



GOODWIN CONSULTING GROUP

CITY OF LATHROP 2018 CAPITAL FACILITIES FEES STUDY UPDATE



May 3, 2018

CITY OF LATHROP

2018 CAPITAL FACILITIES FEES STUDY UPDATE

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EXECUTIVE SUMMARY

PURPOSE OF THE CFF UPDATE

The City of Lathrop (“City”) retained Goodwin Consulting Group to assist it in updating the City’s Capital Facilities Fee (“CFF”) program. As new development occurs throughout the City it is critical that fees in the CFF program be updated regularly to ensure that CFF rates keep up with the rising costs of infrastructure, facilities, and land.

Many of the Capital Facilities Fees in the City’s fee program have been updated for 2018 based on the Engineering News Record (ENR) 20-City Construction Cost Index (“ENR 20-City CCI”) and are presented in this City of Lathrop 2018 Capital Facilities Fees Study Update (“Fee Study”) to summarize all the fees in the CFF program. The City is restricted by development agreements for certain developments to limit the annual increase of their CFFs to only the rate of inflation, as determined by the change in the ENR 20-City CCI. As a result, only the following fees are updated in this Fee Study:

- West/Central Lathrop Regional Transportation CFF - for Central Lathrop Specific Plan area (CLSP), Mossdale Village (not including the Mossdale Landing developments), and River Islands (Stewart Tract)
- Surface Water Supply CFF - for East Lathrop, South Lathrop Specific Plan (SLSP), CLSP, and Mossdale Village (not including the Mossdale Landing developments)
- Water System CFF - for East Lathrop (including North Harlan and Crossroads)
- Sewer/Recycled Water System CFF - for CLSP only

WEST/CENTRAL LATHROP REGIONAL TRANSPORTATION CFF

The West/Central Lathrop Regional Transportation CFF was created in 2003 to supplement funding for transportation facilities needed for the West Lathrop Specific Plan Area. The capital improvement plan for the West/Central Lathrop Regional Transportation CFF includes 28 improvement projects. In conjunction with updating this CFF, City staff reviewed the transportation facilities and their costs and inflated them to 2018 dollars based on the ENR 20-City CCI. City staff found that all project costs were consistent with current estimated costs to construct these facilities with the exception of the Louise/I-5 interchange. The Louise/I-5 interchange project was estimated to cost \$11,564,000 in 2005 and \$16.9 million in 2018, if inflated by the ENR 20-City CCI. However based on a City staff estimate, the current cost to construct this facility is \$39,200,000. In order to be able to fund this facility in the future, City staff determined that the interchange cost needs to be updated in the CFF program to the \$39.2

million cost. As a result, this Fee Study includes updated CFF rates for the West/Central Lathrop Regional Transportation CFF for the three areas that are subject to this CFF, specifically, CLSP, Mossdale Village (only those areas without a development agreement), and River Islands.

SURFACE WATER SUPPLY FACILITIES

In 2003 the City issued \$32,530,000 revenues bonds to fund a portion of the construction cost for Phase 1 of the South County Surface Water Supply Project. Debt service on these bonds is paid by existing ratepayers and by new growth areas that receive a share of the water supply capacity. Existing ratepayers pay their proportionate share of the debt service through their monthly water bills. River Islands and Mossdale Village fund their respective shares of the bond debt service through separate community facilities districts; and CLSP and other new growth areas will fund their share of the debt service through CFF payments.

In 2013 the 2003 Bonds were refunded. The existing ratepayers, the CLSP area, and other future development's shares of the 2003 remaining bond principal were refunded through the 2013 Subordinate Water Revenue Refunding Bonds. In June 2017 the City refunded the 2013 Bonds through the 2017 Loan Agreement. Because the Surface Water Supply CFF is based on the present value of debt service payments, the Surface Water Supply CFF needed to be updated for existing infill development in East Lathrop, new development in the CLSP, and other future development areas. This Fee Study updates the Surface Water Supply CFF for these areas.

WATER SYSTEM FACILITIES

The Water System CFF includes four separate components. These include 1) an East Lathrop Water System Buy-In CFF, 2) a Well Improvement CFF for West/Central Lathrop to fund the costs of arsenic treatment for groundwater wells and for a portion of the cost of a standby well, 3) a Water Storage CFF for the Mossdale Landing developments to construct a 1.0 MG water storage reservoir, and 4) a Reimbursement CFF for the Crossroads area. The City does not currently have updated costs for the West/Central Lathrop Well Improvement CFF or the Mossdale Landing Water Storage CFF so these CFFs have been updated recently by the City for inflation only. This Fee Study does update the East Lathrop Buy-In CFF and the Crossroads Reimbursement CFF.

SEWER FACILITIES

Saybrook CLSP, LLC ("Saybrook"), the developer of the CLSP area, has constructed sewer and recycled water backbone facilities that will serve the CLSP area. Facilities include a pump station, force mains, sewer pipelines, and recycled water pipelines. The total cost of these facilities in 2018 dollars is \$11.6 million. In order for the City to reimburse the developer for

oversizing these facilities, a sewer/recycled water CFF specific to the CLSP development area must be created. This Fee Study creates the new Sewer/Recycled Water CFF for the CLSP area.

FEE SCHEDULE

Table ES-1 summarizes the fees in the CFF program and includes the proposed CFFs that have been created or updated in this Fee Study. The CFF fee schedule includes eight separate development areas with each having a different fee schedule. In February 2018 the City adopted new CFFs for the South Lathrop Specific Plan and this area is added to the CFF schedule. The City inflated all CFF fees in January 2018 based on the Engineering News Record 20-City Construction Cost Index value of 10,873 for December 2017. Prior to this increase, the CFF fees were based on the August 2016 20-City CCI value of 10,385. Based on the increased value of the ENR 20-City CCI since August 2016, the City increased the fees in its CFF program by approximately 4.7% in 2018. The City also levies a 3.0% administration fee to the cumulative total of all its CFFs to pay for the administrative duties associated with the CFF program. This 3.0% administration fee would be added on top of the City CFFs presented in Table ES-1.

