.	Employee:	60.39
	Employee + 1:	115.04
	Family:	186.92

Vision:		Monthly
The City of Piedmont pays 100% of the premium.	Employee:	16.19
	Employee + 1:	25.15
	Family:	39.90

Life & LTD:		Monthly
The City of Piedmont pays 100% of the premium (per group eligibility):		
Basic Life: .13/1,000 of insurance		
AD&D: .025/1,000 of insurance		
Long Term Disability: .30/100 of monthly payroll – Miscellaneous and Management Only		

PERS: Current Fiscal Year '10-11		Per Pay Payroll
Miscellaneous	Employer Rate:	20.338%
Miscellaneous	Employer Pd Member Contribution:	8.00%
Safety	Employer Rate:	38.952%

PERS: Fiscal Year '11-12		Per Pay Payroll
Miscellaneous	Employer Rate:	22.089%
Miscellaneous	Employer Pd Member Contribution:	8.00%
Safety	Employer Rate:	42.220%

Monthly Car Allowance

City Administrator	600.00
Finance Director	200.00
City Planner	450.00
Interim City Clerk	250.00
Public Works Director	550.00
Assistant Planner	200.00
Building Official	550.00

As is the case with nearly every public employer in California, Piedmont provides an employee benefit package that includes, in addition to health and other insurance options, a defined benefit pension program (managed by the CalPERS, the state pension agency). Unlike the 401k and similar plans found in the private sector, this pension program guarantees to current employees, retirees and some survivors a lifetime income as a percentage of final salary, calculated through a formula based on years of service multiplied by an age-related factor. This is the largest cost component of the City's benefits package. It is a risk for the future as well, because any shortfalls in the state pension fund related to benefits for retired Piedmont employees would have to be made up by additional contributions from the City, unless steps are taken to cap the City's future responsibility.

Exhibit 3
Pension/Social Security/Medicare Benefits (1)
Percentage of Employee Salary

Fiscal 2011-2012

<u>Safety</u>	<u>Employer</u>	<u>Employee</u>
PERS Employer Rate (1), (2)	39.61%	2.61%
PERS Employee Paid Member Contribution	0.00	9.00
Social Security	N/A	N/A
Medicare	1.45	1.45
	41.06%	13.06%
<u>Miscellaneous</u>	<u>Employer</u>	<u>Employee</u>
PERS Employer Rate	22.09%	N/A
PERS Employee Paid Member Contribution (3)	8.00	0.00
Social Security (4)	6.20	4.20
Medicare	1.45	1.45
	37.74%	5.65%

- (1) For public safety, Employer pays 100% up to 37%, then shares 50/50 with Employee the amount above 37%. Thus, the FY 2011-12 Employer rate of 42.2% is broken into two components: Employer pays the first 37%, then the amount over 37% (42.2% - 37% or 5.22%) is shared on a 50/50 basis (2.61% for Employer and 2.61% for Employee).
- (2) PERS is the California Public Employees Retirement System.
- (3) The City has agreed to pay the Employee Paid Member Contribution of 8% of salary.
- (4) Public safety employees do not participate in the Social Security system, but other City employees do; relevant current payroll taxes related to Social Security and Medicare are included in these tables. Future increases would also have to be borne in the same way.

Exhibit 4
Chronology of City Employee Retirement Plans

Public Safety

1. Effective through December 31, 2003, the retirement plans for public safety shall be PERS 2% @ 50 (see Footnote).
2. Effective January 1, 2004, the retirement plan for public safety employees shall be PERS 3% @ 55.
3. Effective January 1, 2008, the retirement plan for the public safety shall be PERS 3% @ 50, as sponsored by the California Public Employees' Retirement System.
4. Effective January 1, 2008, if the Public Safety Employer PERS contribution rate is more than 37% of salary, the amount above 37% will be shared equally between the City (50%) and the employees (50%) through payroll deductions. If at any time the rates drop below 28%, the City will encumber the percentage amount saved below the 28% in an account to be used to offset future increases above 37%.

Non-Safety (Miscellaneous)

1. Effective through December 1, 2003, the retirement plans for non-safety employees shall be PERS 2% @ 60.
2. Beginning January 1, 2004, the retirement plan for miscellaneous employees is PERS 3% @ 60, sponsored by the California Public Employees' Retirement System. The City shall pay into the Public Employees' Retirement System the employee's eight percent (8%) contribution.
3. Effective January 1, 2008, if the miscellaneous Employer PERS contribution rate to maintain 3% @ 60 is more than 24.42% of salary, the amount above 24.42% will be shared equally between the City (50%) and the miscellaneous employee (50%) through payroll deductions.

Note: 2% @ 50 means the employee pension benefit will, for employees aged 50, equal 2% of their final pay with the City for each year they have worked. Benefits are paid monthly for life, including annual cost of living adjustments, and the benefit vests after 5 years of service. For clarity and using (3) above, the current benefit rate for a Public Safety employee (3% @ 50), an employee with 25 years service can retire at 50 with a pension equal to 75% of his/her final pay with annual cost of living adjustments.

C. Mission-Critical Services

The City Council is currently evaluating or has recently undertaken several new, non-essential service commitments including aquatics, Blair Park and payment to Oakland for library services.

Before commenting on these undertakings, the MTRC deems it appropriate to address the Piedmont Hills Undergrounding situation. In March 2011, the Piedmont League of Women Voters issued a report that documented the City's lack of preparedness, processes and procedures for conducting undergrounding projects. Also addressed were the causes of an estimated \$2.5 to \$3.5 million, including legal fees, cost overrun a significant financial setback suffered by the City.

The City Council formed an Audit Subcommittee to study the cost overrun in March 2010. A "draft final report" was issued in July 2011 almost 17 months later and 4 months after the League of Women Voters' report. The report provides a list of 30 recommendations, rather than a definitive process and set of procedures.

The importance of developing processes and procedures for City construction projects is even more important as the City Council moves into the latter phases of discussion of a much larger and more complex project, Blair Park. The MTRC recommends that, drawing as appropriate from the League of Women Voters and Audit Subcommittee reports, the City Council should establish a process and procedures for executing large capital undertakings (costing over \$250,000) to the highest standards of professional project management, covering all phases including design, specification, contracting, construction and inspection.

Back to the broader topic of non-essential services, the MTRC recommends that the City undertake a prioritizing of City services designating certain services as "mission-critical" and other services as "not mission-critical" to create a priority for funding.

In July 2011, the City took over operation of the swimming pool that had previously been managed by the Piedmont Swim Club. The City anticipates that this arrangement will cost the City \$380,000 per year over and above user fees. Additionally, no reserves have been set aside for pool facility maintenance and refurbishment. This arrangement runs contrary to the general policy that user fees should fund recreation facilities, not general fund revenues or the parcel tax.

The MTRC recommends that no City subsidies be paid for operation of the swimming pool after July 2012, unless offsetting reductions are made elsewhere in the municipal budget.

The City Council is discussing and there is significant civic controversy over the proposed Blair Park project for new athletic facilities. The Blair Park project is relevant to the work of the MTRC only to the extent that such a project will affect City finances. The MTRC offers no conclusion whatsoever about the wisdom or need for Blair Park; appropriately, the MTRC will leave those judgments to the Planning Commission, the Recreation Commission, the Public Works Department and the City Council.

The MTRC assessment is that the City does not and will not have the financial resources to subsidize the construction, operation, maintenance or future capital renovations for the proposed Blair Park.

To date, the City has spent approximately \$320,000 on this project. The MTRC recommends that the City Council, before approval of the Blair Park project, secure and publicly release an independent expert study of the initial construction and ongoing maintenance and operating costs of the facilities as well as potential risks and liabilities to the City. Pursuant to the study, the Blair Park project should be structured so as to have zero or nominal impact on City finances, now or in the future, both in terms of actual costs and potential liabilities.

Finally, in the event there is evidence of strong community interest for subsidizing user-specific, non-essential programs, the City Council should consider seeking a public vote for specific parcel taxes to fund them, recognizing that the two-thirds vote required for passage would be the ultimate measure of public support.

D. MTRC Projections and Operating Expenditure Assumptions

The MTRC prepared projections of the City's likely financial position over the next nine years, including the period of 2013–2017 when a renewed parcel tax would be in effect. These projections were prepared after considerable time spent discussing and agreeing on reasonable assumptions and after much deliberation by the MTRC in concert with City management. The committee is unanimous in approving these projections as our best effort to project the financial path of Piedmont.

The two projections prepared by the MTRC are critical to our findings and recommendations. The two projections use the 2011-12 budget approved by the City Council and project from that date forward. A comparison of the assumptions used in the “base case” (Exhibit 5) projection and the “flat benefits case” (Exhibit 6) projection is as follows:

1. Both cases assume no layoffs, reduction or furloughs of City employees;
2. Both cases assume no salary increase in 2012-13 and 2% per annum thereafter. For perspective, over the last seven years (2004-05 to 2011-12) the City's total salary cost increases (not individual salaries) have averaged 3.9% per annum;
3. Both cases assume the need to plan for \$1.3 million per year (on average) to maintain and replace essential city facilities and equipment (see next report section on Capital Assets);
4. Both cases assume the need to build and maintain a general operating reserve equal to 15% of the annual general fund budget as contingency against unexpected fiscal needs and to cushion the City against the next economic downturn without having to make damaging cuts to essential services (the current reserve is only 9% and has been shrinking for several years);
5. The “base case” assumes fringe benefits increase 3% faster than salaries; 3% in 2012-13 and 5% thereafter. The “flat fringe benefits case” assumes that fringe benefits are capped at the 2011-12 budgeted level of \$5.18 million. For perspective, over the last seven years, the City's total fringe benefit cost increases have averaged 8% per annum, or 4.1% faster than salaries;
6. The “base case” assumes a City aquatics subsidy of the budgeted 2011-12 \$380,000 increasing at 2% per annum thereafter. The “flat fringe benefits case” assumes no City subsidy after 2011-12;

7. Both cases assume no City subsidy for the construction or operation of Blair Park;
8. Both cases assume the continued annual payment of \$350,000 to the City of Oakland for library services;
9. Unless otherwise noted, both cases assume a 2% per annum increase in all other operating expenditures.
10. No provision is made in these projections for unanticipated future obligations arising from external mandates or regulatory requirements.

The base case is a “business as usual” projection, and it shows that if recent trends continue, Piedmont risks the depletion of its general fund during the term of the next parcel tax. This is consistent with actual experience over the past several years. Taken as a whole, governmental funds held by the City of Piedmont have dropped dramatically since 2007, from \$15.8 million to an estimated \$8.5 million at June 2012.

The flat benefits case, by contrast, shows that the MTRC’s recommended actions will ensure fiscal stability for the City through the end of the current decade. These recommendations include:

- Capping fringe benefit costs at their current level
- No further commitments of public funds to subsidize proposed new recreational programs and facilities; costs for operation, maintenance and replacement to be recovered through user fees
- Sufficient funds to maintain the City’s physical assets
- Multi-year budget planning to ensure that the City does not take on future commitments for which it does not have adequate fiscal resources

Exhibit 5 Base Case

Base Case										
Assumptions:										
Property taxes increase at 2% per year in 12-13, 4% thereafter (slightly more than average of last 5 years)										
Real property transfer tax increases 1.1% per year as a revenue item										
Salaries flat through 12-13, increasing 2% thereafter										
Fringe benefits increase 3% faster than salaries (requires city policy to ensure compliance with limit)										
Other expenditures increase 2% per year beginning in 12/13										
Bottom line adjusted by 15% reserve										
CITY OF PIEDMONT										
Estimated Revenue & Expenditures										
Year	2010-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20
REVENUE										
Property Tax	9,105,000	9,200,000	9,384,000	9,759,360	10,149,734	10,555,724	10,977,953	11,417,071	11,873,754	12,348,704
Transfer Tax	2,500,000	2,500,000	2,527,500	2,555,303	2,583,411	2,611,828	2,640,558	2,669,605	2,698,970	2,728,659
Parcel Tax	1,530,000	1,552,950	1,584,009	1,615,689	1,648,003	1,680,963	1,714,582	1,748,874	1,783,851	1,819,528
Other Taxes and Franchises	2,301,787	2,303,300	2,425,375	2,553,920	2,689,278	2,831,809	2,981,895	3,139,936	3,306,352	3,481,589
Licenses and Permits	398,000	398,000	409,940	422,238	434,905	447,953	461,391	475,233	489,490	504,174
Use of Money and Property	350,000	365,000	365,000	365,000	365,000	365,000	365,000	365,000	365,000	365,000
Revenue from Other Agencies	1,263,000	1,163,000	1,163,000	1,163,000	1,163,000	1,163,000	1,163,000	1,163,000	1,163,000	1,163,000
Charges for Current Services	2,430,344	2,547,031	2,646,365	2,749,573	2,856,807	2,968,222	3,083,983	3,204,258	3,329,224	3,459,064
Other	74,000	74,000	74,000	74,000	74,000	74,000	74,000	74,000	74,000	74,000
TOTAL Revenue	19,952,131	20,103,281	20,579,189	21,258,083	21,964,138	22,698,499	23,462,363	24,256,976	25,083,642	25,943,719
TRANSFER IN:										
Private Contribution Fund	25,000	30,000	30,600	31,212	31,836	32,473	33,122	33,785	34,461	35,150
Internal Service Fund			0	0	0	0	0	0	0	0
Traffic Safety Fund	70,000	70,000	71,400	72,828	74,285	75,770	77,286	78,831	80,408	82,016
State Gas Tax Fund	200,000	200,000	100,000	102,000	104,040	106,121	108,243	110,408	112,616	114,869
Sewer Fund	1,000,000	1,000,000	1,020,000	1,040,400	1,061,208	1,082,432	1,104,081	1,126,162	1,148,686	1,171,659
Sidewalk Repair Fund			0	0	0	0	0	0	0	0
Capital Improvement Fund			0	0	0	0	0	0	0	0
Workers Compensation			0	0	0	0	0	0	0	0
Liability Insurance			0	0	0	0	0	0	0	0
Measure B Sales Tax			0	0	0	0	0	0	0	0
Measure D Fund	30,000	20,000	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433
Alameda County CMA			0	0	0	0	0	0	0	0
Schoolmates Program Fund	55,125	0	0	0	0	0	0	0	0	0
TOTAL Transfer In	1,380,125	1,320,000	1,242,400	1,267,248	1,292,593	1,318,445	1,344,814	1,371,710	1,399,144	1,427,127
TOTAL Revenue/Transfer In	21,332,256	21,423,281	21,821,589	22,525,331	23,256,731	24,016,944	24,807,176	25,628,686	26,482,786	27,370,846
EXPENDITURES										
SALARIES	9,956,780	9,781,382	9,781,382	9,977,010	10,176,550	10,380,081	10,587,682	10,799,436	11,015,425	11,235,733
FRINGE BENEFITS	4,764,805	5,181,177	5,336,612	5,603,443	5,883,615	6,177,796	6,486,686	6,811,020	7,151,571	7,509,149
PERSONNEL EXPENSES	164,100	181,450	185,079	188,781	192,556	196,407	200,335	204,342	208,429	212,598
SUPPLIES & SERVICES	4,003,462	4,104,777	4,186,873	4,270,610	4,356,022	4,443,143	4,532,005	4,622,646	4,715,099	4,809,400
NON-DEPARTMENTAL	366,148	366,148	373,471	380,940	388,559	396,330	404,257	412,342	420,589	429,001
CAPITAL OUTLAY EXPENDITURE	4,000	195,000	198,900	202,878	206,936	211,074	215,296	219,602	223,994	228,474
EQUIPMENT REPLACEMENT FUND			0	0	0	0	0	0	0	0
CAPITAL IMPROVEMENT FUND			0	0	0	0	0	0	0	0
TOTAL Expenditures	19,259,295	19,809,934	20,062,317	20,623,662	21,204,238	21,804,831	22,426,262	23,069,388	23,735,106	24,424,355
Average Benefit Rate	47.9%	53.0%	54.6%	56.2%	57.8%	59.5%	61.3%	63.1%	64.9%	66.8%
Compensation as % of Expenditures	76.4%	75.5%	75.4%	75.5%	75.7%	75.9%	76.1%	76.3%	76.5%	76.7%
TRANSFER OUT:										
Internal Service Fund										
Workers Compensation Fund	575,000	586,500	598,230	610,195	622,398	634,846	647,543	660,494	673,704	687,178
Liability Insurance Fund	450,000	459,000	468,180	477,544	487,094	496,836	506,773	516,909	527,247	537,792
Traffic Safety			0	0	0	0	0	0	0	0
Equipment Replacement Fund	300,000	300,000	306,000	312,120	318,362	324,730	331,224	337,849	344,606	351,498
Aquatics	110,000	380,139	387,742	395,497	403,407	411,475	419,704	428,098	436,660	445,393
Sewer Fund			0	0	0	0	0	0	0	0
Capital Improvement Fund	400,000	0	0	0	0	0	0	0	0	0
Measure B Fund			0	0	0	0	0	0	0	0
Facility Maintenance	0	50,000	800,000	816,000	832,320	848,966	865,946	883,265	900,930	918,949
OPEB Medical Fund	200,000	200,000	204,000	208,080	212,242	216,486	220,816	225,232	229,737	234,332
TOTAL Transfer Out	2,035,000	1,975,639	2,764,152	2,819,435	2,875,824	2,933,340	2,992,007	3,051,847	3,112,884	3,175,142
TOTAL Expenditures/Transfer Out	21,294,295	21,785,573	22,826,469	23,443,096	24,080,062	24,738,171	25,418,269	26,121,234	26,847,990	27,599,497
Excess: Revenues over Expenditures	37,961	(362,292)	(1,004,879)	(917,765)	(823,331)	(721,227)	(611,092)	(492,548)	(365,204)	(228,651)
Beginning Fund Balance:	2,194,122	2,232,083	1,869,791	864,912	(52,854)	(876,184)	(1,597,412)	(2,208,504)	(2,701,052)	(3,066,256)
Estimated Ending Fund Balance:	2,232,083	1,869,791	864,912	(52,854)	(876,184)	(1,597,412)	(2,208,504)	(2,701,052)	(3,066,256)	(3,294,907)
Less 15% reserve	3,194,144	3,267,836	3,423,970	3,516,464	3,612,009	3,710,726	3,812,740	3,918,185	4,027,198	4,139,925
Available Balance	(962,061)	(1,398,045)	(2,559,059)	(3,569,318)	(4,488,194)	(5,308,137)	(6,021,244)	(6,619,237)	(7,093,455)	(7,434,832)

