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DATE: October 8, 2014

TO: RMP Steering Committee

FROM: Philip Trowbridge, RMP Manager

RE: Projected RMP Expenses and Fees for 2016-2023

Introduction

The RMP is funded by fees paid by municipal wastewater agencies, stormwater agencies, refineries, dredgers, and industrial dischargers. The fees are set by the Steering Committee every three years. On January 24, 2012, the Steering Committee decided that total fees should increase 1.5% for 2013, 2% for 2014, and 2% for 2015, for a total fee revenues of \$3,285k, \$3,350k, and \$3,418k, respectively. On November 13, 2014, the Steering Committee will need to set the target fees for 2016, 2017, and 2018.

The purpose of this memo is to estimate the RMP expenses for 2016-2018 so that the Steering Committee can make an informed decision about what the total fees should be in these years. Rather than limit the analysis to 2016-2018, the expense projections were extended to 2023 in order to span the full range of RMP monitoring activities. The RMP's most expensive monitoring program, sport fish tissue monitoring, now occurs every five years. Sport fish were monitored in 2014 and will next be monitored in 2019. Given this schedule, it made sense to estimate expenses for 2016-2023, which spans the next five years after the 2016-2018 interval.

Methods and Assumptions

The first part of the analysis was to estimate the net RMP expenses in each year between 2016 and 2023 following the steps and assumptions outlined below.

- Determine the 2015 budget for yearly RMP activities. The yearly RMP activities consist of program management, governance, data management, annual reporting, and communications.
- Estimate the variable costs for RMP Status and Trends (S&T) monitoring in each year based on what it cost to do the work in previous years after adjusting for inflation. If the

planned stations or parameters monitored were different from previous years, the future cost of the activity was prorated accordingly.

- Assume that \$1,150k of funding (in 2015 \$) would be needed for RMP special studies each year. The Steering Committee has allocated \$1,020k, \$1,228k, \$1,682k, and \$1,162k for special studies in 2012, 2013, 2014, and 2015, respectively. The funding level in 2014 appears to be an outlier. The average expense for special studies for 2012, 2013, and 2015 was \$1,136k. Therefore, this analysis will assume that typically \$1,150k will be needed for special studies in each year.
- Assume that \$120k of funding (in 2015 \$) will be used for a study of sediment contamination in the bay margins or another high priority monitoring activity. In 2013, the RMP reduced the frequency of sediment monitoring from once every two years to once every four years. This change and several other adjustments netted a cost savings of \$120k per year on average for the 2016-2023 period. The expectation has been that these cost savings will be allocated to the study of the bay margins. Therefore, a line item with this amount was added to the budget explicitly. Note that, due to the variable costs of the S&T program, there will not be exactly \$120k savings in each year. Also, the annual cost savings estimate is sensitive to the assumed rate of inflation and, therefore, is approximate.
- Convert all costs to real dollars in each year by adjusting for inflation. This calculation is sensitive to the inflation rate but, of course, the inflation rate in the future is unknown. In the past, the Bay Area Consumer Price Index (CPI)¹ increased an average of 2.4% per year over the 10-year period of 2004-2013. Most recently, the year-over-year CPI in June 2014 and October 2014 has increased by 3.0%². For this analysis, an average inflation rate of 2.5% per year was assumed. However, the calculations were checked using a 3.0% inflation rate to demonstrate how the outcome might be different if inflation were to be higher than expected.
- Calculate the net RMP expenses in real dollars in each year after accounting for set-asides and interest income. Set-asides are funds that the Steering Committee “saves” in years with low S&T monitoring costs to be used in later years with high S&T monitoring costs. Therefore, the net expense for S&T in a year will be the actual expense plus any funds set-aside for future years and minus any previously set-aside funds that will be used in that year. A nominal amount of interest income (\$10k in 2015 \$) was also assumed to offset a small portion of the expenses.

¹ <http://www.abag.ca.gov/planning/research/cpi.html>

² <http://www.bls.gov/ro9/cpisanf.htm>

The second step of the study was to estimate the total fees that would be collected under the following three fee scenarios.