Table ES-1 - Fee Summary

		Service Area ¹							
		East	Cross-roads	No. Harlan	South	Mossdale	Mossdale	Central	Stewart
Fee		Lathrop		Improv. Dist.	Lathrop	Village	Landings	Lathrop	Tract
Component	Unit				Specific Pl.	(no DA)	(with DA) ²		
Culture and Leisure CFF ³									
Park Sub-Component									
Single Family Residential	DU	\$5,526		\$5,526		\$5,526	\$5,524	\$6,072	Project Developer
Multi-Family Residential	DU	\$3,947		\$3,947		\$3,947	\$3,945	\$4,338	
Facility Sub-Component									
Single Family Residential	DU	\$3,386		\$3,386		\$3,386	\$2,218	\$3,386	\$3,386
Multi-Family Residential	DU	\$2,417		\$2,417		\$2,417	\$1,584	\$2,417	\$2,417
Total Culture and Leisure CFF									
Single Family Residential	DU	\$8,912		\$8,912		\$8,912	\$7,742	\$9,458	\$3,386
Multi-Family Residential	DU	\$6,364		\$6,364		\$6,364	\$5,529	\$6,755	\$2,417
Municipal Service Facilities CFF ⁴									
Single Family Residential	DU	\$3,793		\$3,793		\$3,793	\$3,725	\$3,793	\$3,793
Multi-Family Residential	DU	\$2,709		\$2,709		\$2,709	\$2,662	\$2,709	\$2,709
Service/Retail	1,000 sf	\$2,471	\$2,471	\$2,471	\$2,471	\$2,471	\$2,419	\$2,471	\$2,471
Other Non-Residential	1,000 sf	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$1,464	\$1,496	\$1,496
Surface Water Supply CFF ⁵									
	5/8" meter	\$2,489	\$2,489	\$2,489	\$2,489	\$4,242	Funded through Mossdale CFD	\$5,744	Funded through River Islands CFD
	1" Fire Svc.	\$2,489		\$2,489	\$2,489	\$4,242		\$5,744	
	3/4" meter	\$3,733	\$3,733	\$3,733	\$3,733	\$6,363		\$8,616	
	1" meter	\$6,222	\$6,222	\$6,222	\$6,222	\$10,605		\$14,360	
	1 1/2" meter	\$12,444	\$12,444	\$12,444	\$12,444	\$21,210		\$28,720	
	2" meter	\$19,910	\$19,910	\$19,910	\$19,910	\$33,936		\$45,952	
	3" meter	\$37,332	\$37,332	\$37,332	\$37,332	\$63,630		\$86,160	
	4" meter	\$62,220	\$62,220	\$62,220	\$62,220	\$106,050		\$143,600	
	6" meter	\$124,440	\$124,440	\$124,440	\$124,440	\$212,100		\$287,200	
	8" meter	\$199,105	\$199,105	\$199,105	\$199,105	\$339,360		\$459,520	
	10" meter	\$360,877	\$360,877	\$360,877	\$360,877	\$615,090	\$832,880		
Water System - Buy-In CFF ⁶									
	5/8" meter	\$1,231		\$1,157					
	1" Fire Svc.	\$1,231		\$1,157					
	3/4" meter	\$1,847		\$1,735					
	1" meter	\$3,078		\$2,892					
	1 1/2" meter	\$6,155		\$5,785					
	2" meter	\$9,848		\$9,256					
	3" meter	\$18,466		\$17,354					
	4" meter	\$30,776		\$28,924					
	6" meter	\$61,552		\$57,847					
	8" meter	\$98,483		\$92,555					
	10" meter	\$178,501		\$167,756					
Water System - Reimbursement CFF									
	5/8" meter		\$1,392						
	1" Fire Svc.								
	3/4" meter		\$2,088						
	1" meter		\$3,480						
	1 1/2" meter		\$6,959						
	2" meter		\$11,134						
	3" meter		\$20,877						
	4" meter		\$34,795						
	6" meter		\$69,591						
	8" meter		\$111,345						
	10" meter		\$201,813						

TABLE ES-1 - Fee Summary (Continued)

		Service Area ¹							
		East	Cross-	No. Harlan	South	Mossdale	Mossdale	Central	Stewart
Fee		Lathrop	roads	Improv. Dist.	Lathrop	Village	Landings	Lathrop	Tract
Component	Unit	Lathrop	roads	Improv. Dist.	Specific Pl.	(no DA)	(with DA) ²	Lathrop	Tract
Water System - West/Central Lathrop Well Improvement CFF ⁷									
	5/8" meter					\$756	\$756	\$756	\$756
	1" Fire Svc.					\$756	\$756	\$756	\$756
	3/4" meter					\$1,135	\$1,135	\$1,135	\$1,135
	1" meter					\$1,891	\$1,891	\$1,891	\$1,891
	1 1/2" meter					\$3,782	\$3,782	\$3,782	\$3,782
	2" meter					\$6,051	\$6,051	\$6,051	\$6,051
	3" meter					\$11,345	\$11,345	\$11,345	\$11,345
	4" meter					\$18,909	\$18,909	\$18,909	\$18,909
	6" meter					\$37,817	\$37,817	\$37,817	\$37,817
	8" meter					\$60,507	\$60,507	\$60,507	\$60,507
	10" meter					\$109,670	\$109,670	\$109,670	\$109,670
Water System - Water Storage CFF ⁸									
	5/8" meter						\$895		
	1" Fire Svc.						\$895		
	3/4" meter						\$1,343		
	1" meter						\$2,238		
	1 1/2" meter						\$4,477		
	2" meter						\$7,162		
	3" meter						\$13,430		
	4" meter						\$22,383		
	6" meter						\$44,766		
	8" meter						\$71,625		
	10" meter						\$129,820		
Office Commercial	1,000 sf				\$988				
Limited Industrial	1,000 sf				\$467				
Warehouse	1,000 sf				\$133				
Sewer/Recycled Water System CFF ^{9 10}									
	5/8" meter	\$5,538		\$5,538	Funded by Project Developer	\$1,083	\$1,083		Funded by Project Developer
	1" Fire Svc.	\$5,538		\$5,538		\$1,083	\$1,083		
	3/4" meter	\$8,306		\$8,306		\$1,623	\$1,623		
	1" meter	\$13,844		\$13,844		\$2,706	\$2,706		
	1 1/2" meter	\$27,688		\$27,688		\$5,410	\$5,410		
	2" meter	\$44,301		\$44,301		\$8,657	\$8,657		
	3" meter	\$83,064		\$83,064		\$16,232	\$16,232		
	4" meter	\$138,440		\$138,440		\$27,052	\$27,052		
	6" meter	\$276,879		\$276,879		\$54,104	\$54,104		
	8" meter	\$443,007		\$443,007		\$86,566	\$86,566		
	10" meter	\$802,950		\$802,950		\$156,903	\$156,903		
Single Family Residential	DU						\$1,915		
Multi-Family Residential	DU						\$1,329		
Commercial	1,000 sf						\$353		
Industrial	1,000 sf						\$212		
(Manteca WQCF)	ISU	\$8,466		\$8,466					
All New Development	gpd		\$40.95						
Recycled Water Outfall CFF ¹¹									
	5/8" meter				\$45	\$45	\$45	\$45	\$45
	1" Fire Svc.				\$45	\$45	\$45	\$45	\$45
	3/4" meter				\$69	\$69	\$69	\$69	\$69
	1" meter				\$114	\$114	\$114	\$114	\$114
	1 1/2" meter				\$227	\$227	\$227	\$227	\$227
	2" meter				\$363	\$363	\$363	\$363	\$363
	3" meter				\$683	\$683	\$683	\$683	\$683
	4" meter				\$1,138	\$1,138	\$1,138	\$1,138	\$1,138
	6" meter				\$2,275	\$2,275	\$2,275	\$2,275	\$2,275
	8" meter				\$3,640	\$3,640	\$3,640	\$3,640	\$3,640
	10" meter				\$6,598	\$6,598	\$6,598	\$6,598	\$6,598