Exhibit 6 Projection with Flat Benefits

Flat Benefits										
Assumptions:										
Property taxes increase at 2% per year in 12-13, 4% thereafter (slightly more than average of last 5 years)										
Real property transfer tax increases 1.1% per year as a revenue item										
Salaries flat through 12-13, increasing 2% thereafter										
Fringe benefits capped at 11-12 budget level (requires city policy to ensure compliance with limit)										
Other expenditures increase 2% per year beginning in 12/13, except pool subsidy which is eliminated in that year										
Assumes no net operating costs for Blair Park if built										
Bottom line adjusted by 15% reserve										
CITY OF PIEDMONT										
Estimated Revenue & Expenditures										
Year	2010-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20
REVENUE										
Property Tax	9,105,000	9,200,000	9,384,000	9,759,360	10,149,734	10,555,724	10,977,953	11,417,071	11,873,754	12,348,704
Transfer Tax	2,500,000	2,500,000	2,527,500	2,555,303	2,583,411	2,611,828	2,640,558	2,669,605	2,698,970	2,728,659
Parcel Tax	1,530,000	1,552,950	1,584,009	1,615,689	1,648,003	1,680,963	1,714,582	1,748,874	1,783,851	1,819,528
Other Taxes and Franchises	2,301,787	2,303,300	2,425,375	2,553,920	2,689,278	2,831,809	2,981,895	3,139,936	3,306,352	3,481,589
Licenses and Permits	398,000	398,000	409,940	422,238	434,905	447,953	461,391	475,233	489,490	504,174
Use of Money and Property	350,000	365,000	365,000	365,000	365,000	365,000	365,000	365,000	365,000	365,000
Revenue from Other Agencies	1,263,000	1,163,000	1,163,000	1,163,000	1,163,000	1,163,000	1,163,000	1,163,000	1,163,000	1,163,000
Charges for Current Services	2,430,344	2,547,031	2,646,365	2,749,573	2,856,807	2,968,222	3,083,983	3,204,258	3,329,224	3,459,064
Other	74,000	74,000	74,000	74,000	74,000	74,000	74,000	74,000	74,000	74,000
TOTAL Revenue	19,952,131	20,103,281	20,579,189	21,258,083	21,964,138	22,698,499	23,462,363	24,256,976	25,083,642	25,943,719
TRANSFER IN:										
Private Contribution Fund	25,000	30,000	30,600	31,212	31,836	32,473	33,122	33,785	34,461	35,150
Internal Service Fund			0	0	0	0	0	0	0	0
Traffic Safety Fund	70,000	70,000	71,400	72,828	74,285	75,770	77,286	78,831	80,408	82,016
State Gas Tax Fund	200,000	200,000	100,000	102,000	104,040	106,121	108,243	110,408	112,616	114,869
Sewer Fund	1,000,000	1,000,000	1,020,000	1,040,400	1,061,208	1,082,432	1,104,081	1,126,162	1,148,686	1,171,659
Sidewalk Repair Fund			0	0	0	0	0	0	0	0
Capital Improvement Fund			0	0	0	0	0	0	0	0
Workers Compensation			0	0	0	0	0	0	0	0
Liability Insurance			0	0	0	0	0	0	0	0
Measure B Sales Tax			0	0	0	0	0	0	0	0
Measure D Fund	30,000	20,000	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433
Alameda County CMA			0	0	0	0	0	0	0	0
Schoolmates Program Fund	55,125	0	0	0	0	0	0	0	0	0
TOTAL Transfer In	1,380,125	1,320,000	1,242,400	1,267,248	1,292,593	1,318,445	1,344,814	1,371,710	1,399,144	1,427,127
TOTAL Revenue/Transfer In	21,332,256	21,423,281	21,821,589	22,525,331	23,256,731	24,016,944	24,807,176	25,628,686	26,482,786	27,370,846
EXPENDITURES										
	0	11/12	12/13	13/14	14/15	0	0	0	0	0
SALARIES	9,956,780	9,781,382	9,781,382	9,977,010	10,176,550	10,380,081	10,587,682	10,799,436	11,015,425	11,235,733
FRINGE BENEFITS	4,764,805	5,181,177	5,181,177	5,181,177	5,181,177	5,181,177	5,181,177	5,181,177	5,181,177	5,181,177
PERSONNEL EXPENSES	164,100	181,450	185,079	188,781	192,556	196,407	200,335	204,342	208,429	212,598
SUPPLIES & SERVICES	4,003,462	4,104,777	4,186,873	4,270,610	4,356,022	4,443,143	4,532,005	4,622,646	4,715,099	4,809,400
NON-DEPARTMENTAL	366,148	366,148	373,471	380,940	388,559	396,330	404,257	412,342	420,589	429,001
CAPITAL OUTLAY EXPENDITURE	4,000	195,000	198,900	202,878	206,936	211,074	215,296	219,602	223,994	228,474
EQUIPMENT REPLACEMENT FUND			0	0	0	0	0	0	0	0
CAPITAL IMPROVEMENT FUND			0	0	0	0	0	0	0	0
TOTAL Expenditures	19,259,295	19,809,934	19,906,882	20,201,396	20,501,800	20,808,212	21,120,753	21,439,545	21,764,712	22,096,383
Average Benefit Rate	47.9%	53.0%	53.0%	51.9%	50.9%	49.9%	48.9%	48.0%	47.0%	46.1%
Compensation as % of Expenditures	76.4%	75.5%	75.2%	75.0%	74.9%	74.8%	74.7%	74.5%	74.4%	74.3%
TRANSFER OUT:										
Internal Service Fund										
Workers Compensation Fund	575,000	586,500	598,230	610,195	622,398	634,846	647,543	660,494	673,704	687,178
Liability Insurance Fund	450,000	459,000	468,180	477,544	487,094	496,836	506,773	516,909	527,247	537,792
Traffic Safety			0	0	0	0	0	0	0	0
Equipment Replacement Fund	300,000	300,000	306,000	312,120	318,362	324,730	331,224	337,849	344,606	351,498
Aquatics	110,000	380,139	0	0	0	0	0	0	0	0
Sewer Fund			0	0	0	0	0	0	0	0
Capital Improvement Fund	400,000	0	0	0	0	0	0	0	0	0
Measure B Fund			0	0	0	0	0	0	0	0
Facility Maintenance	0	50,000	800,000	816,000	832,320	848,966	865,946	883,265	900,930	918,949
OPEB Medical Fund	200,000	200,000	204,000	208,080	212,242	216,486	220,816	225,232	229,737	234,332
TOTAL Transfer Out	2,035,000	1,975,639	2,376,410	2,423,938	2,472,417	2,521,865	2,572,303	2,623,749	2,676,224	2,729,748
TOTAL Expenditures/Transfer Out	21,294,295	21,785,573	22,283,292	22,625,334	22,974,217	23,330,078	23,693,056	24,063,293	24,440,936	24,826,131
Excess: Revenues over Expenditures	37,961	(362,292)	(461,702)	(100,003)	282,514	686,866	1,114,121	1,565,393	2,041,850	2,544,715
Beginning Fund Balance:	2,194,122	2,232,083	1,869,791	1,408,089	1,308,086	1,590,600	2,277,466	3,391,587	4,956,979	6,998,830
Estimated Ending Fund Balance:	2,232,083	1,869,791	1,408,089	1,308,086	1,590,600	2,277,466	3,391,587	4,956,979	6,998,830	9,543,544
15% reserve	3,194,144	3,267,836	3,342,494	3,393,800	3,446,133	3,499,512	3,553,958	3,609,494	3,666,140	3,723,920
Available Balance	(962,061)	(1,398,045)	(1,934,405)	(2,085,714)	(1,855,533)	(1,222,046)	(162,372)	1,347,485	3,332,689	5,819,625
Ending Balance as Percentage of Budget	10%	9%	6%	6%	7%	10%	14%	21%	29%	38%
Avail Balance as Percent of Budget	-5%	-6%	-9%	-9%	-8%	-5%	-1%	6%	14%	23%

Capital Assets and Capital Planning/Budgeting

Introduction

Piedmont owns a large store of capital assets that are used to provide services to the community. These include land and construction in progress that are not depreciated. The depreciable asset categories include buildings & improvements, property & equipment, and infrastructure, including 6 sub categories. As of June 30, 2010 our balance sheet showed the value of these assets as \$40 million, net of depreciation. Infrastructure represents 75% of all assets. Land is valued at \$5 million, certainly well under current Fair Market Value. Buildings & improvements represent just under \$2 million, and the remaining categories each equal under \$1 million of value. All reporting is in full compliance with GASB 34.

Most capital assets depreciate over time and with use. Below is a table that summarizes the net asset position of some of the major categories of depreciable assets:

Table 1
Summary of City Assets

Category	Values as of 6/30/10 (in \$ millions)			
	Asset Value	Depreciation	Net Asset Value	Useful Life
Sidewalks, curbs & Gutters	\$22.0	\$11.4	\$10.6	40
Park facilities	8.0	3.5	4.5	25-40
Pavement system	6.7	4.3	2.4	28
Buildings & improvements	2.5	0.7	1.8	60
Vehicles	2.8	2.3	0.5	4-20

As can be seen by the accounting useful lives, most assets are long-term in nature. Accordingly the City faces two responsibilities. First, it must maintain these assets so they are fully functional and available. This is particularly critical for public safety vehicles like fire trucks and police cars. Second, it must periodically replace those assets, at the end of their economic useful life. Both these actions involve careful monitoring and judgment. Like many other cities, Piedmont has been inconsistent in both regards. The City's approach to acquiring assets is a "pay as you go" approach. This is problematic since the City may not have sufficient funding when large assets are needed. This is not surprising, and it is likely most cities face this to a degree. When revenues are limited, there is the strong temptation to reduce maintenance, and delay replacing large assets in favor of using scarce money for other, more immediate needs. Unfortunately, as of today, the City has a) built up a large amount of deferred maintenance, b) has significantly depleted reserves, and c) must anticipate the replacement of several assets in the immediate coming years.

Thus the challenges facing the City are the following:

- Strengthen capital planning, particularly through developing a multi-year plan.
- Increase reserves, which have been depleted by approximately 50% from prior, reasonable levels.

- Develop a stronger, more consistent capital budgeting method, which should improve the chances the City will correctly prioritize equipment orders, and acquire at good prices.
- Work to address the deferred maintenance and equipment acquisitions as needed.

To follow the City's expense budget classifications, assets will be reviewed in the following groups:

- Equipment replacement
- Street re-surfacing
- Sidewalks, curbs, and street gutters
- Existing facilities

In each case the size of the group, historic spending and expected future investment levels required over the next 5 years are reviewed. The historic sources of funding will be identified. A set of recommendations will be offered at the end of this report section.

Note, two items will not be covered. First, Piedmont has completed approximately 50% of all EPA required changes to our sewer system. As such we are well ahead of schedule compared to most other cities that are dealing with the same issue. All sewer related review is in a separate section of this report as these expenses are subject to a separate parcel tax.

Second, we do not address any possible future capital needs which aren't already on the planning list. This is an area of potential risk. Possibly important omissions include upgrades needed for the swimming pool, resurfacing of City owned fields, or similar. These issues are not ignored because they are trivial. Rather, there is not sufficient data to currently estimate their impact. The committee strongly recommends that any such "new assets" (if added) be budget neutral. This could occur through user charges, higher taxes, or reduced spending in other areas.