- The first scenario was that fees would increase at 2%, which is less than inflation but equal to what the Steering Committee approved for 2014 and 2015.
- The second scenario was that fees would increase at 3%, which is the current rate of inflation.
- The last scenario was that fees would increase at 4%, which is faster than inflation in order to make up for past years when RMP fees increased slower than inflation.

The third and final step of the study was to compare the estimated fee revenue and net expense for each year between 2016 and 2023 for each of the three fee scenarios. If expenses were higher than revenue in a year, the deficit was calculated and was assumed to be made up by funds from the RMP reserve funds until the \$593k current balance of those funds was exhausted. This comparison was used to show which fee scenarios would require the RMP to draw upon reserve funds and how long the reserve funds would last.

Results and Discussion

Table 1 shows the RMP budgets for 2014 and 2015 along with the projected expenses for 2016-2023. In 2015, the gross expenses are budgeted to be \$3,633k; and, after adjusting for set-asides and interest revenue, the net expenses will be \$3,544k. The relative contributions of each line item in the budget are shown in Figure 1. The total net expenses for the RMP are expected to increase to \$3,812k by 2018 and \$4,339k by 2023 in order to keep up with inflation. Please note that the 2015 budget presented in this memo is a draft. The agenda package for the November 13, 2014 Steering Committee meeting will contain a more detailed description of the proposed budget.

Table 2 shows the three different scenarios for fee increases and how the fee revenue would compare to net expenses. Each of the scenarios is explained below.

- For the first scenario, 2% increase in fees per year, the total fees would be less than expenses in every year. The annual deficit would grow from \$121k in 2016 to \$334k in 2023. Unless expenses were cut by an average of \$241k each year, RMP reserve funds would be needed to fill the funding gap and would be exhausted in 2019.
- For the second scenario, 3% increase in fees per year, the total fees would initially be less than expenses but would catch up by 2022. A total of \$554k would need to be taken from reserves during 2016-2023, which would nearly exhaust the reserve balance (\$593k).
- For the third scenario, 4% increase in fees per year, the total fees would initially be less than expenses but would catch up by 2018. A total of \$164k would need to be taken from reserves during 2016-2017, after which the reserve would begin to accumulate funds. At the end of 2023, the reserve balance would be \$904k higher than it was in 2015.

- A final scenario was run to estimate the “break even” point when fees would equal net expenses over the 2016-2023 period. It was determined that a fee increase of 3.4% per year would allow for the current level of expenditures without depleting the reserve balance. A total of \$333k of reserve funds would be needed in years 2016-2019. After that, the reserve balance would begin to grow again and would end \$27k higher than it started in 2015. The break even rate for fee increases is higher than the inflation rate because the 2015 budget, which is the starting point for the out-year projections, has \$126k more expenses than fee revenue. The excess expenses are for special studies that were approved by the Technical Review Committee and Steering Committee.

The projected expenses in Tables 1 and 2 are sensitive to the assumed rate of inflation. An average rate of 2.5% was assumed for this analysis. If the rate were to actually be 3% (which it is currently in the year-over-year CPI), the results would be different. In particular, the first and second scenarios (2% and 3% increases in fees per year) would fully deplete the reserve funds balance by 2017 and 2019, respectively. With a 3% average rate of inflation, fees would need to increase by 3.9% to “break even” and not deplete reserves. What actually happens in future years depends on the actual rate of inflation that occurs in each year. Inflation rates as high as 5.4% have occurred in the Bay Area (2001).

Summary

The purpose of this analysis was to make reasonable estimates of RMP expenses in future years to inform decisions about fees in 2016-2018. The calculations show that the current level of expenditures would not be sustainable if fees were increased by 2% per year. At least \$241k in expenses would need to be cut each year to balance the budget. Fee increases of 3% per year might be able to cover the current level of expenses depending on the actual rate of inflation. Finally, fee increases of 4% per year would generate revenue greater than expenses.