Table ES-1 - Fee Summary (Continued)

		Service Area ¹							
		East	Cross-roads	No. Harlan	South Lathrop	Mossdale Village	Mossdale Landings	Central Lathrop	Stewart Tract
Fee Component	Unit	Lathrop		Improv. Dist.	Specific Pl.	(no DA)	(with DA) ²		
Storm Drainage CFF ^{12 13}									
Low Density Residential	DU	\$894		\$894		\$341	\$341	Area of Benefit Assessment	Funded by Project Developer
Medium Density Residential	DU					\$234	\$234		
High Density Residential	DU					\$183	\$183		
Service Commercial	Acre	\$6,144		\$6,144		\$4,231	\$4,231		
Freeway Commercial	Acre	\$11,025		\$11,025					
Waterfront Resort Commercial	Acre								
Neighborhood Commercial	Acre	\$2,729		\$2,729					
Limited Industrial - Zone #5	Acre	\$8,576		\$8,576					
Limited Industrial - Other Zones	Acre	\$4,780		\$4,780					
General Industrial	Acre	\$5,804		\$5,804					
Transit Station (if on Lathrop Road)	Acre	\$5,461		\$5,461					
Fire Station (if on Yosemite Avenue)	Acre	\$6,144		\$6,144					
Area of Benefit #6	Acre	\$2,382							
Crossroads - Onsite	Acre		\$12,732						
Crossroads - Offsite	Acre		\$7,260						
Office Commercial	1,000 sf				\$380				
Limited Industrial	1,000 sf				\$129				
Warehouse	1,000 sf				\$129				
Local Transportation CFF ¹⁴									
Single Family Residential	DU	\$3,558		\$3,558					
Multi-Family Residential	DU	\$2,616		\$2,616					
Office Commercial	1,000 sf	\$4,859		\$4,859	\$15,631				
Retail Commercial	1,000 sf	\$4,859		\$4,859	\$15,631				
Industrial	1,000 sf	\$1,431	\$1,068	\$1,431	\$4,516				
Warehouse	1,000 sf				\$466				
Commercial	Acre		\$29,417						
WLSP Regional Transportation Impact Fee (RTIF) ¹⁵									
Single Family Residential	DU					\$343	\$343	\$343	\$343
Multi-Family Residential	DU					\$401	\$401	\$401	\$401
Service/Office Commercial	1,000 sf					\$532	\$532	\$532	\$532
Retail Commercial	1,000 sf					\$1,918	\$1,918	\$1,918	\$1,918
WLSP Reimbursement Fee									
	Acre					\$2,001	\$2,001		
West/Central Lathrop Transportation CFF ¹⁶									
Single Family Residential	DU					\$3,473	\$2,624	\$3,412	\$3,998
Multi-Family Residential	DU					\$2,142	\$1,613	\$2,098	\$2,454
Service/Office Commercial	1,000 sf					\$4,983	\$3,769	\$3,176	\$3,668
Retail Commercial	1,000 sf					\$5,502	\$4,159	\$4,348	\$6,644
Offsite Roadway Improvements CFF									
Single Family Residential	DU							\$142	
Multi-Family Residential	DU							\$88	
Service/Office Commercial	1,000 sf							\$133	
Retail Commercial	1,000 sf							\$182	

Table ES-1 - Fee Summary (Continued)

		Service Area ¹							
		East	Cross-	No. Harlan	South	Mossdale	Mossdale	Central	Stewart
Fee	Unit	Lathrop	roads	Improv. Dist.	Lathrop	Village	Landings	Lathrop	Tract
Component	Unit	Lathrop	roads	Improv. Dist.	Specific Pl.	(no DA)	(with DA) ²	Lathrop	Tract
San Joaquin County RTIF CFF									
Single Family Residential	DU	\$3,312		\$3,312		\$3,312	\$3,312	\$3,312	\$3,312
Multi-Family Residential	DU	\$1,987		\$1,987		\$1,987	\$1,987	\$1,987	\$1,987
Office Commercial	1,000 sf	\$1,660		\$1,660	\$1,660	\$1,660	\$1,660	\$1,660	\$1,660
Retail Commercial	1,000 sf	\$1,320		\$1,320	\$1,320	\$1,320	\$1,320	\$1,320	\$1,320
Industrial	1,000 sf	\$1,000		\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Warehouse	1,000 sf	\$420		\$420	\$420	\$420	\$420	\$420	\$420
County Facilities CFF ¹⁷									
Single Family Residential	DU	\$2,434		\$2,434		\$2,434			
Multi-Family Residential	DU	\$1,807		\$1,807		\$1,807			
Service/Office Commercial	1,000 sf	\$610		\$610	\$610	\$610			
Retail Commercial	1,000 sf	\$400		\$400	\$400	\$400			
Industrial	1,000 sf	\$110		\$110	\$110	\$110			
Warehouse	1,000 sf	\$110		\$110	\$110	\$110			
Environmental Mitigation CFF ¹⁸									
Low Density Residential	DU					\$199	\$199		
Medium Density Residential	DU					\$113	\$113		
High Density Residential	DU					\$41	\$41		
Commercial	Acre					\$954	\$954		
AG Mitigation CFF									
	Acre				\$2,796	\$2,796		\$4,194	\$3,076
Economic Development Fee (Measure D)									
Residential Development	DU								\$5,000
Levee Impact Fee ¹⁹									
Single Family Residential	Acre	\$17,054	\$17,054	\$17,054	\$17,054	\$17,054	\$17,054	\$17,054	
Multi-Family Residential	Acre	\$18,667	\$18,667	\$18,667	\$18,667	\$18,667	\$18,667	\$18,667	
Commercial	Acre	\$19,236	\$19,236	\$19,236	\$19,236	\$19,236	\$19,236	\$19,236	
Industrial	Acre	\$15,080	\$15,080	\$15,080	\$15,080	\$15,080	\$15,080	\$15,080	