Equipment Replacement

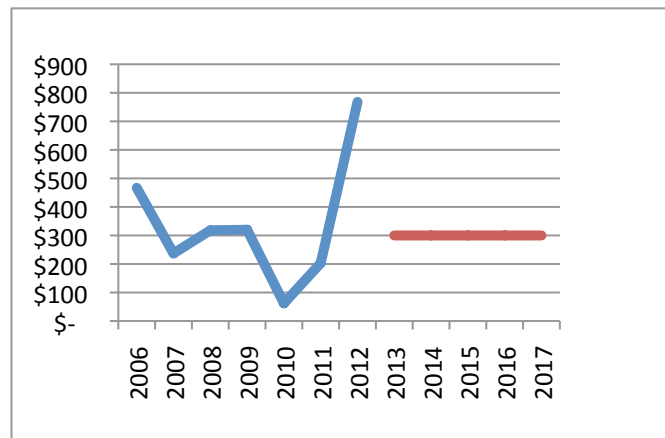
As of June 30, 2010 the City had \$1.2 million of Equipment (vehicles, property & equipment, net of depreciation). The majority of that equipment is used by safety and public works departments. The City's policy is to establish a replacement cycle for all equipment, based on experience with similar assets. Table 1 shows estimated useful lives of many types of equipment. These lives appear to be reasonable. Each year department heads are requested to identify equipment that they believe should be replaced. The department head then evaluates replacement equipment, shops for pricing, and develops a justification for that acquisition. There appears to be no standardized approach to this task. The City Administrator and Finance Manager first review any proposal. After that review, proposals are presented to the City Council for a final decision. The council's decision is influenced by the strength of each justification as well as the forecasted availability of funding. Funding for new or replacement equipment generally comes from the Equipment Replacement Fund via transfer from the General Fund.

Not surprisingly, when funds are tight, equipment replacement requests are often deferred. There appears to be no method of auditing the advisability of stretching useful lives, or any review of the outcome of doing so. This would be a good discipline to develop.

Chart 1 below shows the historic spending for equipment replacement (blue line). Since 2006 annual equipment replacement spending has been as high as \$470,000 and as low as \$62,000.

Fiscal 2011-12 shows a significant spike in expected spending, to \$768,000, since it includes a very expensive fire truck may be needed to replace an older unit. The chart also shows a projected “Steady State” spending rate (red line). The concept of Steady State is this is the amount the City Council should anticipate each year for the next 5 years. It appears Piedmont should plan on approximately \$300,000 of equipment replacements, on average, during those years. Three comments are worth noting. First, the year shown on the X-axis is the year of the June 30th fiscal year end. Second, no inflation factor is included. Exposure in this area will increase dramatically if inflation occurs. Third, the “wish list” for equipment replacement developed by all departments for the coming 6 years totals over \$3.5 million, about twice the level projected.

**Chart 1
Annual Equipment Replacement Spending
& Estimated “Steady State”**



Conclusion: The City will need to have strong capital budgeting to assure that equipment is acquired or replaced as needed.

Street Resurfacing

Piedmont has approximately 40 miles of streets. Most are subject to light to medium usage. However, some streets (for example, most of Grand Avenue) are subject to much higher usage, and thus require more work. When problems arise, the City may slurry coat areas that need patching, which adds 3-5 years of additional life, or do a complete grind and repaving. The City maintains a rolling street repair priority list, as required for state and federal matching funds. The Metropolitan Transportation Commission is the transportation planning, coordinating, and financing agency that serves the nine Bay Area counties. Among other functions, it produces an annual assessment of the condition of over 100 City’s streets. Piedmont is ranked in the second category of paving condition (“good”). Our ranking is about the middle of the pack, although our rating (a three year rolling average) has risen from 67 in 2006 to 70 in 2010. There is no clear trend in the data. For example, some very small and affluent cities (Yountville, Los Gatos, Ross, Mill Valley, Orinda, and Woodside) have lower ratings than ours.

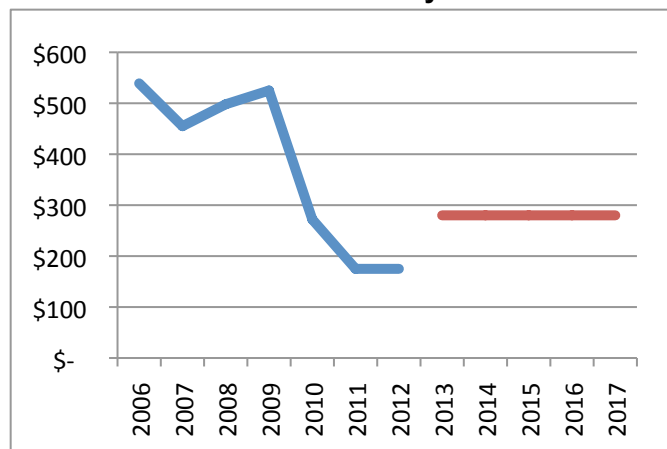
A separate measure of our street conditions was provided in the December, 2010 report prepared by Harris & Associates. (Harris is a 250 professional consulting firm, which serves public and institutional clients in the western United States by providing planning, design, and construction management services.) This study was funded by grants from the US Department of Transportation and the Federal Highway Administration. It used the Pavement Condition Index, a widely used measure of road condition developed by the Army Corps of Engineers. It concluded our major streets (arterial and collector) were 74 and 76 (on a scale of 100), while our residential streets and roads were 69. The overall rating was 72. More importantly, less than one mile of our streets (under 2.5%) was rated very poor, thus needing immediate repair. Their planning appears to be based on an assumed average useful life of 20 years for paved streets. Harris concludes their analysis by recommending annual investment in paving of \$565,000, which would essentially keep the pavement rating steady. Lower spending will result in a slowly declining rating. Our plan assumes \$280,000 annual spending in this area, 50% of the amount recommended by the consultants. Adjusting for the difference in expected useful life would raise our spending level to 70% of their target.

A final test of the appropriateness of annual spending in areas like street resurfacing is comparing annual spending with the average annual depreciation and the asset value. Thus, if there were \$1 million of assets with a useful life of 20 years, average annual spending should be \$50,000 ignoring inflation.

In street resurfacing, our book investment (\$6.7 million) times average annual depreciation ($100/28 = 3.57\%$) is \$240,000 somewhat below our spending level of \$280,000. This is close enough, and could represent the difference between book and replacement value.

Street resurfacing is funded from one of three sources. Primarily it is funded from Measure B. In addition, the City seeks, and sometimes gets, funding from the state and federal governments.

Chart 2
Street Resurfacing Spending
& Estimated "Steady State"



Conclusion: Spending appears to be in the ballpark to maintain quite acceptable street conditions.

Sidewalks, Curbs & Gutters

The City is fortunate to have its large stock of trees that line most of our streets. They provide shade as well as beauty. Unfortunately, the extensive tree roots play havoc with level sidewalks. The Department of Public Works monitors the condition of sidewalks, and prioritizes where work is needed. When the variation is less than 2", the concrete is usually ground to smooth the transition. However, with greater variations, the sidewalk section is replaced. The City has started using rebar in sidewalks to extend useful life. Finding innovations in "best practices" is essential to stay cost competitive. Work on curbs and gutters follows similar monitoring.

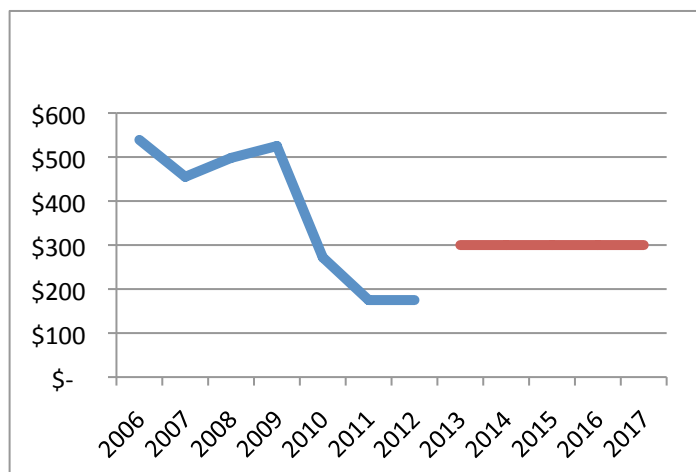
In addition, the City requires homeowners who are making property improvements to repair sidewalks in front of their houses, when needed. Although such "private" spending has never been more than 20% of total repair costs recent levels are much lower than in the past. During the prior 6 years the City has spent an average of \$300,000 to repair and upgrade sidewalks, curbs, and gutters. The variation in spending level has been smaller than other categories. Going forward, we anticipate similar annual spending.

Sidewalks, curbs, and gutters are funded either from Measure B funds or the General Fund.

Using the test discussed in street repaving, the numbers are:

Annual spending	\$300,000
Depreciation/year	2.5% (100/40)
Investment (equivalent)	\$12 million
Book value	\$22 million

**Chart 3
Sidewalks, Curbs & Gutters Spending
& Estimated "Steady State"**



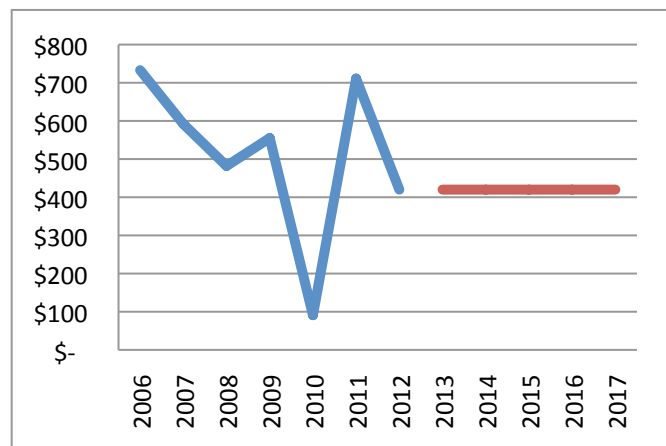
Conclusion: The City may be falling behind in this area, since investment equivalent is well below book value.

Existing Facilities

The City owns several buildings, related grounds, and public areas like parks. The funding of existing facilities comes from the small Facilities Maintenance Fund, the Capital Improvement Program, and donations from citizens. During the past 5 years citizens have contributed nearly \$700,000 towards the costs of projects. During that time period a similar amount was spent on those projects. (There is currently a balance of \$57,000 of private contributions towards existing facilities). Much of this work is aided by the CIP Review Committee, a group of volunteers who, working with staff and City employees, identify, assist in design, and often raise donations for projects like the recent work in and around the Japanese Tea House.

During the past 6 years, the City has spent as low as under \$100,000 and as much as \$700,000 on existing facilities. This makes this segment the most volatile. Going forward a Steady State of \$420,000 is estimated.

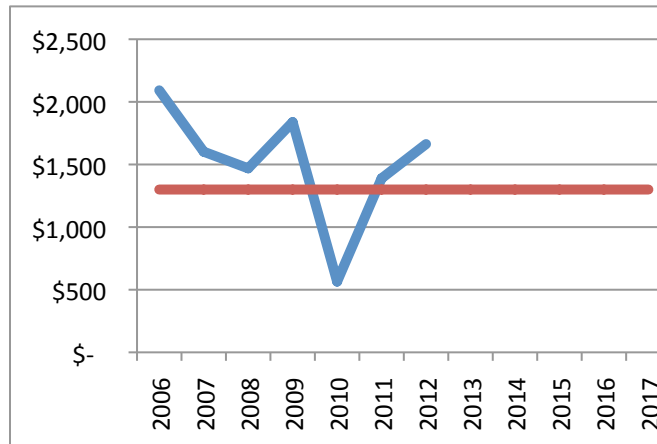
**Chart 4
Existing Facilities Spending
& Estimated “Steady State”**



Total Capital Spending

Aggregating the four categories of capital spending is simple. Visible are wide variations in prior year spending, reflecting the availability of funding and alternative needs. To emphasize this point, “Steady State” is shown historically as well as projected. The range is from just over \$500,000 to just over \$2 million. The “Steady State” spending level that will sustain capital formation at an acceptable level appears to be \$1.3 million annually. It seems reasonable that this level of spending will keep the stock of capital assets at an acceptable level, with the possible concern of spending for sidewalks, curbs, and gutters. Of course, the City should always seek ways to get more from its assets, and should review carefully any request for new or replacement assets.

**Chart 5
Total Capital Spending
& Estimated “Steady State”**



Recommendations

The City has a significant investment in capital assets. Maximizing their utility requires their proper use, careful monitoring of condition, investing in maintenance, and replacement when required. This is too important not to do very carefully. We believe the following steps will help the City manage these assets more effectively:

1. Develop a five-year capital plan, and update it each year. Each department should propose and justify the assets they anticipate in each period. This process would be more efficient if it was standardized.
2. After careful review and approval of prudent investments, capital should be committed to the annual expense budget when needed. Although we have not reviewed the validity of capital needs in the coming years, it seems likely the annual need will be approximately \$1.3 million annually. Variations in prior year investing have resulted in uneven maintenance.
3. The more consistent review process recommended will be aided by the formation of a citizen's committee whose function is to monitor planning and recommendations, and to study other cities' activities to seek best practices. This committee should review all capital requests above an agreed upon floor. The focus of the committee would be financial.
4. The City has greatly benefited from the generous support of citizens who have donated to many improvements of City property. We should work hard to encourage this support, and honor those who participate.

5. The City should review historic asset use and the experience of other similar cities to validate their current estimated useful life periods and those used for accounting purposes.
6. The City should begin to make estimates of potential exposures for upgrades or major maintenance for its facilities. Of particular interest are the following facilities:
 - Field replacement or other upgrades for all play areas including Dracaena Park, Coaches Field, Hampton Field, Beach Field, and the Main Park. (Only Beach has synthetic turf, and that shouldn't need replacement for several years)
 - Necessary upgrades for the City swimming pool
 - The continuing issue of inadequate parking in the schools/City Hall area

Note, the committee is not necessarily advocating immediate spending commitments in this area. It is however recommending we begin to "size" the potential and timing of financial exposure for future planning purposes.

Special Municipal Sewer Tax Executive Summary And Recommendation

Recommendation

The Municipal Tax Review Committee proposes that the City of Piedmont, as directed by the Piedmont City Council, adopt the following recommendations with regard to a proposed Special Municipal Sewer Tax.

