

**TRUCKEE RIVER FLOOD CONTROL PROJECT
NEEDS COMMITTEE**

**PROJECT COSTS CALCULATED FOR DIFFERENT
TRUCKEE RIVER FLOOD CONTROL PROJECT
CONSTRUCTION DURATIONS**

OCTOBER 19, 2017

**TRUCKEE RIVER FLOOD MANAGEMENT PROJECT
COMPARATIVE ANALYSIS OF PROJECT COMPLETION DATES OF FYE 2033 AND FYE 2043**

SUMMARY

A comparative analysis was performed based on completing the Truckee River Flood Management Project in FYE 2033 versus extending the completion date to FYE 2043. As shown in the following table a completion date of FYE 2043 compared to a project completed in FYE 2033:

- Increases the project costs by \$88.1 million
- Decreases the new revenue required by \$38 million
- Decreases the average annual new revenue required by \$5.7 million

Truckee River Flood Management Project Comparative Project Cost & Revenues Project Completion Dates of FYE 2033 & FYE 2043 (In Millions)					
		Existing Sales Tax (Thru Debt Repayment)		New Revenue Required (Thru Debt Repayment)	
Completion Date	Project Cost (Nominal \$)	Total	Annual Average	Total	Annual Average
FYE 2033	\$557.2	\$301.8	\$12.6	\$507.7	\$23.1
FYE 2043	\$645.3	\$431.3	\$14.4	\$469.7	\$17.4
Difference	\$88.1 more	\$129.5 more	\$1.8 more	\$38 less	\$5.7 less

PROJECT COMPLETED IN FYE 2033 – COST OF PROJECT

The comparative project capital costs to finish the project in FYE 2033 in 2016 (current) dollars and nominal (indexed) dollars:

- Total current cost is \$398.4 million.
- Total nominal cost is \$557.2 million.
- Cost difference is \$158.8 million, or 40% higher due to inflation.

PROJECT COMPLETED IN FYE 2043 – COST OF PROJECT

The comparative project capital costs to finish the project in FYE 2043 in 2016 dollars and nominal dollars:

- Total current cost is \$398.5 million.
- Total nominal cost is \$645.3 million.
- Cost difference is \$246.8 million, or 62% higher due to inflation

**TRUCKEE RIVER FLOOD MANAGEMENT PROJECT
COMPARATIVE ANALYSIS OF PROJECT COMPLETION DATES OF FYE 2033 AND FYE 2043**

**PROJECT COMPLETED IN FYE 2033 – GENERAL FUND REVENUES AND CASH OUTFLOWS,
PLUS CAPITAL PROJECT FINANCING**

The following table shows the projected revenues through the last year of debt payments in FYE 2041 totaling \$813.9 million.

General Fund Revenues Thru End of Debt Payments					
	Existing Sales Tax Revenue	New Revenue Required	Other Revenue	Interest Income	Totals
Revenue Growth Rates	3.0%	3.0%	0%	N/A	
Total Revenue	301,779,957	507,723,496	387,600	4,042,957	813,934,010
% Total Revenue	37.08%	62.38%	0.05%	0.50%	100.00%
Average Annual Revenue	12,574,165	23,078,341	16,150	168,457	33,913,917

The projected General Fund cash outflows through the last year of debt payments in FYE 2041 are shown in the following table and total \$785.5 million.