- ¹ Each service area listed is separate and distinct from the others. Crossroads and North Harlan ID are within East Lathrop but in limited instances CFFs differ.
- ² "Mossdale Landings" include Mossdale Landing, Mossdale Landing East, and Mossdale Landing South and are in Mossdale Village. Development agreements in these areas place limits on increasing the CFF rates.
- ³ Includes neighborhood, community, linear parks, library, youth center, and senior center. This fee has been divided into two components so that fee payments, waivers, credits, and reimbursements for parks and facilities can be administered separately. This CFF reflects a recent adjustment by the City for inflation only.
- ⁴ Includes police, animal control, city hall, corporation yard, performing arts center, and wireless network facilities. Applies to the entire City. Wireless network costs are excluded from the Mossdale Landings developments CFF calculation. This CFF reflects a recent adjustment by the City for inflation only.
- ⁵ Surface Water Supply CFF for infill areas (East Lathrop) assumes customers will also pay SCSWSP facilities charge in monthly water bills. Surface Water Supply CFF for growth areas (Central Lathrop and parts of Mossdale Village that are outside the CFD) reflects the full cost of the surface water supply project. See the surface water section of this report for details and possible exclusions.
- ⁶ The Water System CFF for East Lathrop is a buy-in fee reflecting the value of existing water system assets. North Harlan fee reflects credit for North Harlan ID costs.
- ⁷ West/Central Lathrop Water System CFF is for well improvements and reflects the cost of future arsenic treatment and a share of standby well capacity. This Water System CFF reflects a recent adjustment by the City for inflation only.
- ⁸ The Mossdale Landings Water System CFF is for a water storage tank; this CFF was adjusted by the City recently for inflation only. The Water System CFF for SLSP is for water storage facility improvements only; the SLSP Water System CFF was determined in a separate CFF fee study adopted in 2018.
- ⁹ East Lathrop sewer collection system CFF is a buy-in fee reflecting value of existing sewer system assets. Existing ISU charge for Manteca WQCF treatment capacity is retained. All Sewer System CFFs, except for CLSP, were adjusted by the City for inflation only.
- ¹⁰ Mossdale Village Sewer System CFF reflects sewer collection and recycled water distribution costs within Mossdale Village. It is in addition to the recycled water outfall CFF.
- ¹¹ Recycled water CFF applies to West/Central Lathrop and SLSP and is based on the estimated cost of a recycled water outfall to San Joaquin River. This fee was recently adjusted by the City for inflation only.
- ¹² All Storm Drainage CFFs, except for SLSP, were recently adjusted by the City for inflation only; the SLSP Storm Drainage CFF was determined in a separate CFF fee study adopted in 2018.
- ¹³ Mossdale Village Storm Drainage CFF reflects the cost of a storm drainage outfall.
- ¹⁴ Local transportation CFF for East Lathrop was recently adjusted by the City for inflation only.
- ¹⁵ West Lathrop Specific Plan Regional Transportation Impact Fee was originally adopted in 1997. This CFF was recently adjusted by the City for inflation only.
- ¹⁶ West/Central Lathrop Transportation CFF reflects transportation project analysis and is net of estimated WLSP RTIF revenues. The CFFs for the Mossdale Village, CLSP, and the Stewart Tract reflect the updated cost for the Louise Avenue interchange. Due to the limitation for increasing Mossdale Landings CFFs, the Mossdale Landing CFF was adjusted by the City recently for inflation only.
- ¹⁷ County Facilities CFF was updated by San Joaquin County, effective April 2, 2018.
- ¹⁸ Environmental mitigation CFFs for Mossdale Village and Mossdale Landings include land and fencing costs for brush rabbit habitat.
- ¹⁹ The Levee impact fee became effective on 4/7/17; this fee was adjusted recently by the City for inflation only.

FEE ADJUSTMENTS

The Capital Facilities Fees may be adjusted in future years to reflect revised facility standards, receipt of funding from alternative sources (i.e., state or federal grants), revised costs, or changes in land uses, densities, or development plans. In addition to such adjustments, each year the CFF will be adjusted by the change in the ENR 20-City Construction Cost Index over the prior calendar year. This Fee Study adjusted facilities costs in this report based on the ENR 20-City CCI value for December 2018, which is 10,873. For inflating facilities costs that are in the City's 2005 CFF Fee Study, this Fee Study applied the ENR 20-City CCI values of 6,695 (July 2003) for costs that were established in 2003 and the ENR 20-City CCI value of 7,422 (July 2005) for costs that were established in 2005.

1. INTRODUCTION

BACKGROUND

The City of Lathrop is located in the Sacramento central valley, approximately 58 miles south of Sacramento and 80 miles east of San Francisco. When the City incorporated in 1989, its population was approximately 6,500; as of January 2017, the California Department of Finance estimates the City's population is 23,110.

In 1990 the City adopted its original Capital Facilities Fees program to fund growth in the City. In 1994 the City updated the CFF and included additional fees in the program. In subsequent years the City added other fees to the CFF program. For example, in 1997 it added the West Lathrop Specific Plan Regional Transportation Impact Fee, which was developed in coordination the San Joaquin Council of Governments and area developers. In 2003 a comprehensive effort was undertaken to update the CFF program to include new planning areas in the western part of the City and establish new fees for these areas. In 2005 the CFF program was again updated to include additional facilities and updated fee calculations. In subsequent years additional minor changes to the fee program were made. For example an agriculture fee was added in 2005. Also in 2005, the City adopted San Joaquin County's Regional Transportation Impact Fee. In 2007, the City added an offsite roadway improvement fee for the CLSP development. In April 2017 the City adopted the Interim Levee Impact Fee to fund the design and construction of the levee system improvements for Reclamation District 17. Lastly, in February 2018 the City adopted CFFs for the South Lathrop Specific Plan area.