1. Based on a thorough analysis of the ongoing requirements to renovate and upgrade the City's sewer system, maintain current services and comply with court orders and regulatory requirements, the MTRC recommends that the Sewer Tax be assessed in a manner outlined in this report and detailed in **Exhibit 7**. The MTRC recognizes that this recommendation will represent a fifty percent increase (50%) of the Sewer Tax currently levied. This increase ("Surtax") is necessary to meet legal and regulatory obligations that the City must satisfy.
2. The MTRC further recommends that the proposed Surtax will apply for a period not to exceed ten years, at which time the repaying of debt associated with the City's sewer renovation and upgrade will be significantly reduced, the City's sewer fund will have been funded to a minimum of \$2,000,000, and legal and regulatory requirements satisfied or materially reduced. At such time, the MTRC recommends that the Surtax be eliminated. The Sewer Tax will then revert to the maximum tax rate allowable under the current Sewer Tax authorization and benchmarked to the rates in effect for fiscal year 2011-2012.
3. The MTRC recommends that the Council levy the Sewer Tax each year.
4. The MTRC recommends that the Council direct City staff to take required steps to ensure that the Sewer Tax, as recommended herein and to include the Surtax, be placed on the ballot for the scheduled February 2012 Piedmont general election.
5. The City Council should clarify the definition of legal uses of the Sewer Fund, particularly the question of whether storm drains and sewers may be constructed and maintained with Sewer Fund money.

Summary

The City initiated the Citywide sewer renovation and upgrade project nearly two decades ago to replace the original clay pipe sewer lines in Piedmont. This effort is more than sixty percent (60%) complete. This project has materially improved the City's aged sewer system and has afforded significant improvement to the system's efficiency and environmental impact. **Exhibit 8** outlines the background, details various legal and regulatory decisions and provides a succinct narrative to the sewer rehabilitation project.

The project is also central to Piedmont's compliance with recent regulatory requirements of the Environmental Protection Agency ("EPA") that mandate that the City continue and complete the sewer replacement project and comply with a range of rehabilitation, reporting and testing deadlines. Failure to meet these deadlines or take actions as appropriate to their fulfillment will result in penalties. These requirements are detailed and explained in **Exhibit 9**.

In considering the continued funding requirements for the Sewer project and the need for additional funding to achieve regulatory compliance, the MTRC has been concerned with further financial burden on individual property owners related to the rehabilitation of private sewer

laterals in accordance with the recent amendment to Piedmont's Sewer Ordinance. The MTRC has urged the City to clearly communicate the potential obligations of property owners in the City as a priority. To the extent that special funding, grants or forms of financial assistance become available to assist property owners in rehabilitating private sewer laterals, the MTRC recommends that the Council direct City staff to inform property owners of such availability and facilitate, where appropriate, the access to such funding.

The MTRC recommends that the Sewer project be continued and to ensure that the City satisfies all legal and regulatory obligations. Failure to comply will prove more costly than a well-planned effort to continue to improve the City's sewer system – a project that is well underway.

To accomplish these goals, the City should continue to take advantage of favorable funding provided by the State of California State Water Resources Control Board program for sewer rehabilitation projects and compliance. The City further should continue to manage the project in accordance with the phased project plan that spreads the project and costs over the next eight to ten years. Finally, the Council should instruct the Staff to thoroughly and conservatively review the project and costs, take advantage of any cost reduction efforts that may be realized and initiate any steps that would optimize the efficiency and expense of the project. Detailed historic financials and projections that reflect the proposed new tax schedule are contained in **Exhibit 10**.

Further, the MTRC holds, in a unanimous opinion, that the Sewer Project should be self-sustaining. That is, the Sewer Tax should be sufficient to enable the City to complete the project, maintain the system and services and satisfy all legal and regulatory requirements. There should be no reliance on subsidies from the General Fund.

In addition, the MTRC believes that Sewer Tax funds should not be used to subsidize the General Fund, or expenditures, therein. However the MTRC recognizes and understands that there are legitimate and necessary cash flows and appropriations from the Sewer Tax funds to the City's General Fund to accommodate the necessary maintenance of the sewer system and the related staffing and equipment required. Policies and procedures should remain in place to ensure that the allocations and expenses are proper and documented.

In addition, to the extent that the project is completed in a timely manner and regulatory oversight reduced, the City should review the appropriateness of the Sewer Tax and take steps accordingly to reduce the tax in future years notwithstanding the proposed ten-year limit on the Surtax proposed in this recommendation.

Attached please find the following exhibits that provide supportive information and background on the Sewer project:

- Exhibit 7 - Proposed Maximum Sewer Tax Measure H Rate Schedule
- Exhibit 8 - Report to the 2011 Municipal Tax Review Committee- Sewer Tax Narrative
- Exhibit 9 - EPA Compliance Requirements
- Exhibit 10 - Financial Projections July 2011- Sewer Project
- Exhibit 11 - City of Piedmont- Sewer System Management Plan.

Sewer Tax Rate: Measure H			
Parcel Size in square feet	New tax 50% increase from 2011-12	FY 2011-12 Adopted rate (Maximum)	FY 2010-11 Adopted rate (Maximum)
Single Family Residences			
0 to 4,999	\$706	\$471	\$464
5,000 to 9,999	\$804	\$536	\$528
10,000 to 14,999	\$927	\$618	\$609
15,000 to 20,000	\$1,082	\$722	\$711
Over 20,000	\$1,273	\$849	\$836
Commercial Properties	\$0		
0 to 10,000	\$1,273	\$849	\$836
Over 10,000	\$1,754	\$1,169	\$1,152
Multi-family residential:per unit	\$589	\$393	\$387
Dual jurisdiction parcels: per parcel	\$706	\$471	\$464
Est'd Municipal Sewer Tax Revenue	\$3,166,800	\$2,111,200	\$2,080,000

This Page Intentionally Left Blank

REPORT
to the
2011 MUNICIPAL TAX COMMITTEE

SEWER TAX NARRATIVE

TABLE OF CONTENTS

- I. Sanitary System Overview
- II. History of Sewer System Compliance Requirements
- III. History of Sewer System Rehabilitation Programs
- IV. Future of Sewer System Rehabilitation Programs
- V. New EPA Administrative & Stipulated Order Compliance Requirements & Costs

I. SANITARY SYSTEM OVERVIEW

The City of Piedmont currently comprises approximately 1,120 acres of sloping terrain in the north Oakland hills area. The character of construction and land use is mainly residential with very minor commercial activity. The population served varies between 10,000 and 12,000 people over the past 50 years.

The wastewater generated within the City is collected in approximately 50 miles of sanitary sewer pipelines, from 6 to 18 inches in diameter, built mainly between the years of 1900 to 1940. The newer sewer lines that have been recently rehabilitated, which represent approximately 62% out of the total 50 miles, are of High Density Polyethylene. The majority of the remaining branch and trunk sewer mains, which is approximately 37% of the total, are constructed of vitrified clay pipe (VCP), while a few segments (1%) are constructed of Ductile Iron (DI) and Concrete Pipe (CP). The city is divided into 22 sub-basins which are distinguished from each other by the main collector pipe to which each area flows.

The City of Piedmont is located in the Lake Merritt/Piedmont Basin (Basin 54) of the East Bay Municipal Utility District (EBMUD) Special District No. 1 (District) service area. Piedmont's collection system does not tie directly into the EBMUD interceptor system. Instead, in accordance with an 1895 agreement between the Cities of Oakland and Piedmont, wastewater from Piedmont is discharged into the Oakland Collection system through seven points located along the southern city limits. It then goes to the EBMUD south interceptor at Embarcadero East near 5th Avenue and from there is conveyed by gravity to the EBMUD Water Pollution Control Plant (WPCP). After providing secondary treatment, the WPCP discharges through a submerged outfall into the San Francisco Bay. In addition, flow from approximately 220 acres (80,000 linear feet of sewers) in Oakland, primarily northeast of Piedmont, is conveyed through the City of Piedmont's collection system.

II. HISTORY OF SEWER SYSTEM COMPLIANCE REQUIREMENTS

Underground pipes are subject to numerous variables which can cause imperfections. With that, rain and ground water will intrude into the sanitary sewer system, which is known as Infiltration and Inflow (I/I). Under perfect circumstances, rain and ground water should be conveyed by the separate storm drain system throughout the city. Ground water infiltration (I/I) into the sanitary sewer system comes from Piedmont's sewer mains and feeder lines made of vitreous clay (VCP). Secondly, it has been discovered that private building sewer laterals, which connect privately-owned buildings to the municipal sewer system and are also historically constructed with VCP, are a significant contributor to this problem. Although no definitive records are available, it is anticipated that there are at least 25 to 30 miles of private sewer lateral within the City of Piedmont boundaries. The old VCP pipes can collapse or crack, joints can come loose, and sections can be separated by tree roots or ground movement. During heavy rains, the total volume in the sanitary sewer system can be as much as ten (10) times higher than during the dry months, with ground water infiltration accounting for all of the additional flow. Even if the city's sewer system does not overflow locally, the WPCP can be overwhelmed, resulting in untreated sewage entering the San Francisco Bay. These overflows constitute a public health and environmental hazard, in addition to violating environmental laws.

Starting in 1975, the California Regional Water Quality Control Board (CRWQCB) adopted a Water Quality Control Plan for the San Francisco Bay Basin that recommended regulating discharges from wet weather diversions and overflows for a 5 year storm event. The District and local communities coordinated efforts to resolve the problems of wet weather overflows and diversions, in response to the Regional Board requirements. This coordination effort resulted in the adoption of an Infiltration/Inflow (I/I) Reduction Compliance Plan for each community involved.

Then, in 1986, the CRWQCB issued Cease & Desist Order No. 86-17 (CDO) to Piedmont and the six (6) other East Bay communities and districts served by EBMUD, including Albany, Alameda, Berkeley, Emeryville, Oakland, and the Stege Sanitary District. The CDO required the amount of ground water entering the municipal sewer system to be reduced enough to virtually eliminate overflows of untreated wastewater at the WPCP. In 1993 an amendment, CDO 93-134, included a Compliance Plan that identified the optimum areas of sewer line repairs and upgrades that would achieve the most significant I & I reduction. In addition to the required rehabilitation of 9 of the 22 sub-basins, the city was required to eliminate "bottleneck" sewer intersections and pay its proportionate share of the cost to upgrade sewer mains in Oakland into which Piedmont flows. Moreover, the Compliance Plan required regular annual reports to the CRWQCB so they could track Piedmont's progress in meeting its completion deadline of June 30, 2014.

III. HISTORY OF SEWER SYSTEM REHABILITATION PROGRAMS

Starting in 1995, the City of Piedmont has aggressively pursued and funded a succession of construction phases whereby the sanitary sewer mains have been rehabilitated based on a prioritized list, including those 9 sub-basins identified in CDO 93-134. The following chart summarizes the construction completed to date.

<u>DESCRIPTION</u>	<u>SUB-BASIN</u>	<u>YEAR COMPLETED</u>	<u>LENGTH</u>	<u>CUM.TOTAL</u>	<u>%</u>
Emergency 1	G1	1995	21,000	21,000	8%
Phase I	G4	2002	11,800	32,800	12%
Phase I	W1A	2002	17,250	50,050	19%
Phase II	W1B	2004	14,550	64,600	24%
Phase II	F1	2004	6,160	70,760	26%
Phase II	W7	2004	2,360	73,120	27%
Phase II	N1	2004	7,500	80,620	30%
Phase II	W4	2004	11,400	92,020	34%
Phase III	W5	2005	11,500	103,520	39%
Phase III	T1	2005	22,250	125,770	47%
Phase IV	G3	2010	10,600	136,370	51%
Phase IV	G5	2010	11,000	147,370	55%
Phase IV	N2	2010	5,260	152,630	57%
Phase IV	T2	2010	6,540	159,170	59%

For each of the phases, including Phase IV, the city has diligently applied for and received loans from the State Water Resources Control Board (SWRCB), Division of Financial Assistance under the Clean Water State Revolving Fund. On-going debt service for these loans have been paid and are detailed in the annual Sewer Fund summary provided by the Finance Department.

Phase IV, which was the most recent project, was finished in the 2nd quarter of 2011. This has completed 14 of the 23 sub-basins and has brought the city's sanitary sewer system to almost 60% complete with new piping, well ahead of schedule and clearly within the CDO 93-134 deadline of completing the first 9 sub-basins by 2014.

IV. FUTURE OF SEWER SYSTEM REHABILITATION PROGRAMS

As part of our EPA Administrative Order requirements, we are to develop and update annually, our Sanitary Sewer Management Program (SSMP). In the SSMP under the section entitled Replacement Program, we have prioritized the remaining nine (9) sub-basins that are needing their sewer mains replaced in three (3) phases over the next 8-10 years. The timing of each phase is dependent on the length of the loan process with the SWRCB. Typically, it has taken between 12-18 months for the entire process from loan document preparation through actual funding commitment. Other factors related to the timing between phases involve the preparation of the construction documents and bidding specifications, which as a separate part of the entire projects, requires up-front engineering costs that even though are reimbursed through the State loan program, requires substantial expenditures ahead of funding. Also, the technique of phasing the replacement of our sanitary sewer system keeps the debt service schedule at a manageable rate given our funding sources. The following chart summarizes the future construction phases and estimated costs for the completion of our entire system.

<u>DESCRIPTION</u>	<u>SUB-BASIN</u>	<u>YEAR PROJECTED</u>	<u>LENGTH</u>	<u>EST.COST</u>	<u>%</u>
Previously Completed Phases			159,170		59%
Phase V	Emergency	2012			
Phase V	W3	2012	9,480		
Phase V	W2	2012	7,170	\$3,204,000	65%
Phase VI	V1	2015	16,560		
Phase VI	H1	2015	11,300		
Phase VI	G6	2015	12,600		
Phase VI	P1	2015	7,500	\$3,528,000	83%
Phase VII	G7	2018	22,830		
Phase VII	W6	2018	13,410		
Phase VII	G2	2018	8,800	\$3,768,000	100%

Thus, the projected cost to complete the rehabilitation of the 9 remaining sub-basins and the emergency repairs that will continually crop up until the entire system is replaced, is approximately \$10,500,000, which includes planning, design, administration, construction management, inspections, and the construction costs.

V. NEW EPA ADMINISTRATIVE & STIPULATED ORDER COMPLIANCE REQUIREMENTS & PROJECTED COSTS.

In July of 2009, the CRWQCB and the EPA entered into a Stipulated Order with EBMUD that required, amongst other things, to conduct flow monitoring on the satellites collection systems, adopt a regional private sewer lateral ordinance, implement an incentive program to encourage replacement of leaky private laterals, and develop and asset management template for managing the wastewater collection system into the future.

Concurrently, in November of 2009, the CRWQCB and the EPA issued Piedmont's Administrative Order No. R2-2009-0084, which specified a number of requirements that reflected the EPA's requirements of EBMUD. These requirements include annual flow monitoring, smoke testing of a minimum of 12.5% of our system every year, CCTV inspection of 12.5% of our system per year, annual root intrusion mitigation and manhole repairs, hydraulic modeling of our entire system in 2012, purchase of a new vactor truck in 2013 as previously committed to the EPA, and various professional consultants to guide us through these various requirements, including engineering, legal, and technical advisory services. And finally, we are required to adopt, incorporate, and implement of the EBMUD Private Sewer Lateral Regional Ordinance.