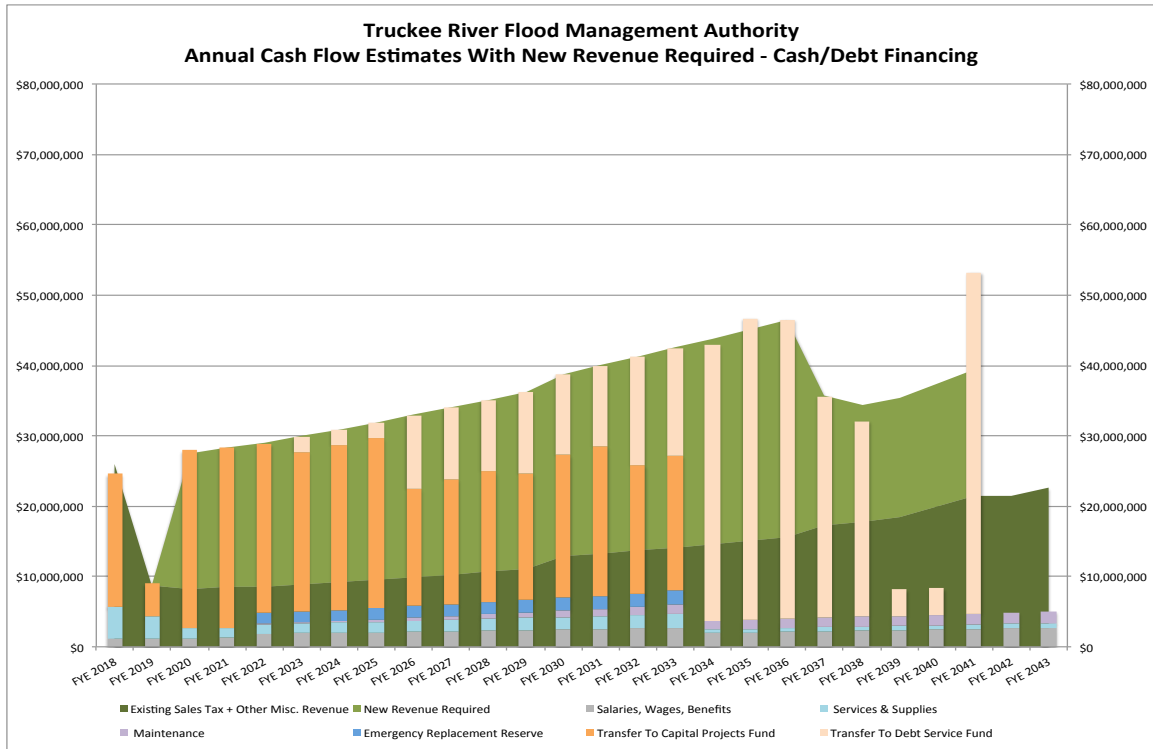
General Fund Cash Outflows Thru End of Debt Payments		
	Amount	% of Total
Operations & Maintenance	103,351,950	13.16%
Transfers To Capital Project Fund	319,168,365	40.63%
Transfer To Debt Service Fund	342,102,765	43.55%
Transfers To Emergency Replacement Fund	20,914,525	2.66%
Total Cash Outflow	785,537,605	100.00%

The next table shows the sources of funding for the flood management project totaling \$557.2 million.

Capital Project Financing		
Source of Funds	Amount	% of Total
Debt Financed (Deposit to Capital Project Fund)	225,511,278	40.47%
General Fund (Transfer to Capital Project Fund)	319,168,365	57.28%
Capital Project Fund - Beginning Fund Balance	7,074	0.00%
Capital Project Fund - Interest Income	12,360,617	2.22%
Capital Project Fund - Other Income	138,800	0.02%
Total Project Cost (Nominal \$)	557,186,134	100.00%

**TRUCKEE RIVER FLOOD MANAGEMENT PROJECT
COMPARATIVE ANALYSIS OF PROJECT COMPLETION DATES OF FYE 2033 AND FYE 2043**

The following graph shows the yearly General Fund cash flows for the project being financed by a mix of cash and debt and completed in FYE 2033.



Note that the existing revenues for FY 2018 include a beginning General Fund fund balance of \$17 million and new revenues are reduced FYE 2037 and FYE 2038 to match reduced cash needs and eliminated altogether in FYE 2042 the year after the end of debt payments.

TRUCKEE RIVER FLOOD MANAGEMENT PROJECT
COMPARATIVE ANALYSIS OF PROJECT COMPLETION DATES OF FYE 2033 AND FYE 2043

CONSTRUCTION COMPLETED IN FYE 2043 – GENERAL FUND REVENUES AND CASH OUTFLOWS, PLUS CAPITAL PROJECT FINANCING

The following table shows the projected revenues through the last year of debt payments in FYE 2047 totaling \$903 million.

General Fund Revenues Thru End of Debt Payments					
	Existing Sales Tax Revenue	New Revenue Required	Other Revenue	Interest Income	Totals
Revenue Growth Rates	3.0%	3.0%	0.0%	N/A	
Total Revenue	431,297,070	469,745,483	484,500	1,516,715	903,043,769
% Total Revenue	47.76%	52.02%	0.05%	0.17%	100.00%
Average Annual Revenue	14,376,569	17,397,981	16,150	50,557	30,101,459

The projected General Fund cash outflows through the last year of debt payments in FYE 2047 are shown in the following table and total \$910.4 million.