FEES CALCULATED IN THIS CFF STUDY UPDATE

Most of the City's Capital Facilities Fees shown in Table ES-1 were updated by the City based on the increase in ENR 20-City CCI from August 2016 to December 2017. The ENR 20-City CCI increased by 4.7%, from 10,385 to 10,873 over this period and the City applied this rate increase to its CFF program. The City is restricted through development agreements with certain developments that limit the annual increase of their CFFs to the rate of inflation, as determined by the ENR 20-City CCI. However, for this Fee Study the following fees have been updated:

- West/Central Lathrop Regional Transportation CFF - for Central Lathrop Specific Plan area (CLSP), Mossdale Village (not including the Mossdale Landing developments), and River Islands (Stewart Tract)
- Surface Water Supply CFF - for East Lathrop, South Lathrop Specific Plan (SLSP), CLSP, and Mossdale Village (not including the Mossdale Landing developments)
- Water System CFF - for East Lathrop (including North Harlan and Crossroads)

- Sewer/Recycled Water System CFF - for CLSP only

MITIGATION FEE ACT (AB 1600)

The Mitigation Fee Act, commonly known as Assembly Bill (AB) 1600, was enacted by the State of California in 1987 and created Section 66000 et. seq. of the Government Code. AB 1600 requires that all public agencies satisfy the following requirements when establishing, increasing, or imposing a fee as a condition of approval for a development project:

1. Identify the purpose of the fee
2. Identify the use to which the fee will be put
3. Determine how there is a reasonable relationship between:
 - A. The fee's use and the type of development project on which the fee is imposed
 - B. The need for the public facility and the type of development project on which the fee is imposed
 - C. The amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed

The purpose of this Fee Study is to demonstrate that the fees calculated herein comply with the Mitigation Fee Act. The assumptions, methodologies, facility standards, costs, and cost allocation factors that were used to establish the nexus between the fees and the development on which the fees will be levied are summarized in subsequent chapters of this report.

ORGANIZATION OF REPORT

The remainder of this report has been organized into the following chapters:

Chapter 2	Identifies the major development projects in the City
Chapter 3	Provides an explanation of the fee methodology used to calculate the fees in the this Fee Study
Chapters 4-7	Provide details of the fee calculations for transportation, surface water supply, water system, and sewer/recycled water CFFs
Chapter 8	Presents changes to the capital improvement plan for facilities in the Culture and Leisure Facilities subcomponent fee
Chapter 9	Discusses the nexus findings for the CFFs
Chapter 10	Addresses implementation of the updates to the fee program, future fee adjustments, and administrative duties required by the fee law

2. DEVELOPMENT AREAS IN THE CITY

Lathrop has several major development areas throughout the City. Following is a brief description of those developments. At full build out these areas may produce approximately 18,000 residential units and over 16 million square feet of nonresidential building space.

Mossdale Village

Located west of I-5 interstate and east of the San Joaquin River, the Mossdale Village Planning Areas include Mossdale Landing, Mossdale Landing East, Mossdale Landing South, and the Silveria property. When fully developed these planning areas, totaling about 1,160 acres, will have approximately 3,000 residential units and 1,500,000 square feet of retail and service commercial building space. The Mossdale Landing developments are in the latter stages of development.

River Islands

River Islands is located west of the I-5 interstate and north of I-205 and partially abuts the Mossdale Village development. River Islands has nearly 5,000 acres and is planned for 11,000 homes and over 250 acres of commercial development. River Islands is in its early stage of development.

Central Lathrop Specific Plan Area

CLSP abuts the northern boundary of Mossdale Village and includes 1,521 acres that are planned for 5,100 to 6,800 residential units and approximately 5,000,000 square feet of retail and office space. CLSP is in the initial stage of development - some backbone infrastructure has been constructed but no building permits have been issued at this time.

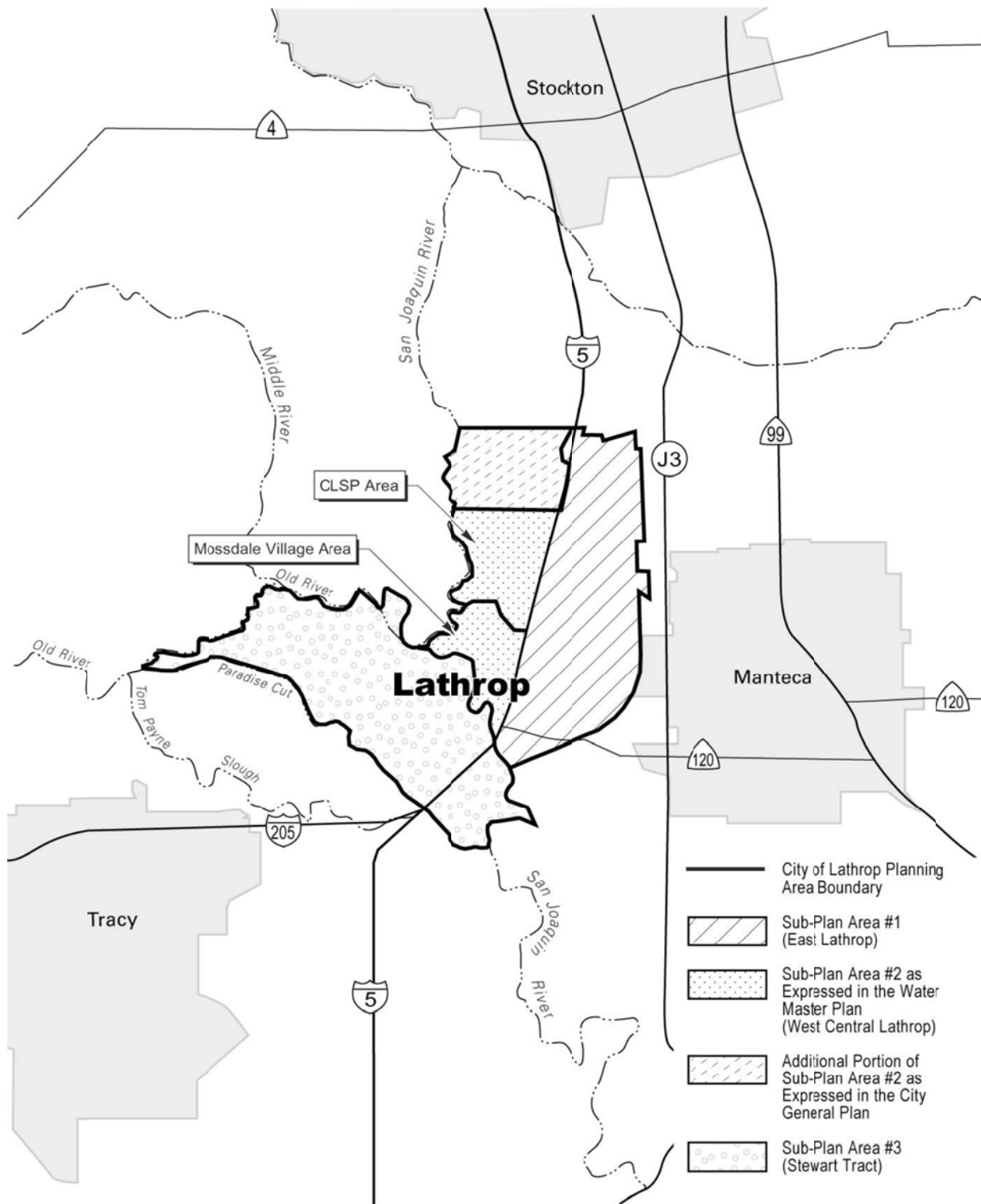
South Lathrop Specific Plan

SLSP is a commercial/industrial development totaling approximately 315 acres. The development is east of interstate I-5 and south of State Route 120. The majority of the acreage, about 246.4 acres, is planned for warehouse and light industrial and about 10 acres of retail. The maximum estimated building square footage for SLSP is 4,214,000.