On March 15, 2011, the EPA, the CRWQCB, the SWRCB, and San Francisco Baykeeper lodged the Stipulated Order for Preliminary Relief, No. C09-05684 RS. This most recent order

represents a reiteration of all of the requirements previously outlined in Piedmont's Administrative Order of November of 2009, but further specifies monetary penalties for non-compliance to all of the required rehabilitation, testing, reporting, and annual update deadlines. It also requires that Piedmont gather information that EBMUD will use to determine how to reduce flows to its system, and furthermore, it requires that Piedmont begin taking steps to reduce inflow and infiltration into our sanitary sewer system.

To the extent that Piedmont has rehabilitated 60% of our system, and will be the first of the satellite communities to implement the EBMUD PSL Regional Ordinance, we are clearly ahead of the compliance schedules included in this Stipulated Order. The key from this point forward will be to adhere to our master plan schedule for a totally rehabilitated sanitary sewer system in the next 8-10 years.

This Page Intentionally Left Blank

EPA COMPLIANCE REQUIREMENTS

Description of Cost Impact Items

March 2011

I. PROFESSIONAL SERVICES

A. Causey Consulting (Technical Advisory)

Paul Causey is the independent sanitation system consultant hired by the Technical Advisory Board (TAB), which is the organization composed of a representative from each of the satellites and provides a means by which the satellites can meet and strategize with EBMUD and the EPA on various compliance requirements. He also sits on the advisory board of the East Bay Collection System Advisory Committee (EBCSAC), which is the independent organization comprised of just the member satellites, and allows for an exchange of ideas and methodologies related to compliance free from the presence of the EPA and EBMUD.

B. Meyers – Nave (Legal)

Meyers Nave is the legal advisor to matters related to the TAB group issues and discussions This is independent from our own City Attorney, who also directly advises staff in matters related to compliance. Stege Sanitary District hired Meyers Nave directly for the benefit of the TAB members, thus, Piedmont reimburses Stege for our proportionate share of the costs.

C. Engineering & Administration Consultant

Consulting engineer hired by the City of Piedmont to assist in the preparation of all Administrative Order and Stipulated Order compliance requirements, reports, tests, and coordination of consultants for those purposes. Attends all required meetings with the EPA, EBMUD, TAB, and EBCSAC to represent the city, express the opinions of staff, and maintain our compliance schedule . Annually updates the Sanitary Sewer Management Plan (SSMP) and the required Sanitary Sewer Overflows Report. Additionally, updates the city sewer maps as compliance projects progress, and provides general engineering consultation and strategies for the city's EPA requirements.

II. FLOW MONITORING

Piedmont's sanitary sewer system is gravity driven as it begins at the higher elevations with inflows from Oakland, collects sewage from Piedmont, then eventually ends at the lower elevations with outflows back into Oakland. Flow monitoring is a method by which an independent consultant can measure baseline water flow through key, selected manholes that represent a convergent point for the city's sanitary sewer inflow from Oakland, and subsequent outflow back into Oakland. This baseline data is then compared to measurements taken during high wet weather activity. The theoretical goal is that if our sanitary sewer system does not have any infiltration or inflows of storm water due to leaking pipes, the water

flow measurements should be relatively close. If the wet weather flow numbers are significantly higher, then infiltration and inflow of unacceptable levels is suspected. Piedmont is under contract with a private consulting company that specializes in this work, and is providing this service to all of the satellites through the TAB group contract. Piedmont is required to monitor and report annually.

III. CCTV INSPECTION

CCTV stands for closed-circuit television and is a method by which one can visually see the condition of an underground pipe. Special equipment and cameras are designed to enter the sanitary sewer system through manholes and other structures and televise and record the inspection in real-time as the camera operator moves the equipment through the desired length of pipe. Obstructions, pipe displacement, and other problems can be identified. The EPA has required that the city inspect 12.5% (1/8) of our entire system annually. Since we do not own the proper equipment to perform this compliance requirement, we hire sub-contractors that specialize in this work.

IV. INFLOW IDENTIFICATION

Inflow identification is a test that identifies leaks and illegal storm drain connections within the city's sanitary sewer piping system and includes private building sewer laterals all the way up to each individual home. Smoke is injected into the system and non-conformities will be identified by smoke rising in non-compliant locations. The EPA has required that Piedmont test 12.5% (1/8) of our entire system and report the results annually. Piedmont is under contract with a private consulting company that specializes in this work, and is providing this service to all of the satellites through the TAB group contract.

V. ROOT MITIGATION

Plant and tree root intrusion into the sanitary sewer system represents a major component in the type of obstruction that can lead to sewer blockages and overflows. This is particularly pronounced in the areas where the city still has the older vitrified clay pipe (VCP). This pipe is not seamless as it is manufactured in 6 foot lengths (or less) and therefore has multiple joints over a long run where displacements can occur and plant or tree roots can easily intrude into the pipe. The EPA, having recognized this weakness in older systems, requires that the city continually inspect, cut and clean out these roots, and then inject into the system, a foaming chemical that inhibits the growth of roots within the pipes. The city must hire a specialized sub-contractor to inject these chemicals. Eventually, the older pipes will be replaced with the new, seamless high density polyethylene (HDPE) type pipe, which will be substantially better at resisting this root intrusion. However, until the city completes its entire system, this cost will be a reality.

VI. MANHOLE REPAIR

Manholes are subject to degradation, thus providing compromised service entry points as well as a possible source of infiltration into the sanitary sewer system. The EPA requires that the city continually inspect and repair these manholes, at a minimum rate of 20 to 30 per year. Whenever the city performs a sewer rehabilitation project, it is required that the contractor repair all compromised manholes encountered under their contract, thus accelerating the number of inspected and services manholes beyond the EPA minimum.

VII. ENFORCEMENT

A. Smoke Testing

The EPA wants an assurance from the satellites that there will be adequate staff or contracted personnel to identify, enforce, and track compliance once the smoke-testing results are available. Costs are likely to rise due to the anticipated volume of work (worst case scenario) generated by the smoke testing.

B. Private Sewer Laterals

The EPA and EBMUD wants assurances from the satellites that there will be adequate staff or contracted personnel to identify, enforce and track compliance once the EBMUD PSL Regional Ordinance becomes effective.

VIII. MAINS REPLACEMENT

A. Required EPA Main Replacement

The EPA requires that the City of Piedmont have a program in place that continually replaces existing, older sewer main pipes, above and beyond that work completed under a specific sewer rehabilitation project, which is typically funded by loans from the CSWRCB. Therefore, this represents an out-of-pocket expense to the city that must be accounted for separately.

B. Emergency Repairs

The EPA requires that the City of Piedmont have sufficient funding for emergency repairs necessitated by sanitary sewer overflows that may occur during the year.

IX. HYDRAULIC MODELING

The EPA requires that the City of Piedmont pay for an independent consultant to establish baseline data to ensure that our sanitary sewer system has the sufficient capacity to handle the design flow. Since Piedmont is built-out, the design flow should be relatively unchanged since the last modeling occurred in 1986. However, because of the new compliance requirements, and because EBMUD is also under court order to provide their independent flow analysis to each agency, the City of Piedmont is again required to provide updated flow analysis as a comparator to the new EBMUD numbers.

X. EQUIPMENT

The EPA requires that the City of Piedmont possess the proper equipment to be able to service our sewer system as required by Administrative Order. Also, our ability to respond to sewer emergencies is their paramount concern. Piedmont is

the only agency of the 7 satellites that does not have a vactor/flusher combo truck. Thus, it was previously committed that the city would purchase this equipment in FY 13/14.

		<i>Estimated</i>	<i>Estimated</i>	<i>New Sewer Tax: 50% increase</i>																
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28		
Beginning Fund Balance	\$1,185,723	\$1,006,088	(\$653,367)	(\$1,045,536)	(\$1,414,508)	(\$608,100)	\$424,448	\$1,076,365	\$1,798,300	\$2,591,653	\$3,457,854	\$4,398,358	\$5,414,652	\$6,508,252	\$7,966,825	\$9,505,828	\$11,288,380	\$13,154,611		
Revenues																				
Interest	4,000	4,080	4,162	4,245	4,330	4,416	4,505	4,595	4,687	4,780	4,876	4,973	5,073	5,174	5,278	5,383	5,491	5,601		
Sewer Service Charges	2,080,000	2,111,200	2,153,424	3,294,739	3,360,633	3,427,846	3,496,403	3,566,331	3,637,658	3,710,411	3,784,619	3,860,312	3,937,518	4,016,268	4,096,593	4,178,525	4,262,096	4,347,338		
Phase IV loan proceeds	1,500,000																			
Phase V loan proceeds				4,400,000																
Phase VI loan proceeds						4,840,000														
Transfer from general fund	0																			
Sub-total: Revenues	3,584,000	2,115,280	2,157,586	7,698,984	3,364,963	8,272,262	3,500,908	3,570,926	3,642,344	3,715,191	3,789,495	3,865,285	3,942,591	4,021,443	4,101,871	4,183,909	4,267,587	4,352,939		
Expenditures																				
Operating costs	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000		
General sewer projects	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000		
EPA Compliance	450,000	961,100	591,200	1,009,400	600,000	600,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000		
Sewer Equipment Maintenance	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000		
Purchase of sewer equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sewer Rehabilitation: Phase IV	1,500,000																			
Sewer Rehabilitation: Phase V		1,000,000		4,000,000																
Sewer Rehabilitation: Phase VI				1,100,000		4,400,000														
Debt Services:																				
Phase I	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342						
Phase II	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780						
Phase III	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513		
Phase IV			144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920		
Phase V						281,160	281,160	281,160	281,160	281,160	281,160	281,160	281,160	281,160	281,160	281,160	281,160	281,160		
Phase VI							309,276	309,276	309,276	309,276	309,276	309,276	309,276	309,276	309,276	309,276	309,276	309,276		
Total Debt Service	447,635	447,635	592,555	592,555	592,555	873,715	1,182,991	1,182,991	1,182,991	1,182,991	1,182,991	1,182,991	1,182,991	896,869	896,869	735,356	735,356	735,356		
Sub-total: Expenditures	3,763,635	3,774,735	2,549,755	8,067,955	2,558,555	7,239,715	2,848,991	2,848,991	2,848,991	2,848,991	2,848,991	2,848,991	2,848,991	2,562,869	2,562,869	2,401,356	2,401,356	2,401,356		
Excess of Revenues over Expenditures	(179,635)	(1,659,455)	(392,169)	(368,971)	806,408	1,032,548	651,917	721,935	793,353	866,200	940,504	1,016,294	1,093,600	1,458,574	1,539,002	1,782,553	1,866,231	1,951,583		
Ending Fund Balance	\$1,006,088	(\$653,367)	(\$1,045,536)	(\$1,414,508)	(\$608,100)	\$424,448	\$1,076,365	\$1,798,300	\$2,591,653	\$3,457,854	\$4,398,358	\$5,414,652	\$6,508,252	\$7,966,825	\$9,505,828	\$11,288,380	\$13,154,611	\$15,106,194		

	Actual					Estimated		New Sewer Tax: 50% increase														
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Beginning Fund Balance	\$2,192,834	\$2,506,506	\$2,221,889	\$1,062,650	\$1,185,723	\$1,006,088	(\$294,167)	(\$430,016)	(\$804,588)	\$103,893	\$43,833	\$909,072	\$1,331,007	\$1,824,361	\$2,390,561	\$3,031,065	\$3,747,359	\$4,540,959	\$5,699,533	\$6,938,535	\$8,421,088	\$9,987,319
Revenues																						
Interest	115,186	111,676	46,378	9,061	4,000	4,080	4,162	4,245	4,330	4,416	4,505	4,595	4,687	4,780	4,876	4,973	5,073	5,174	5,278	5,383	5,491	5,601
Sewer Service Charges	1,742,853	1,746,076	1,808,081	2,021,332	2,080,000	2,111,200	2,153,424	3,294,739	3,360,633	3,427,846	3,496,403	3,566,331	3,637,658	3,710,411	3,784,619	3,860,312	3,937,518	4,016,268	4,096,593	4,178,525	4,262,096	4,347,338
Phase IV loan proceeds	0	0	0	623,473	1,500,000																	
Phase V loan proceeds							2,819,520															
Phase VI loan proceeds									3,104,640													
Phase VII loan proceeds										3,315,840												
Transfer from general fund	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total: Revenues	1,958,039	1,857,752	1,854,459	2,653,866	3,584,000	2,115,280	4,977,106	3,298,984	6,469,603	3,432,262	6,816,748	3,570,926	3,642,344	3,715,191	3,789,495	3,865,285	3,942,591	4,021,443	4,101,871	4,183,909	4,267,587	4,352,939
Expenditures																						
Operating costs	795,000	805,000	1,000,000	950,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
General sewer projects	349,735	758,569	1,291,491	472,017	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
EPA Compliance					450,000	961,100	591,200	1,009,400	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
Sewer Equipment Maintenance	7,407	33,553	60,686	70,821	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000
Purchase of sewer equipment	0	0	178,491	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sewer Rehabilitation: Phase IV	44,590	97,612	35,395	590,321	1,500,000																	
Sewer Rehabilitation: Phase V						640,800	2,563,200															
Sewer Rehabilitation: Phase VI								705,600	2,822,400													
Sewer Rehabilitation: Phase VII										753,600	3,014,400											
Debt Services:																						
Phase I	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342	144,342
Phase II	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780	141,780
Phase III	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513	161,513
Phase IV							144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920	144,920
Phase V								180,167	180,167	180,167	180,167	180,167	180,167	180,167	180,167	180,167	180,167	180,167	180,167	180,167	180,167	180,167
Phase VI										198,386	198,386	198,386	198,386	198,386	198,386	198,386	198,386	198,386	198,386	198,386	198,386	198,386
Phase VII											211,882	211,882	211,882	211,882	211,882	211,882	211,882	211,882	211,882	211,882	211,882	211,882
Total Debt Service	447,635	447,635	447,635	447,635	447,635	447,635	592,555	592,555	772,722	772,722	971,109	1,182,991	1,182,991	1,182,991	1,182,991	1,182,991	1,182,991	896,869	896,869	735,356	735,356	735,356
Sub-total: Expenditures	1,644,367	2,142,369	3,013,698	2,530,794	3,763,635	3,415,535	5,112,955	3,673,555	5,561,122	3,492,322	5,951,509	3,148,991	3,148,991	3,148,991	3,148,991	3,148,991	3,148,991	2,862,869	2,862,869	2,701,356	2,701,356	2,701,356
Excess of Revenues over Expenditures	313,672	(284,617)	(1,159,239)	123,072	(179,635)	(1,300,255)	(135,849)	(374,571)	908,481	(60,060)	865,239	421,935	493,353	566,200	640,504	716,294	793,600	1,158,574	1,239,002	1,482,553	1,566,231	1,651,583
Ending Fund Balance	\$2,506,506	\$2,221,889	\$1,062,650	\$1,185,722	\$1,006,088	(\$294,167)	(\$430,016)	(\$804,588)	\$103,893	\$43,833	\$909,072	\$1,331,007	\$1,824,361	\$2,390,561	\$3,031,065	\$3,747,359	\$4,540,959	\$5,699,533	\$6,938,535	\$8,421,088	\$9,987,319	\$11,638,902