Figure 1: Relative contributions of different line items to the draft 2015 RMP budget

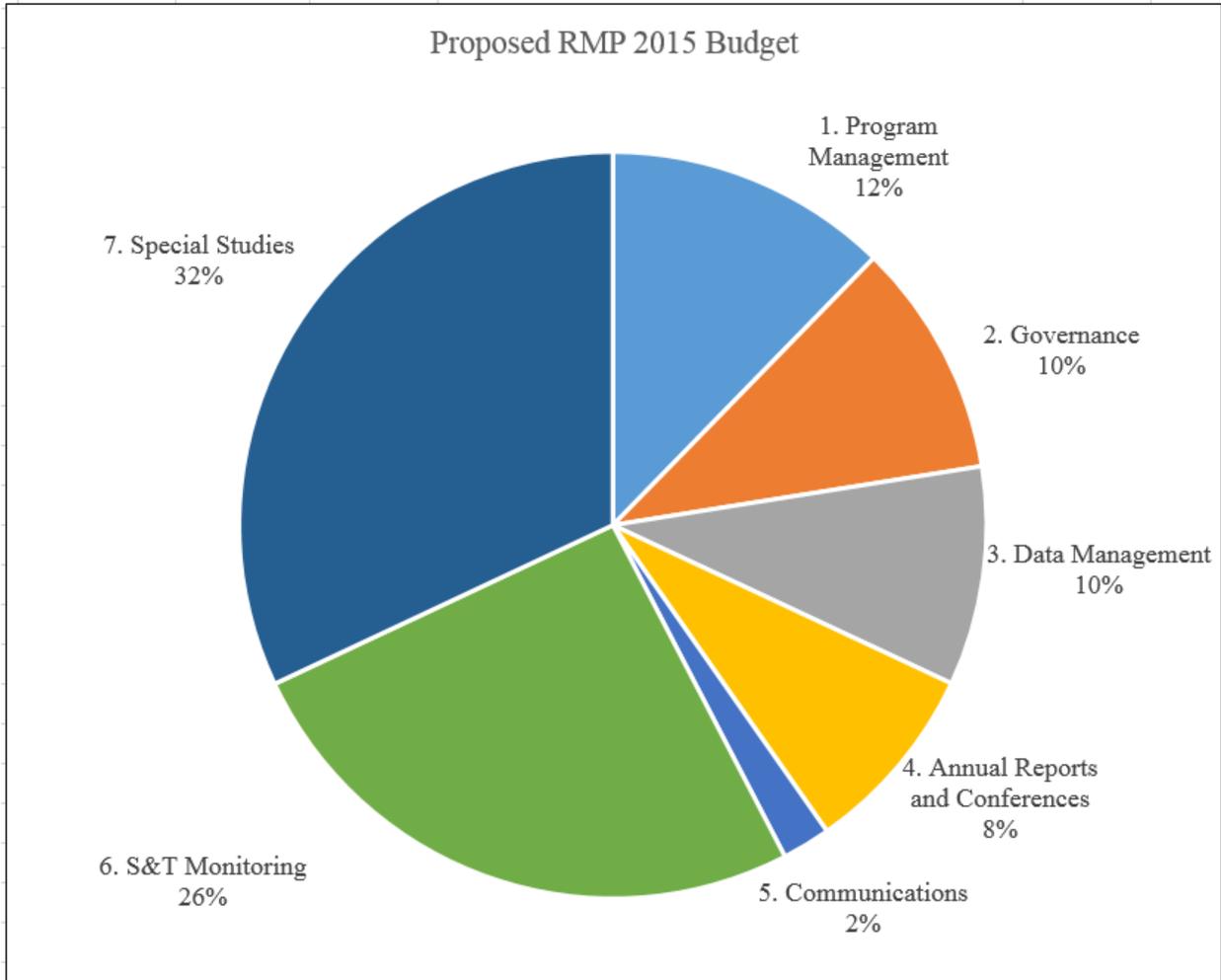


Table 1: RMP Budgets in 2014-2015 and Projected Expenses in 2016-2013 (\$'000)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Line Item	Budget	Budget	Forecast							
1. Program Management	\$666	\$447	\$458	\$469	\$481	\$493	\$506	\$518	\$531	\$544
2. Governance		\$370	\$379	\$388	\$398	\$408	\$418	\$429	\$439	\$450
3. Data Management	\$318	\$345	\$354	\$362	\$372	\$381	\$390	\$400	\$410	\$420
4. Annual Reports and Conferences	\$348	\$137	\$141	\$144	\$148	\$152	\$155	\$159	\$163	\$167
Pulse or Pulse Lite Report*		\$165	\$85	\$173	\$89	\$182	\$93	\$191	\$98	\$201
5. Communications		\$76	\$78	\$80	\$82	\$84	\$86	\$88	\$90	\$93
6. S&T Monitoring**	\$993	\$811	\$622	\$741	\$1,111	\$1,040	\$687	\$992	\$1,098	\$1,048
Margins or Other Monitoring Study	\$0	\$120	\$123	\$126	\$129	\$132	\$136	\$139	\$143	\$146
7. Special Studies***	\$1,682	\$1,162	\$1,179	\$1,208	\$1,238	\$1,269	\$1,301	\$1,334	\$1,367	\$1,401
Subtotal	\$4,007	\$3,633	\$3,418	\$3,693	\$4,048	\$4,141	\$3,773	\$4,251	\$4,340	\$4,471
S&T Set-Aside Revenue	-\$417	-\$79			-\$225	-\$150		-\$75	-\$175	-\$120
S&T Set-Aside Expense	\$161		\$200	\$125			\$225			
Interest Revenue	-\$7	-\$10	-\$10	-\$11	-\$11	-\$11	-\$11	-\$12	-\$12	-\$12
Total Net Expenses	\$3,744	\$3,544	\$3,608	\$3,808	\$3,812	\$3,980	\$3,986	\$4,164	\$4,153	\$4,339

Inflation rate for 2016-2023 was assumed to be: 2.5% <http://www.abag.ca.gov/planning/research/cpi.html>

* Cost for "Pulse Lite" report was assumed to be 50% of the cost for the full Pulse report.