Lathrop Gateway Specific Plan

LGSP is also a commercial/industrial development that abuts, and is east of, the South Lathrop Specific Plan area and is located to the east of interstate I-5 and north of State Route 120. LGSP is approximately 384 acres and is planned for commercial/industrial development. The maximum estimated building square footage for LGSP is 5,400,000.

Exhibit 1 – Project Site Locations



3. FEE METHODOLOGY

When impact fees are calculated, an analysis must be presented in enough detail to demonstrate that a logical and thorough consideration was applied in the process of determining how the fees relate to the impacts from new development. Various findings pursuant to the impact fee statute must be made to ensure that a reasonable relationship exists between the fee amount and the impact caused by development on which the fee will be levied. Following is a discussion of the method used in this Fee Study to allocate facilities costs to development and determine the fees in the fee program.

FEE METHODOLOGY

The plan-based fee methodology is used in this Fee Study. This methodology is used for facilities that must be designed based on future demand projections within a geographic location. Typically, a formal plan such as a specific plan, facilities needs assessment, or master plan identifies and supports the level of facilities required to serve the plan area. This plan would typically consider the existing facilities already in place and determine what additional facilities would be necessary to accommodate new development. For example, the need for transportation-related improvements depends specifically on the projected number of trips that must be accommodated on specific roadways. An analysis of existing facilities, geographic constraints, and current levels of service must be completed in order to identify the future facility needs. This information is analyzed in conjunction with a projection of the amount and location of future development in the plan area to determine the adequacy of existing facilities and the demand for new improvements that will be required. Depending on the level of existing facilities, the plan-based fee methodology may allocate planned facilities costs to either future development only or to future and existing development. The steps to calculate a fee under the plan-based fee methodology include the following:

- Step 1** Identify existing facilities and estimate future demand for facilities at build out of the plan area
- Step 2** Determine facilities needed to serve anticipated growth in the plan area
- Step 3** Estimate the gross cost of facilities needed to serve the future development in the plan area

- Step 4** Subtract the gross cost of any facilities included in the facilities plan that will cure an existing deficiency in service or will serve other development areas
- Step 5** Subtract revenues available from alternative funding sources, if any, to identify a net facilities cost that will be allocated to future development.
- Step 6** Select cost allocation factors (e.g., trips generated, gallons per day) that will be used to allocate facility costs on a proportional impact basis; apply cost allocation factors to each of the land use categories based on their relative service demand or impact on each type of facility
- Step 7** Estimate the total impact from future development by multiplying the total number of units/acres/square feet for each respective land use by its cost allocation factor. Sum the total cost allocation factors for each land use category
- Step 8** Determine the percentage distribution of the cost allocation factors for each land use category by dividing the total of the cost allocation factors for each land use category by the total of all cost allocation factors for all land use categories
- Step 9** Multiply the percent distribution for each land use category, as determined in Step 8, by the total facilities cost to determine the portion of the facility cost that is allocated to each land use category
- Step 10** Divide the facilities cost that is allocated to each land use category, as determined in Step 9, by the number of units or per 1,000 square feet of building space, to determine the facilities fees

4. WEST/CENTRAL LATHROP REGIONAL TRANSPORTATION CFF

This section of the report identifies the facilities, costs, and the CFF rates required to fund the transportation facilities in the West/Central Lathrop Regional Transportation CFF program.

BACKGROUND

The West/Central Lathrop Regional Transportation (WCLRT) CFF was created in 2003 to supplement the existing WLSP Regional Transportation Impact Fee (RTIF). The RTIF was created in 1997 to mitigate the transportation impacts from developments in the West Lathrop Specific Plan area (WLSP). The WLSP area includes the Mossdale Village, CLSP, and River Islands developments. The WCLRT CFF provides a revenue source for funding transportation facilities that include specific transportation projects serving development areas west of the I-5 highway.

FACILITIES AND COSTS

Table 4-1 on the following page identifies the transportation facilities in the WCLRT CFF program and shows their costs in 2005 dollars and also in 2018 dollars - inflated based on the ENR 20-City CCI as of December 2017. City staff reviewed the inflated costs to determine if they were sufficient to fund the cost of constructing the projects in today's dollars. Staff identified the Louise/I-5 interchange, whose inflated cost was significantly lower than the project's current estimated construction cost. For example, the Louise/I-5 interchange project was estimated to cost \$11,564,000 in 2005; its current updated 2018 cost is \$16.9 million when inflated by the ENR 20-City CCI. However based on the City's estimate, the current cost to construct this facility is \$39,200,000. In order to fund this facility in the future, City staff determined that the cost of this interchange needs to be updated in the CFF program to \$39.2 million cost. As a result, the \$39.2 million cost is incorporated into the calculation of the proposed WCLRT CFF. Table 4-1 on the following page shows the total cost of the transportation facilities in the WCLRT CFF program in current 2018 dollars is \$281.5 million.