This Page Intentionally Left Blank

**Sewer System
Management Plan**

for

City of Piedmont

Completed Date: August 2008
Revised Date: March 2011

By: Kourosh Iranpour
Deputy City Engineer

List of Major Changes from Previous Version

March 2011

<i>Description of Revision</i>	<i>Page</i>
Revised text under Section “iii. Legal Authority” due to recently revised sewer code	6
Revised Table 1 due to recent rehabilitation work	7
Revised text under “Replacement Program” due to recent rehabilitation work	13
Included date for recently completed rehabilitation work and revised text to reflect the changes	15
Revised Table 10 due to recently completed rehabilitation work	17
Included CWEA certification of the City maintenance staff under Section “f. Training”	19
Revised text under Section “vii. Fats, Oils, and Grease (FOG) Control Program” based on recent agreement with EBMUD	26
Revised percentage of plastic pipes under Section “b. System Evaluation and Capacity Assurance Plan” due to recently completed rehabilitation work	28
Revised Building Sewer Code	Appendix A
Revised Sanitary Sewer Rehabilitation Program Map to reflect recent rehabilitation work	Appendix C

TABLE OF CONTENTS

	PAGE
INTRODUCTION.....	1
SYSTEM OVERVIEW	1
(i) GOALS	3
(ii) ORGANIZATION	4
(iii) LEGAL AUTHORITY	6
(iv) OPERATION AND MAINTENANCE	7
a. Collection System Map.....	7
b. Resources and Budget.....	8
c. Prioritized Preventive Maintenance.....	10
d. Schedule Inspection and Condition Assessment	15
e. Contingency Equipment and Replacement Inventories.....	18
f. Training	19
g. Outreach to Plumbers and Building Contractors.....	19
(v) DESIGN AND PERFORMANCE PROVISIONS	20
a. Standards for Installation, Rehabilitation and Repair.....	20
b. Inspection and Testing of New and Rehabilitated Facilities.....	20
(vi) OVERFLOW EMERGENCY RESPONSE PLAN.....	21
(vii). FATS, OIL, AND GREASE (FOG) CONTROL PROGRAM	26
(viii) SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN.....	27
a. Capacity Assessment.....	27
b. System Evaluation and Capacity Assurance Plan	28
(ix) MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS.....	29
(x) SSMP AUDIT	30
(xi) COMMUNICATIONS.....	31

APPENDICES

APPENDIX “A” - CITY’S BUILDING SEWERS CODE

**APPENDIX “B” – LEGAL AUTHORITY TO ACCESS CITY SEWERS ON
PRIVATE PROPERTY**

APPENDIX “C” - SANITARY SEWER REHABILITATION PROGRAM MAP

**APPENDIX “D” - SSO REPORTING – SWRCB MONITORING AND REPORTING
REQUIREMENTS-ORDER NO. WQ 2008-2002-EXEC**

APPENDIX “E” - SSMP AUDIT FORM

Sewer System Management Plan (SSMP)

INTRODUCTION

In 2004, the SFRWQCB indicated its intent to implement new regulations to uniformly monitor sanitary sewer overflows. Also envisioned was some type of collection system planning document, which all agencies would be required to produce.

The Bay Area Clean Water Agencies (BACWA), with a broad base of collection system management experience, elected to work collectively with the Regional Board to develop a system which would meet the needs of the Regulators while retaining a common sense approach to the practicalities of managing collection systems. The BACWA collections sub-committee was charged with developing core details of the plan, which had to be negotiated with the SFRWQB. Although the resulting SSMP is not perfect, but was acceptable to both parties.

The City had developed a Sanitary Sewer Maintenance Manual and implemented numerous processes intended to better manage its collection system. The City has now incorporated the contents of this document and its current practices into the SSMP.

SYSTEM OVERVIEW

The City of Piedmont currently comprises approximately 1.7 square miles of residential and minor commercial land use. The wastewater generated within the City is collected in approximately 50 miles of sanitary sewer pipelines, 6 to 18 inches in diameter, built mainly between the years of 1900 to 1940. Collected wastewater is discharged through the City of Oakland to the East Bay Municipal Utility District (EBMUD) Special District No. 1 (District) interceptor, where the interceptor transports the flows to the EBMUD Water Pollution Control Plant (WPCP). After providing secondary treatment, the WPCP discharges through a submerged outfall into the San Francisco Bay.

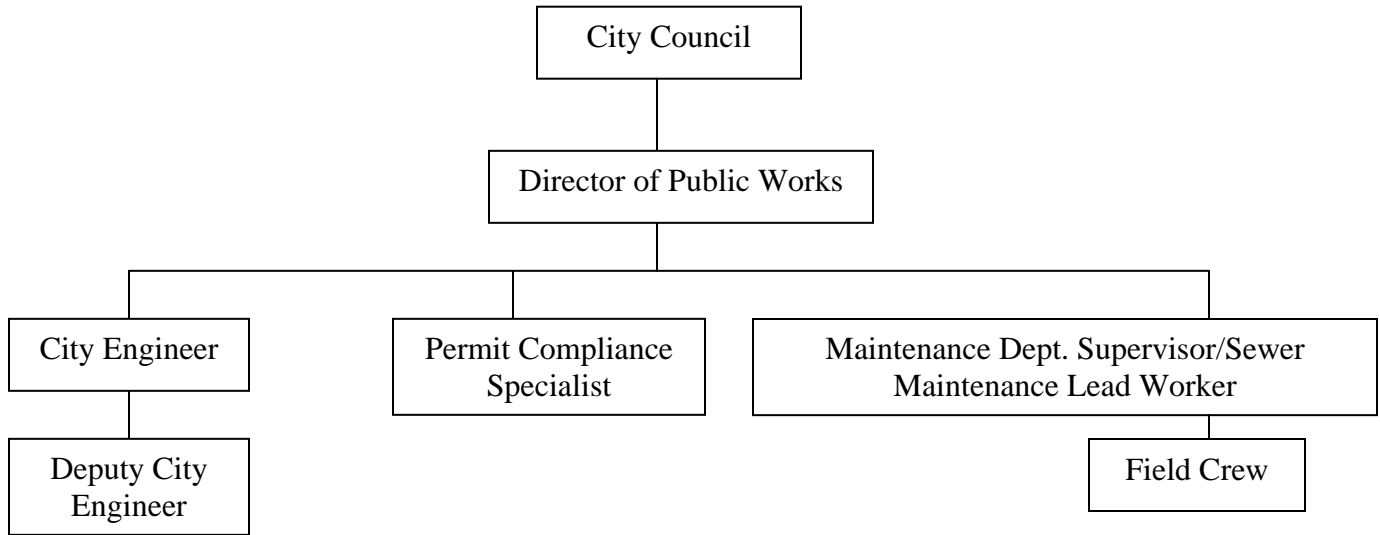
In 1975, the California Regional Water Quality Control Board (CRWQCB) adopted a Water Quality Control Plan for the San Francisco Bay Basin that recommended regulating discharges from wet weather diversions and overflows for a 5 year storm event. The District and local communities coordinated efforts to resolve the problems of wet weather overflows and diversions, in response to the Regional Board requirements. This coordination effort resulted in the adoption of an Infiltration/Inflow (I/I) Reduction Compliance Plan for each community involved.

In 1986, an infiltration/inflow study was conducted on the sanitary sewer system for the City of Piedmont. Based on the study's findings, nine (9) of the City's twenty-two (22) sub-basins were recommended for rehabilitation. The City completed rehabilitation of these sub-basins along with the lower laterals located in public right-of-way in 2005, which accounts for approximately half of the sewer lines within the City

(i) GOALS

- o Continue to professionally manage, operate and maintain all parts of the wastewater collection system
- o Minimize the frequency of SSO's
- o Mitigate the impact of SSOs
- o Update the SSMP regularly

(ii) ORGANIZATION



Director of Public Works (DPW) – Ensures that the staff has the resources necessary to perform services, plans strategy, leads staff, delegates responsibility, authorizes outside contractors to perform services, arranges for emergency Council meeting if necessary, is also public information officer.

City Engineer – Reviews and approves construction and repair plans.

Deputy City Engineer – Assist the City Engineer with plan review and approval, manages capital improvement delivery system; documents new and rehabilitated assets; and coordinates development and implementation of SSMP. He is also the designated Legally Responsible Official (LRO) in charge of overseeing the reporting process.

Permit Compliance Specialist – Works as needed on applicable permits, laws, and regulations; provides support to all parts of operation.

Maintenance Supervisor/Sewer Maintenance Lead Worker – Manages field operations and maintenance activities, provides verbal report to DPW to ensure that he has adequate information to address service related problems on a timely basis, leads emergency response, evaluates situation and plan strategy with DPW, reviews and approves SSO reports prior to transmittal to the appropriate authorities, investigate SSOs, and trains field crews.

Field Crew – Implements emergency response and documents SSO’s for reporting, mobilizes sewer cleaning trucks, by-pass equipment, and other field related work.

Service Calls — The maintenance department is open Monday through Friday, 7:00 a.m. to 3:30 p.m. and all service calls are referred directly to the Maintenance Supervisor or public works department. The City uses an after-hours 24-hour dispatch to take emergency calls at the Police Department. The service then relays the message to the duty

operator by telephone (land line or mobile). The duty operator makes a determination about the emergency, and, if necessary, summons the standby personnel and/or Maintenance Supervisor. Additional help will then be summoned as needed. The supervisor and standby collection worker are each furnished with a City truck and cell phone.

The Maintenance Supervisor/Sewer Maintenance Lead Worker reviews and approves every SSO report prepared by the field crew and ensures that the reports are forwarded to appropriate regulators on a timely basis.

(iii) LEGAL AUTHORITY

Discharges to the wastewater collection system are regulated by the City of Piedmont and EBMUD. EBMUD has adopted a useful ordinance that prohibits discharge of toxic or hazardous wastes, allows the District to monitor discharges, requires industrial discharges to obtain discharge permits and pay user fees in proportion to the amount and strength of their discharge, and prohibits discharge of stormwater inflows. The ordinance sets requirements that are primarily concerned with the District's wastewater treatment facilities.

The City of Piedmont's present ordinance governing sewer is in Chapter 17A of the city code (included in Appendix A). The ordinance deals primarily with the wastewater collection system. On February 7, 2011, the City Council approved a second reading of Ord. 697 N.S., amending Chapter 17A of the Piedmont Municipal Code regarding sewer, included in which is the adoption of East Bay Municipal Utility District's Regional Private Sewer Lateral Ordinance (EBMUD Ord. 311, Title VIII). The Ordinance became effective as of March 7, 2011.

Section 17A.8 makes the private property owner responsible for the repair and maintenance of the entire building sewer, including the connection to the sewer main. Section 17A.8f gives the private property owner 48 hours after notification by the City to make all emergency repairs. If the repairs are not completed in 48 hours, the City shall have the right to make or have made the necessary repairs and recover said costs as authorized by the Sewer Code.

The City of Piedmont is able to access sewers located on private property for repairs, maintenance or reconstruction based on a series of legal means, as indicated in the City Attorney Memorandum, dated March 14, 2007 (included in Appendix B).

(iv) OPERATIONS AND MAINTENANCE

a. Collection System Map

The City has hard copy maps of the sewer system that is available for use by the staff and contractors. A copy of this map, showing the City’s entire sewer system, is posted on the wall at the corporation yard, which the staff uses for reference and identifying problem areas. This map is updated electronically as the sewer rehabilitation projects are completed and is used as a planning tool for the yearly Capital Improvement Program. Additionally, the maintenance staff marks the problem areas (known as hot spots) on this map so that they can plan activities, programs and policies that would eliminate the cause of the problem.

The City of Piedmont has a fully functional Geographic Information System (GIS) using ESRI ArcGIS software, which was implemented in 1994, consisting of multiple layers from all City departments. The sewer layer was created in 2001 and has been updated upon completion of each sub-basin of the city’s capital improvement project. The City updates the sewer layer based on routine maintenance performed throughout the year. In addition, the City is using system inventory software which meets the requirements for sanitary sewer systems and associated monitoring and reporting. Data entered into the system are linked to the city's Geographic Information System.

Collection System Characteristics by Pipe Material - The sanitary sewer system for the City presently consists of approximately 50 miles of sewer mains, with about an equal length of house laterals (serving an estimated 3,800 buildings) comprising the total wastewater collection system. The public sewer lines vary between 6 and 18 inches in diameter. Since year 2000, the City has rehabilitated approximately 60% (including emergency repairs) of the existing sewer mains with plastic pipe. The remaining branch and trunk sewers in the city are constructed of vitrified clay pipe. A few segments have been constructed of other materials such as Ductile Iron (DI) and Concrete Pipes (CP). A breakdown of pipe lengths and percentages by material is shown in Table 1.

Table 1. Percentage of Pipe by Materials

PIPE MATERIAL	PIPE LENGTH (MI.)	PERCENTAGE
Vitrified Clay	18.50	37%
Plastic	31.00	62%
Misc. (DI, CP)	0.50	1%
TOTAL	49.50	100%

The Piedmont service area comprises 1,120 acres of sloping terrain in the Oakland hills. Land use is primarily residential with minor commercial activity. The population served has varies between 10,000 and 12,000 people over the last 50 years.

Conveyance - The City of Piedmont is located in the Lake Merritt/Piedmont Basin (Basin 54) of the East Bay Municipal Utility District (EBMUD) Special District No. 1 (District) service area. Piedmont’s collection system does not tie directly into the EBMUD interceptor system. Instead, in accordance with an 1895 agreement between the Cities of Oakland and Piedmont, wastewater from Piedmont is discharged into the Oakland Collection system through seven points located along the southern city limits. It then goes to the EBMUD south interceptor at Embarcadero East near 5th Avenue and from there is conveyed by gravity to the District’s treatment plant.

In addition, flow from approximately 220 acres (80,000 linear feet of sewers) in Oakland and northeast of Piedmont is conveyed through the City of Piedmont’s collection system.

b. Resources and Budget

The City generates approximately \$1.80 million through its sewer tax that covers the cost of sewer related operations, maintenance and general sewer projects. This budget also covers the reimbursement of the SRF loan that the City has used and will continue to use to fund its sanitary sewer capital improvement projects.

The 09-10 sewer fund below represent the typical annual sewer related expenditures and revenue.

Current Income

The City of Piedmont is a City charter city created under the laws of the State of California. The City derives the majority of its income via a levy of a user charge to its customers. The user charge is comprised of a fixed “connection” fee component and a large user component based on lot size and which correlates with water usage.

Table 2. City Income

PROJECTED INCOME (2009-2010)

<u>Income Source</u>	<u>Estimated Amount</u> <u>(Dollars)</u>
Sewer Service (User) Charges	\$2,100,00
Interest Earned	50,000
Contributed or Borrowed Capital	-
State Revolving Loan Fund	-
EPA Grant Funds	-
Total Income (2009-10)	\$2,150,000

Income reflected from the user charges. The City anticipates annually increases in rates based upon CPI.