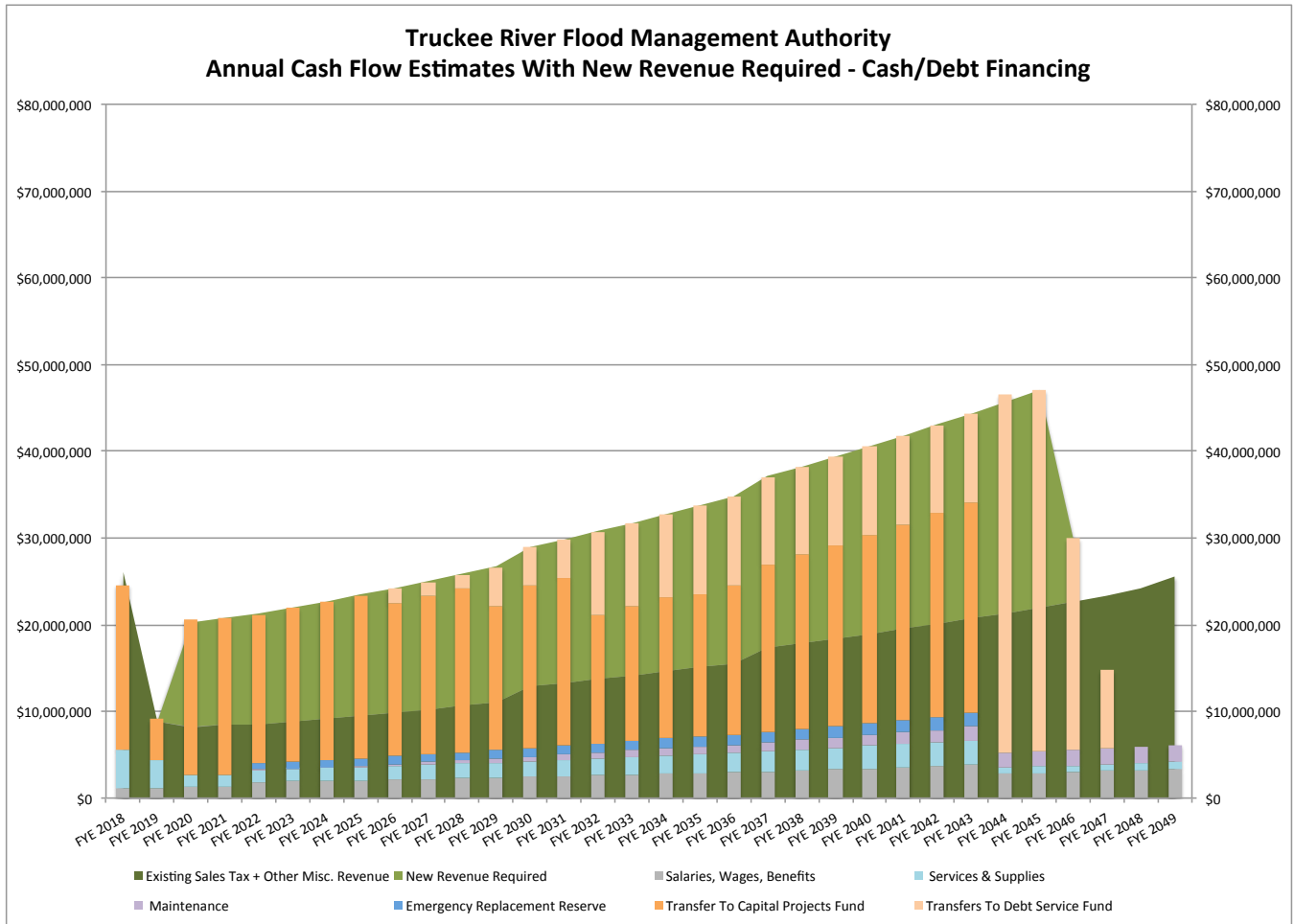
General Fund Cash Outflows Thru End of Debt Payments		
	Amount	% of Total
Operations & Maintenance	157,482,238	17.30%
Transfers To Capital Project Fund	473,793,474	52.04%
Transfer To Debt Service Fund	254,856,761	27.99%
Transfers To Emergency Replacement Fund	24,241,604	2.66%
Total Cash Outflow	910,374,076	100.00%

The next table shows the sources of funding for the project totaling \$645.3 million.

Capital Project Financing		
Source of Funds	Amount	% of Total
Debt Financed (Deposit to Capital Project Fund)	150,008,698	23.25%
General Fund (Transfer to Capital Project Fund)	473,793,474	73.42%
Capital Project Fund - Beginning Fund Balance	7,074	0.00%
Capital Project Fund - Interest Income	21,358,188	3.31%
Capital Project Fund - Other Income	138,800	0.02%
Total Project Cost (Nominal \$)	645,306,234	100.00%

**TRUCKEE RIVER FLOOD MANAGEMENT PROJECT
COMPARATIVE ANALYSIS OF PROJECT COMPLETION DATES OF FYE 2033 AND FYE 2043**

The following graph shows the yearly General Fund cash flows for the project being financed by a mix of cash and debt.



Note that the existing revenues for FY 2018 include a beginning General Fund fund balance of \$17 million and new revenues are reduced FYE 2046 and eliminated altogether in FYE 2047 the year of the last debt payments.