Table 4-1 - Transportation Facilities and Costs

No.	Route	Project Limits	Description	Project Cost (2005 \$)	Project Cost (2018 \$)
1	Arbor Avenue	Between Macathur Drive and Paradise Avenue	Widen roadway to 4 lanes with left turn at all intersections and driveways	\$9,138,000	\$13,387,000
2	Golden Valley Parkway	Between Paradise Avenue and Paradise Cut	Construct a 4-lane roadway with left turn lanes at all intersections and driveways includes Paradise Cut bridge	\$30,203,000	\$44,246,000
3	Golden Valley Parkway	Between Paradise cut and San Joaquin River	Construct a 4-lane divided arterial. Includes San Joaquin River Bridge.	\$20,745,000	\$30,391,000
4	Golden Valley Parkway	Between San Joaquin River and River Edge Avenue	Construct a 4-lane divided arterial.	\$2,754,000	\$4,035,000
5	Golden Valley Parkway	Between River Edge Avenue and River Island Parkway.	Construct a 6-lane divided arterial.	\$5,627,000	\$8,243,000
6	Golden Valley Parkway	Between River Island Parkway and Lathrop Road	Construct a 6-lane divided arterial.	\$6,046,000	\$8,857,000
7	Golden Valley Parkway	Btw. Lathrop Road and Central Lathrop Specific Plan north border	Construct a 4/6 divided arterial.	\$4,740,000	\$6,944,000
8	Golden Valley Parkway / Manthey Road	Between Central Lathrop Specific Plan north border and Roth Road.	Construct a improved 2-lane arterial.	\$1,430,000	\$2,095,000
9	Roth Road Interchange Improvements	Roth Road Interchange	Signalize and improve ramp intersections, include 4 lanes in interchange area.	\$752,000	\$1,102,000
10	Lathrop Road Interchange Improvements	Lathrop Road Interchange	Signalize and improve ramp intersections, include 8 lanes in interchange area.	\$25,370,000	\$37,166,000
11	Lathrop Road	Between Golden Valley Parkway and I-5	Construct a 6-lane divided arterial.	\$958,000	\$1,403,000
12	Louise Avenue Interchange Improvements	Louise Avenue Interchange	Construct 8 lanes in interchange area, expand ramps, upgrade signals as required.	\$11,564,000	\$39,200,000
13	River Island Parkway	Between Golden Valley Parkway and I-5	Construct a 6-lane divided arterial.	\$758,000	\$1,110,000
14	River Island Parkway	Between Golden Valley Parkway and McKee Avenue	Construct a 6-lane divided arterial.	\$1,517,000	\$2,222,000
15	River Island Parkway	Between McKee Avenue and San Joaquin River	Construct a 4-lane divided arterial. Includes San Joaquin River Bridge.	\$9,958,000	\$14,588,000
A	River Island Parkway	Between San Joaquin River and Broad Street	Construct a 4-lane divided arterial.	\$1,590,000	\$2,329,000
B	Broad Street	Between River Island Parkway and South River Island Parkway	Construct a 4-lane divided arterial.	\$2,435,000	\$3,567,000
C	S. River Island Parkway	Between Broad Street and Golden Valley Parkway.	Construct a 4-lane divided arterial.	\$2,357,000	\$3,453,000
D	Broad Street	Between River South Island Parkway and Golden Valley Parkway.	Construct a 4-lane divided arterial.	\$1,831,000	\$2,682,000
16	Paradise Avenue Interchange Improvements	Paradise Avenue Interchange	Construct new diagonal ramps, signalize ramp intersections, add left turn lanes on all approaches to new signalized intersections, maintain 2-lane overpass.	\$20,800,000	\$30,471,000
17	Paradise Avenue	Between I-205 and Golden Valley Parkway	Widen roadway to 4 lanes with left turn at all intersections and driveways	\$985,000	\$1,443,000
19	Macarthur Drive Interchange Improvements	Macarthur Drive Interchange	Construct interchange improvements	\$11,032,000	\$16,162,000
20	Macarthur Drive	Between I-205 and Arbor Avenue	Widen Roadway to 4 lanes.	\$1,369,000	\$2,006,000
21	Arbor Avenue and Macarthur Drive	Traffic Signal	Construct new traffic signals.	\$472,000	\$691,000
22	Golden Valley Parkway and Paradise Avenue	Traffic Signal	Construct new traffic signals.	\$472,000	\$691,000
23	Golden Valley Parkway and River Island Parkway	Traffic Signal	Construct new traffic signals.	\$472,000	\$691,000
24	Golden Valley Parkway and Lathrop Road	Traffic Signal	Construct new traffic signals.	\$472,000	\$691,000
25	River Island Parkway and Broad Street	Traffic Signal	Construct new traffic signals.	\$277,000	\$406,000
26	S. River Island Parkway and Broad Street	Traffic Signal	Construct new traffic signals.	\$277,000	\$406,000
27	Golden Valley Parkway and Broad Street	Traffic Signal	Construct new traffic signals.	\$277,000	\$406,000
28	Golden Valley Parkway and S. River Island Parkway	Traffic Signal	Construct new traffic signals.	\$277,000	\$406,000
Total				\$176,955,000	\$281,490,000

Table 4-2 shows the updated total cost of the transportation facilities in the WCLSP CFF program is \$281.5 million. An estimated \$96.2 million in fee revenue is expected to be collected through the WLSP RTIF program for seven transportation projects that are in both of these transportation fee programs. This amount will be used to reduce the total cost of the transportation projects to be funded through WCLSP CFF and would leave a net cost of \$185.3 million to be allocated to developments in the City through the WCLSP CFF program.

The cost allocation percentages shown in Table 4-2 are based on a traffic model analysis conducted by TJKM in 2003 and were applied in the WCLSP CFF calculation in the 2005 Fee Study. Costs are allocated based on trip generation from the following five zones:

1. Area A = Central Lathrop Specific Plan area
2. Area B = Mossdale Village
3. Area C = River Islands
4. Area D = East Lathrop
5. Area E = Areas outside the City

Based on the trip generation allocation, the CLSP area is allocated approximately \$34.9 million of the transportation project costs, or about 19% of the total \$185.3 million cost; Mossdale Village is allocated \$20.2 million, or about 11% of the total cost; and River Islands is allocated \$59.9 million, or about 32% of the total cost. The remaining 38% of the cost, approximately \$70.3 million, is allocated to East Lathrop and areas outside of the City and therefore this portion of the total cost cannot be collected and will need to be funded through other sources.