Current Expenditures

Expenditures of the City are classified as Labor, Materials and Equipment Maintenance, Administration and Overhead and Capital.

Table 3 below shows the projected planned expenditures which exclude maintenance capital expenditures:

Table 3. City Expenses

PROJECTED CITY EXPENSES (2009-2010)	
<u>Expenses</u>	<u>Estimated Amount (Dollars)</u>
Salaries & Wages	\$ 360,000
Material & Maintenance	80,000
Administration & Overhead	190,000
Capital Outlay/Contract Service	0
Sanitary Sewer/Trash Disposal	<u>250,000</u>
Total Expenses (2009-10)	\$ 880,000
SRF Debt Service - Phases I-III (Existing)	<u>447,635</u>
Total	<u>\$1,327,635</u>

Outstanding Long-Term Indebtedness

Other than State Revolving Loans for Phases I-III, the City has no long-term indebtedness to be paid from the Special Municipal Sewer Tax.

c. Prioritized Preventive Maintenance

The recommended preventive maintenance program consists of the following three components:

1. Operations and Repairs – The work performed continuously, including administration, emergency repairs, major repairs, TV inspection, root control, and rodent control.

2. Periodic Line Maintenance – The intermittent activities of cleaning, testing, and inspecting the lines and performing minor rehabilitation as necessary.
3. Replacement Program– The pre-scheduled replacement of the most deteriorated sub-basins.

The recommended program should cost-effectively keep I/I at levels associated with a well-maintained system, maintain the structural integrity of the collection system, reduce operation, maintenance, rehabilitation, and replacement costs, and protect public health. Table 4 lists the components of the recommended long-term preventive maintenance program; each component is discussed in the following sections of the manual.

Table 4. Recommended Frequencies for Preventive Maintenance Program Activities

	Activity	Frequency
1.	Operations, repairs and minor rehabilitation (including administration, root and rodent control, emergency and major repairs)	Continuous
2.	Periodic line maintenance: a. Cleaning b. Manhole inspection c. TV inspection d. Root Treatment	4-year cycle Continuous 8-year cycle As determined by TV inspection and cleaning
3.	Sewer replacement	Emergency lines and CIP

OPERATIONS, REPAIRS AND MINOR REHABILITATION

Operations and repairs, which includes administration, emergency and major repairs, and control of roots, encompasses most of the City’s existing program of sewer system operation and maintenance except line cleaning (which would be part of the periodic line maintenance portion of the recommended preventive maintenance program). These essential activities are performed every year throughout the year. Each year, construction and maintenance records, supplemented by TV inspection results from the periodic line maintenance program, are used to determine the main lines that show serious structural damage. These lines are replaced by pipe bursting or spot repaired as appropriate.

PERIODIC LINE MAINTENANCE

The periodic line maintenance portion of the preventive maintenance program includes periodic cleaning, building inspection, manhole inspection and television inspection.

Cleaning

Sewer lines in the collection system are cleaned at least once every four years to reduce blockage frequency and increase flow capacity. Typically sewer lines are selected for cleaning based on CCTV inspection. Line segments that maintenance records show to have required frequent cleaning of blockages (from accumulated debris, grease, and roots) are cleaned more often.

Manhole Inspection

Manhole inspection is performed as an ancillary step whenever a manhole is opened or entered for cleaning, TV inspection, or other reasons. A crew member would record any structural problems or evidence of infiltration/inflow on the standard manhole inspection form.

Television Inspection

TV inspection of sewer pipes can be effectively employed for evaluating the condition of existing sewer mains and locating sewer laterals prior to final design of major sewer repairs. TV inspection is also used for routine inspection of the entire collection system as part of the preventive maintenance program.

In an attempt to program the future sewer rehabilitation projects, the City embarked on an aggressive CCTV inspection study on the nine (9) sub-basins which had not yet been rehabilitated or scheduled to be rehabilitated. This work was completed in December of 2008. This study inspected 99,000 feet of sewer mains, which encompasses approximately 41% of the entire city's sewer system.

The purpose of this study was to present evaluation of the existing sewer system based on video inspection and offer recommendations for how to address the nine sub-basins not yet programmed for rehabilitation. This study evaluated each individual sewer line run within the 9 sub-basins. It then made recommendations based on videotape observations according to a pre-established grading system.

In general, the City's maintenance schedule calls for all mains to be internally inspected with a television camera every 8 years (about 32,500 linear feet of main a year). Television inspection of lines needing frequent emergency maintenance because of backups and overflows may show that the problem is serious line deterioration or root growth. Any main lines (including manholes) that are found to have serious structural problems will be added to the major repair list. The City staff performs the routine TV inspection. However, to meet the maintenance schedule for CCTV inspection and allow the City personnel to focus on other pressing tasks, the majority of the CCTV work is outsourced.

Root Treatment

Another maintenance effort involves the removal of tree roots from sanitary sewers. Tree roots can be a real menace, damaging sewers and causing sewers to plug. Tree roots seek the moisture and nutrients offered by leaky pipe joints usually found in the older and often broken sewer pipes

City of piedmont currently controls roots by applying a herbicide foam from within the sanitary sewer which kills the roots in a confined area, within and around, the sanitary sewer. The herbicide is effective in killing the problem roots and is not harmful to the tree. It should be noted that the foam used by the City is approved by the EPA as an acceptable root control product which does not interfere with wastewater treatment processes.

In general, sewer lines are selected for foaming on an as-needed- basis as determined by TV inspection and sewer cleaning. Line segments that maintenance records show to have frequent root problems are cleaned more frequently, as merited.

REPLACEMENT PROGRAM

As a sewer line ages, it gradually deteriorates from wear and tear, root intrusion, corrosion, and other physical and chemical processes. Repair or rehabilitation of an older, more deteriorated sewer can be very expensive. When it becomes more cost-effective to replace a sewer than to repair it or to ignore the problems resulting from its deterioration, the sewer's useful life is ended. Under environmental and operational conditions similar to those of the city collection system, most sewers have a useful life of up to 70 years. At the end of its useful life, the sewer line should be replaced. Sewer mains in Piedmont, which have not been rehabilitated as part of the I/I Reduction Compliance Plan, are reaching their useful service life and should be considered for replacement.

As stated earlier in this report and shown in Table 10, the current I/I correction program for the City of Piedmont was completed in July of 2005. This program rehabilitated 9 of the City's 22 sub-basins. The City recently completed the construction of 4 additional sub-basins (phase IV) in December 2010. The remaining 9 sub-basins will go through a multi-phase program that encompasses rehabilitating the remaining approximately 143,000 feet of sewer mains and associated lower laterals.

Table 5 shows the priority list for the remaining 9 sub-basins as determined by the CCTV inspection study beginning with projects posing the highest public health threat an ending with those with the lowest threat to the public.

Once the replacement program is complete, the City will establish a cyclic replacement program for the most deteriorated sewer mains as determined by the periodic inspection.

Table 5: Sub-basin Priority List

Subbasin	Priority Rank
Emergency	1
W3	2
W2	3
V1	4
H1	5
G6	6
P1	7
G7	8
W6	9
G2	10

The first priority is to rehabilitate the “emergency” lines, which include any pipe segments with a break, collapse or major hole. Table 6 shows the estimated cost of rehabilitating the emergency lines and each subbasin. The lengths shown reflect only pipes to be rehabilitated. Emergency lines were deducted from each subbasin length.

Table 6: Estimated Rehabilitation Costs for Remaining Sub-basins

RECOMMENDED PRIORITY	SUB-BASIN	UNIT COST/LF	LF	ESTIMATED TOTAL CONSTRUCTION COSTS*
1	Emergency	\$100*	21,000	\$2,100,000
2	W3		5,700	\$570,000
3	W2		5,000	\$500,000
4	V1		7,900	\$790,000
5	H1		6,800	\$680,000
6	G6		7,000	\$700,000
7	P1		2,700	\$270,000
8	G7		14,700	\$1,470,000
9	W6		10,400	\$1,040,000
10	G2		6,300	\$630,000
TOTAL:			87,500	\$8,750,000

* Average unit cost includes construction only

With a projected construction budget of \$3.0 million per phase, it will take the City approximately three more phases to complete rehabilitation of the existing sanitary sewer system. As stated earlier in this report, phase IV (sub-basins G3, G5, N2, and T2) of the

program was completed in 2010. Our proposed schedule for rehabilitation can be seen in Table 7 below.

Table 7: Recommended schedule for rehabilitating the remaining subbasins.

Phase	Subbasins	Estimated Construction Cost	Estimated Total Cost*
V	Emergency and W3	\$2,670,000	\$3,204,000
VI	W2, V1, H1, G6 and P1	\$2,940,000	\$3,528,000
VII	G7, W6 and G2	\$3,140,000	\$3,768,000

* Total cost includes planning, design, construction, administration, construction management and inspection

d. Schedule Inspection and Condition Assessment

A typical schedule of the recommended preventive maintenance program over several decades is shown on Table 8, which incorporates the frequencies for each activity discussed above and listed in Table 4. To facilitate maintenance activity scheduling, the maintenance history and schedules are recorded and stored.

Table 8. Typical Maintenance Schedule

Activity	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Operations and repairs (including administration, root control, emergency and major repairs)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2. Periodic line maintenance:																									
a. Cleaning	X				X				X				X				X				X				X
b. TV inspection and minor rehabilitation	X								X								X								X
c. Manhole inspection	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3. Replacement program	X			X			X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Table 9 shows, for the entire collection system, the months of the year which each of the maintenance tasks should typically be performed.

Priority for maintenance is given to sub-basins with sewer mains in poor condition and will change accordingly as the sub-basins are rehabilitated. As shown in Table 10, thirteen of the twenty-two sub-basins have been rehabilitated. These thirteen sub-basins, which were at the top of the list, have moved to the bottom of the list because of their recently finished

or scheduled maintenance. Similarly, as the sub-basins at the top of the list are rehabilitated, they will move to the bottom of the maintenance cycle.

Table 9. Seasonal Schedule of Preventive Maintenance Activities

	Activity	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.	Operations and repairs (including administration, root and rodent control, emergency and major repairs)	X	X	X	X	X	X	X	X	X	X	X	X
2.	Periodic line maintenance												
	a. Cleaning	X	X	X	X	X	X	X	X	X	X	X	X
	b. Manhole inspection	X	X	X	X	X	X	X	X	X	X	X	X
	c. TV inspection			X	X	X	X	X	X	X	X		
	d. Root Treatment					X	X	X	X	X	X		
3.	Sewer replacement				X	X	X	X	X	X	X		

Collection System Short Term Rehabilitation Plan

Lines selected for immediate repair or replacements are generally the ones that are identified during routine inspection, which may potentially pose an imminent service disruption or a sinkhole. Pipelines requiring frequent maintenance such as root intrusion and sags are given secondary priority for replacement. The City uses several long-standing contractors for emergency repairs.

Collection System Long Term Rehabilitation Plan

As stated earlier in this report and shown in Table 10 below, thirteen (13) of the City's twenty-two (22) sub-basins have been rehabilitated. As described earlier, the City has an in-house plan to rehabilitate the remaining sub-basins by 2020.

Summary of Sewer Work Completed

The following Table summarizes sewer work completed to date and the color coded map included in Appendix C shows the sub-basins for which the described work was completed. It should be noted that the length of sewer mains were taken from the 1986 SSES report for consistency and simplicity. The actual footage of sewer mains within the sub-basins varies slightly from those indicated in the report.

Table 10: Summary of Sewer Work Completed to date

DESCRIPTION OF WORK	SUB-BASIN	Program Year	LENGTH OF SEWER MAINS WITHIN SUB-BASIN (FT)	PERCENT COMPLETED
CONSTRUCTION COMPLETED				
	G1	1995	21,000	
Phase I SS Program	G4	2001-2002	11,800	
Phase I SS Program	W1A	2001-2002	31,800	
Phase II SS Program	W1B	2003-2004		
Phase II SS Program	F1	2003-2004	6,160	
Phase II SS Program	W7	2003-2004	2,360	
Phase II SS Program	N1	2003-2004	7,500	
Phase II SS Program	W4	2003-2004	11,400	
Phase III SS Program	W5	2004-2005	11,500	
Phase III SS Program	T1	2004-2005	22,250	
Phase IV SS Program	G3	2009-2010	10,600	
Phase IV SS Program	G5	2009-2010	11,000	
Phase IV SS Program	N2	2009-2010	5,260	
Phase IV SS Program	T2	2009-2010	6,540	
		Subtotal:	159,170	59%
CCTV INSPECTION COMPLETED – TO BE REHABILITATED				
	G6	TBD	12,600	
	V1	TBD	16,560	
	G2	TBD	8,800	
	G7	TBD	22,830	
	W2	TBD	7,170	
	H1	TBD	11,300	
	W6	TBD	13,410	
	W3	TBD	9,480	
	P1	TBD	7,500	
		Subtotal:	109,650	41%
		TOTAL:	268,820	100%

e. Contingency Equipment and Replacement Inventories

The City maintains its collection system with a supervisor/manager and a crew of four. They currently utilize the following equipment for repair and maintenance purposes:

- o 2001 Sreco HS Continuous Rodding Machine for sewer cleaning and servicing maintenance. Cleaning method for root and grease removal cutting heavy material from sanitary sewer lines.
- o 2005 Sreco Hydro flusher Truck Jet 800-HPR Series II used for sewer cleaning and servicing Maintenance Cleaning Method cutting and removing hard deposits encrusted at the wall of sewer pipe. High pressure jetting for penetrating through mud, sand and various sediments and loosening hard debris. (80 gallons of water per minute at 2000 psi).
- o 1995 Sreco Hydro flusher truck jet 800-H used for sewer cleaning and servicing maintenance cleaning method cutting and removing hard deposits encrusted at the wall of sewer pipes High pressure jetting for penetrating through mud sand and various sediments and loosening hard debris (65 gallons of water per minute at 2000 psi)
- o Spartan Heavy Duty Electric power cable Machine Model 1065. Ideal for medium & heavy duty jobs used for sewer cleaning and servicing maintenance cleaning method for root and grease removal.
- o Gator Cam System provides a means of viewing video taping the internal condition of pipes recording functions and accurate camera location and depth measurements are made possible with the Gator can video locator. 200th location cable.
- o Two backhoes: 1) Case (yr 1986) 580K, 2) Case (yr 1999) 580 Super L. Both pieces of equipment are available for any and all emergency sewer repairs.
- o Four pumps: 1) Dominator Submersible Sewage pump 115Volt., 2) Tsunami 110Volt pump (x2), 3) Honda WT30X Trash pump, 4) Wacker PT3 Trash pump. All pumps are stored in a central location with all essential quick connect couplings and lengths of hoses.
- o Six generators: 1) Honda EX1000 120Volt Gas Generator, 2) Honda Inverter 1000 120Volt Gas Generator, 3) Honda EM5000S 120-240Volt Gas Generator, 4) Honda ES4500 115-230Volt Gas Generator, 5) Wacker G3000 115-230Volt Mixed Fuel Generator, Honda EU Inverter 2000i V Gas Generator. All generators are stored in a central location.