** For S&T costs in 2014, the value shown is the actual cost, which was \$157k less than budget (\$1,150k).

*** For Special Studies, 2014 values are actuals, 2015 values are budgeted, and 2016-2023 are forecast assuming a need for \$1,150k in 2015 \$.

Table 2: Comparison of Projected RMP Fee Revenue and Expense in 2016-2013 For Different Scenarios (\$'000)

A. Fees Increase Slower than CPI (2% per year)

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Fees	\$3,351	\$3,418	\$3,486	\$3,556	\$3,627	\$3,700	\$3,774	\$3,849	\$3,926	\$4,005
Total Net Expenses	\$3,744	\$3,544	\$3,608	\$3,808	\$3,812	\$3,980	\$3,986	\$4,164	\$4,153	\$4,339
Funding Gap	-\$393	-\$126	-\$121	-\$252	-\$185	-\$280	-\$213	-\$315	-\$227	-\$334
RMP Reserve Balance		\$593	\$471	\$220	\$35	\$0	\$0	\$0	\$0	\$0

B. Fees Increase at CPI (3%)

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Fees	\$3,351	\$3,418	\$3,521	\$3,626	\$3,735	\$3,847	\$3,962	\$4,081	\$4,204	\$4,330
Total Net Expenses	\$3,744	\$3,544	\$3,608	\$3,808	\$3,812	\$3,980	\$3,986	\$4,164	\$4,153	\$4,339
Funding Gap	-\$393	-\$126	-\$87	-\$182	-\$77	-\$133	-\$24	-\$83	\$50	-\$9
RMP Reserve Balance		\$593	\$506	\$324	\$247	\$114	\$90	\$7	\$58	\$49

C. Fees Increase Faster than CPI (4%)

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Fees	\$3,351	\$3,418	\$3,555	\$3,697	\$3,845	\$3,999	\$4,159	\$4,325	\$4,498	\$4,678
Total Net Expenses	\$3,744	\$3,544	\$3,608	\$3,808	\$3,812	\$3,980	\$3,986	\$4,164	\$4,153	\$4,339
Funding Gap	-\$393	-\$126	-\$53	-\$111	\$33	\$18	\$172	\$161	\$344	\$339
RMP Reserve Balance		\$593	\$540	\$429	\$462	\$480	\$652	\$813	\$1,158	\$1,497

Red text indicates that total fees are less than RMP net expenses.