- o Pearpoint P300+ flexiprobe system provides advanced pipeline video inspection. It records up to 1 hour and 45 minutes of video, with 2 gigabyte.
- o 2003 Dodge 3500 flat bed truck. Emergency response vehicle for sanitary sewer overflows. This vehicle is equipped with, gas generators, pumps, hoses, pipe plugs, appropriate signage, lighting, air compressor, PPE's, hooks and other misc equipment needed to deal with SSOs.

For the City, keeping critical replacement parts available encompasses stocking spare pumps that can be used as replacements while pumps are serviced or replaced. In addition to small tools, the City also has a backup flusher and backhoe for emergency situations.

f. Training

The City staff regularly attends workshops on various sewer related issues. Additionally, the field crew participates in cross training exercises with other sanitation agencies on an as-needed basis. The four collection system personnel have 15 or more years of service with the City and participate in vendor-sponsored trainings on a regular basis. The City staff also attends the Bay Area Clean Water Agencies (BACWA) Collection Systems Committee meetings where sewer related issues and challenges are discussed and ideas are exchanged. All City maintenance staff is CWEA certified.

As a result of the Infiltration/Inflow Correction Program (ICP), the East Bay communities including Piedmont and East Bay Municipal Utility District (EBMUD) entered into a Joint Powers Agreement to study and develop a plan for addressing I/I in the communities' collection system. The community members (Satellite agencies) and EBMUD formed a committee Called Technical Advisory Board (TAB) that meets quarterly. The Satellite agencies also formed a committee called East Bay Collection System Advisory Committee (EBCSAC) that meets monthly.

g. Outreach to Plumbers and Building Contractors

The City is using a flyer, which is given to contractors when they apply for a permit, to inform sewer contractors and plumbers about the impacts of SSO's and offers free assistance to help clear root balls, grease blockages and other debris from a main sewer line or to open a manhole in the City's service area. The format and text of the flyer was prepared by the Bay Area Clean Water Agencies (BACWA) and Bay Area Pollution Prevention Group (BAPPG) and was customized for the City.

(v) DESIGN AND PERFORMANCE STANDARDS

a. Standards for Installation, Rehabilitation and Repair

To minimize I/I and lower the long-term costs of operating the wastewater collection system, all relief, rehabilitation and replacement work must be performed to proper standards. The City maintains a newly revised Design Standards, which are required for both new installations and replacement facilities. These standard plans are available to contractors and citizens at no charge. For details not included in the City standards, the latest edition of the Standard Plans for Public Works Construction is used. The latest edition of the Standard Specifications for Public Works Construction “the Greenbook” has been adopted as the standards for sewer and other public works construction specifications.

b. Inspection and Testing of New and Rehabilitated Facilities

The City retains the services of outside consultants for inspection of new construction. The inspector insures that all construction meets City standards and codes. All sewers constructed by outside contractors are pressure cleaned, tested and video inspected before acceptance.

(vi) OVERFLOW EMERGENCY RESPONSE PLAN

PURPOSE: To provide guidance to maintenance crew personnel when servicing an overflow of the collection system.

SCOPE: This procedure is applicable to all overflows of the sewage collection system.

DEFINITIONS: Overflow or spill: Any condition of sewage emitted or discharged from the collection system to the surrounding environment that is caused by a problem in the City’s main lines. A major sewage overflow is defined as any overflow which exceeds 1,000 gallons or which is of sufficient quantity and in a location such that it poses a threat to public health or the environment.

RESPONSIBILITY: The Collection System Supervisor (Supervisor) is responsible for carrying out this procedure. When the Supervisor is not available, a Collection System Worker shall assume the responsibility to carry out this procedure and to direct the efforts of the maintenance crew. One of these individuals (Supervisor or Worker) is responsible for reporting to regulatory agencies.

PROCEDURE: This procedure is to be followed by City field maintenance personnel when servicing an overflow of the collection system.

I. REPORTING

A. Overflows shall be reported in accordance with the requirements of the State of California State Water Resources Control Board, Order No. WQ 2008-0002-EXEC (included in Appendix D).

1. Emergency Reporting. If the overflow is a Category 1, the following telephone calls are required within 2 hours of a sewage spill or release: The State Office of Emergency Services (OES) (1-800-852-7550 or 916-845-8911) and the Alameda County Department of Environmental Health (510-567-6700) and the Regional Water Quality Control Board (510-622-2369).
2. Internal Reporting. The Lead Worker, or any Collection System Worker if the Lead Worker is not present, is responsible for reporting any major overflows immediately to the Maintenance Supervisor, or Lead Worker. They in turn will make the appropriate reports.

An “Overflow Report” form should be completed and provided to the Supervisor after field response to a spill is completed. The Supervisor will then follow the Overflow Response Actions Procedures described herein.

II. RESPONSE

A. Major Overflows

1. Clean Up Response and Warning Sign Posting - Dry Weather Conditions:
 - a. Identify yourself to the property owner who called for service, if applicable, and briefly explain what you will be doing.
 - b. Identify problem (take digital photos and/or video to document flow) and restore flow (if this takes longer than 30 minutes, call for assistance).
 - c. Report spill as required, to Supervisor or Lead Worker (they will notify appropriate agencies).
 - d. Contain spill (call for assistance if needed):
 - 1) Build dike with hay bales or sandbags and plastic sheeting;
 - 2) Build earthen berm;
 - 3) Use pipe plug to plug storm drain/use plastic sheet over inlet to stop flow.
 - e. Take digital photos to document conditions for follow-up investigation.
 - f. Report back to property owner and deal with their concerns (possibility of property damage).
 - g. Warning Signs: Signs warning the public of a sewage release should be posted in the affected area. Signs should include, at a minimum, the wording of “raw sewage”.
 - h. Warning Sign Removal: In critical areas such as creeks and parks, warning signs should remain posted until County Health or Regional Board staff authorize their removal, and until receiving water sample results indicate background levels (levels as determined by upstream samples) have been attained.
 - i. Cleanup Flushing: The affected area should be flushed with clean water. All flush water should be contained and subsequently pumped to the nearest sanitary sewer or removed by vactor truck. Cleanup flushing should be done only with clean, dechlorinated water. Disinfectants should NOT be used due to their toxicity to fish and wildlife.
 - j. Receiving Water Sampling: If the spill or overflow volume exceeds 10,000 gallons, or in incidents where sewage flows into storm drains and/or surface water, sampling should be conducted for Dissolved Oxygen, and Un-ionized Ammonia as soon as possible to insure that the following limits are not violated:

- (1) Dissolved Oxygen: 5.0 mg/L, minimum
- (2) Un-ionized ammonia: 0.16 mg/L as N, maximum

The sampling services are currently contracted with EBMUD.

- k. Return spilled sewage to collection system for treatment, when possible.
 - l. Clean up affected area:
 - 1) Remove all signs of gross pollution (solids, toilet paper, grease, etc.);
 - 2) Flush areas with dechlorinated potable water (use three times volume of overflow); all flush water should be contained and subsequently pumped to the nearest sanitary sewer or removed by vector truck;
 - 3) Apply deodorizer after flushing and only in incidents where this material will not cause further pollution. Disinfectants should NOT be used due to their toxicity to fish and wildlife.
 - m. Follow up:
 - 1) Investigate cause of spill:
 - 2) Add line segment to cleaning schedule, change frequency, or change cleaning method;
 - 3) Add notes as needed to cleaning schedule;
 - 4) Inspect by video camera and re-run as needed;
 - 5) Report on the need for any correction measures;
 - 6) Repair or replace line segment;
 - 7) Reinstate the line to normal maintenance.
 - n. Complete follow-up contacts and service to property owner(s).
 - o. Conduct debriefs to evaluate response.
 - p. Implement needed changes and improvements.
2. Wet Weather Conditions: The response cleanup and warning sign posting procedures given above for Dry Weather Conditions should be followed, except that steps i and j (Flushing and Sampling) may be omitted if storm waters are high and sampling is impractical.

B. Minor Overflows: (Overflow at manhole/lateral less than 1,000 gallons, no environmental impact, limited potential for human contact.)

1. Identify yourself to property owner who called for service, if applicable, and briefly explain what you will be doing.
2. Identify problem (take digital photos and/or videos to document flow) and restore service (if this takes longer than 30 minutes, call for assistance).
3. If the problem is in the private lateral, inform property owner and respond to their questions.
4. Contain spill and return contained flow to collection system for treatment, when possible.
5. Clean up affected area:
 - a. Remove all signs of gross pollution (solids, toilet paper, grease, etc.);
 - b. Flush areas with dechlorinated potable water (use approximately three times volume of overflow); all flush water should be contained and subsequently pumped to the nearest sewer or removed by vactor truck.
 - c. Apply deodorizer after flushing and only in incidents where this material will not cause further pollution. Disinfectants should NOT be used due to their toxicity to fish and wildlife.
6. Advise property owner of claim procedure for backup related repair or cleaning cost, if appropriate.
7. Follow up to prevent recurrence:
 - a. Investigate cause of spill;
 - b. Add line segment to cleaning schedule, change frequency, or change cleaning method;
 - c. Add notes as needed to cleaning schedule;
 - d. Inspect by video camera and re-run as needed;
 - e. Report on the need for any correction measures;
 - f. Repair or replace line segment;
 - g. Reinstate the line to normal maintenance.

C. Property Damage: (Overflow inside residence/building that causes damage to private property.)

1. Identify yourself to property owner who called for service, if applicable, and briefly explain what you will be doing.
2. Stop or reduce flow entering building (remove or break cleanout cap, plus lateral).
3. Identify problem, take digital photos and/or video to document situation and restore service (if this takes longer than 30 minutes, call for assistance).
4. If the problem is in the private lateral, inform property owner and respond to their questions.
5. Report spill as required, to Supervisor, or Lead Worker.
6. Contain spill and return spilled sewage to collection system for treatment.
7. Report progress to property owner and deal with their concerns (damage to property).
8. Advise property owner of claims procedure for backup related damage or cleaning costs, if appropriate. Provide emergency sewer packet.
9. Continue follow-up contacts and service to property owner(s) as needed.
10. Follow up:
 - a. Investigate cause of spill;
 - b. Add line segment to cleaning schedule, change frequency, or change cleaning method;
 - c. Add notes as needed to cleaning schedule;
 - d. Inspect by video camera and re-run as needed;
 - e. Report on the need for overflow device and check valve;
 - f. Repair or replace line segment;
 - g. Reinstate the line to normal maintenance.

(vii) FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

The City of Piedmont does not have any restaurants or other businesses that generate large amounts of grease, and there have not been any FOG occurrences of note in the collection system in recent years. Therefore, there is currently no commercial FOG control program in place.

Piedmont is one of the seven agencies in the EBMUD's wastewater service area. The agencies and EBMUD have developed a regional FOG program, as part of the TAB programs, to reduce FOG related SSOs, and continue working collaboratively on development and implementation of FOG control. This regional FOG program consists of FOG hot spot investigations, residential hotspots response, enforcement support, reporting, public education and public outreach throughout EBMUD's wastewater service area. If through CCTV inspection the maintenance crew flags an area as a potential FOG problem, they immediately begin distributing door hangers that are prepared for this purpose in that area.

(viii) SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

a. Capacity Assessment

As part of the Sewer System Evaluation Survey Study conducted in February 1986, a computerized collection system routing model was created to identify the bottlenecks in the system. The parameters for the computer simulation included the study area characteristics expected during the project life, a description of the collection system, and the characteristics of the design storm.

Three scenarios were evaluated: “no rehabilitation”, “rehabilitation”, and “optimum combination” scenarios. In the “no rehabilitation” case, the total storm flow, including base flow, was routed through the collection system with the assumption that no corrective measures would be taken on the existing collection system to reduce I/I. This simulation established the baseline conditions for comparison with the maximum rehabilitation case. If the simulated flow exceeded the capacity of the existing pipeline, the model sized a relief pipeline to carry the excess flow. This alternative, which does not consider I/I control measures, was not the recommended plan and was developed for comparison and analysis.

The “rehabilitation” alternative is derived by comparing the cost of reducing I/I flow by rehabilitation to the cost of conveying and treating those same flows. Based on this, a cost-effectiveness (C/E analysis) method was established to identify the most cost-effective sub-basins for rehabilitation. The results of C/E analysis identified 9 sub-basins for comprehensive rehabilitation.

The “optimum combination” alternative was the final determination of where relief sewers would be necessary to eliminate the bypasses and overflows remaining after cost-effectiveness rehabilitation was completed. To do this, the estimated flow remaining after rehabilitation was routed through the collection system, using the computer model. The routing program sized relief sewers where the peak flow following the five-year design storm exceeded the capacity of the existing sewer lines.

Between 1990 and 1993, the City replaced the pipe segments where flows generated by the five-year storm would cause surcharging. The nine sub-basins identified as cost-effective for rehabilitation were also rehabilitated prior to 2005. Completion of this work rendered the system’s capacity sufficient for a five-year storm event.

It should be noted that the population of piedmont is not expected to grow significantly, and has remained relatively stable over the last 50 years, because of the lack of additional land for development and zoning restrictions. Because growth and the opportunity for growth in the City are limited and future land use patterns are not expected to change significantly, no extra allowance for growth was considered in calculating the base sanitary sewer flow for future. Therefore, it is concluded that the sanitary sewer improvements

implemented in recent years and scheduled for the future should address the current and future capacity requirements for the collection system facilities for a 5-year storm event.

b. System Evaluation and Capacity Assurance Plan

As explained above, no short-term or long-term improvements are required to improve the capacity of the sewer system. However, replacing the old clay pipes with plastic pipes should provide for additional capacity in the system. To date, approximately 62% (including emergency lines throughout the City) of the sewer system has been replaced with plastic pipes with plans to replace the remaining sewer mains by 2020.

The topographic survey data and as-built information for the sewer projects will be used to update the City sewer map.

(ix) MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

The SSMP will be reviewed periodically to insure all the provisions are implemented and the effectiveness discussed at the monthly Maintenance Department staff meetings. The SSMP and its elements will be updated in accordance with the results of the monitoring and staff recommendations.

The City plans to continue to apply for the State Revolving Fund (SRF) loan funding to finance the future sanitary sewer rehabilitation projects. Since year 2000, the City has rehabilitated approximately 59% (excluding emergency lines) of the sewer mains and their associated sewer laterals within public right-of-way. The goal is to eventually replace all the sewer mains by 2020.

(x) SSMP AUDIT

The City will perform an internal audit evaluating the SSMP which will include any deficiencies and steps to correct them and submit the results of the audit along with recommendations and suggested improvements to the Regional Water Board.

The form included in Appendix E, which is based on the format developed by the BACWA members, will be used for the audit.

(xi) COMMUNICATIONS

The City will provide interested parties with status updates on implementation of the component of the SSMP and will also consider comments made by interested parties.

***** End of SSMP *****