Table 4-2 - Transportation Facilities Cost Allocation

No.	Project Cost (2018 \$)	Less: '97 RTIF (2018 \$)	Net Project Cost (2018 \$)	Contribution to Projects by Area ¹						Net Project Cost by Area			
				A	B	C	D	E	Total	A	B	C	Total
1	\$13,387,000	\$0	\$13,387,000	11.1%	7.1%	48.5%	2.0%	31.3%	100%	\$1,487,444	\$946,555	\$6,490,666	\$8,924,665
2	\$44,246,000	(\$27,688,000)	\$16,558,000	14.0%	2.0%	45.0%	18.0%	21.0%	100%	\$2,318,120	\$331,160	\$7,451,099	\$10,100,379
3	\$30,391,000	(\$19,018,000)	\$11,373,000	19.1%	17.3%	48.2%	4.5%	10.9%	100%	\$2,171,210	\$1,964,427	\$5,479,719	\$9,615,355
4	\$4,035,000	(\$2,525,000)	\$1,510,000	13.1%	21.2%	59.1%	5.8%	0.7%	100%	\$198,394	\$319,635	\$892,773	\$1,410,802
5	\$8,243,000	(\$5,158,000)	\$3,085,000	19.4%	19.4%	50.7%	9.0%	1.5%	100%	\$598,582	\$598,582	\$1,565,522	\$2,762,687
6	\$8,857,000	(\$5,543,000)	\$3,314,000	49.1%	20.9%	20.2%	7.4%	2.5%	100%	\$1,626,503	\$691,263	\$670,933	\$2,988,699
7	\$6,944,000	\$0	\$6,944,000	69.9%	8.1%	7.4%	14.0%	0.7%	100%	\$4,850,587	\$561,647	\$510,587	\$5,922,821
8	\$2,095,000	\$0	\$2,095,000	68.9%	0.9%	1.9%	25.5%	2.8%	100%	\$1,442,782	\$19,763	\$39,529	\$1,502,074
9	\$1,102,000	\$0	\$1,102,000	16.6%	4.1%	5.5%	23.0%	50.9%	100%	\$183,152	\$45,513	\$60,059	\$288,724
10	\$37,166,000	(\$5,795,000)	\$31,371,000	30.9%	5.3%	6.8%	32.9%	24.1%	100%	\$9,696,776	\$1,646,978	\$2,133,227	\$13,476,981
11	\$1,403,000	\$0	\$1,403,000	59.9%	4.4%	5.8%	27.7%	2.2%	100%	\$839,751	\$61,445	\$81,928	\$983,124
12	\$39,200,000	\$0	\$39,200,000	6.2%	16.7%	25.6%	18.7%	32.7%	100%	\$2,446,081	\$6,558,159	\$10,023,441	\$19,027,681
13	\$1,110,000	\$0	\$1,110,000	9.8%	27.0%	40.2%	18.0%	4.9%	100%	\$109,180	\$300,246	\$445,820	\$855,246
14	\$2,222,000	\$0	\$2,222,000	17.9%	17.9%	47.1%	11.4%	5.7%	100%	\$396,786	\$396,786	\$1,047,514	\$1,841,086
15	\$14,588,000	\$0	\$14,588,000	18.4%	12.9%	55.8%	7.5%	5.4%	100%	\$2,679,428	\$1,885,523	\$8,137,524	\$12,702,475
A	\$2,329,000	\$0	\$2,329,000	18.9%	12.8%	55.4%	7.4%	5.4%	100%	\$440,647	\$299,044	\$1,290,499	\$2,030,189
B	\$3,567,000	\$0	\$3,567,000	12.4%	15.7%	59.5%	4.1%	8.3%	100%	\$442,308	\$560,019	\$2,122,722	\$3,125,049
C	\$3,453,000	\$0	\$3,453,000	3.0%	34.8%	59.8%	1.8%	0.6%	100%	\$105,275	\$1,200,128	\$2,063,378	\$3,368,780
D	\$2,682,000	\$0	\$2,682,000	10.9%	9.1%	63.6%	3.6%	12.7%	100%	\$292,606	\$244,062	\$1,706,556	\$2,243,224
16	\$30,471,000	(\$30,471,000)	\$0	5.7%	6.1%	47.9%	2.6%	37.7%	100%	\$0	\$0	\$0	\$0
17	\$1,443,000	\$0	\$1,443,000	7.0%	7.0%	62.0%	1.0%	23.0%	100%	\$101,010	\$101,010	\$894,660	\$1,096,680
19	\$16,162,000	\$0	\$16,162,000	8.5%	4.4%	24.2%	2.9%	60.1%	100%	\$1,375,386	\$704,663	\$3,909,588	\$5,989,637
20	\$2,006,000	\$0	\$2,006,000	10.0%	7.0%	43.0%	2.0%	38.0%	100%	\$200,600	\$140,420	\$862,580	\$1,203,600
21	\$691,000	\$0	\$691,000	9.5%	6.4%	40.8%	2.1%	41.3%	100%	\$65,714	\$43,879	\$281,997	\$391,589
22	\$691,000	\$0	\$691,000	9.4%	8.2%	61.1%	1.4%	19.9%	100%	\$65,023	\$56,593	\$421,856	\$543,472
23	\$691,000	\$0	\$691,000	24.0%	26.7%	33.1%	12.3%	4.0%	100%	\$165,840	\$184,152	\$228,652	\$578,644
24	\$691,000	\$0	\$691,000	62.5%	8.7%	8.8%	18.3%	1.6%	100%	\$432,152	\$60,325	\$60,877	\$553,353
25	\$406,000	\$0	\$406,000	17.1%	12.4%	61.1%	6.4%	3.0%	100%	\$69,548	\$50,385	\$247,903	\$367,836
26	\$406,000	\$0	\$406,000	8.8%	14.7%	64.4%	3.2%	8.9%	100%	\$35,526	\$59,804	\$261,545	\$356,874
27	\$406,000	\$0	\$406,000	8.7%	15.0%	64.6%	5.7%	6.2%	100%	\$35,159	\$60,778	\$262,074	\$358,011
28	\$406,000	\$0	\$406,000	7.2%	22.3%	63.3%	6.2%	1.0%	100%	\$29,273	\$90,416	\$257,079	\$376,768
Total	\$281,490,000	(\$96,198,000)	\$185,292,000							\$34,900,842	\$20,183,359	\$59,902,306	\$114,986,507

¹ Area A = CLSP
 Area B = Mossdale Village
 Area C = Stewart Tract/River Islands
 Area D = East Lathrop
 Area E = Areas outside the City

COST ALLOCATION

The costs allocated to CLSP, Mossdale Village, and River Islands are further allocated to the development planned in each of these three areas. This cost allocation methodology used in this Fee Study is the same that was used in the 2005 Fee Study. Development estimates for each of the three project areas are multiplied by the adjusted PM peak hour trip rates to determine total trip volume. PM Peak hour trips are adjusted by reducing the trip totals for Retail and Office development by 60% and 20%, respectively, to account for pass-by and diverted trips that are linked to other trips. Reducing these trip totals ensures that trip generation estimates on the roadways is not overestimated. Based on adjusted PM Peak Hour trip volume, an allocation of the total cost is calculated for each land use category. The cost per unit was calculated by dividing the total units into the total allocated cost for each land use category. Tables 4-3 to 4-5 show the cost per unit or per 1,000 square feet for each project area. The cost per unit or per 1,000 building square feet is also the WCLSP CFF rate for each land use category.

Table 4-3
CLSP - Cost Allocation

Land Use	Units / Bldg SF	Adjusted PM Peak Hour Trip Rate	Adjusted PM Peak Hour Trip Volume	Percent Allocation	Total Costs	Cost per Unit / Bldg SF
Area A - CLSP Cost	\$ 34,900,842					
<i>Dwelling</i>						
<i>Residential</i>	<i>Units</i>	<i>per Unit</i>				<i>per Unit</i>
Single Family	5,966	1.01	6,026	58.33%	\$20,357,417	\$3,412
Multi-Family	488	0.62	303	2.93%	\$1,023,614	\$2,098
Subtotal - Residential	6,454		6,329	61.26%	\$21,381,031	
<i>Non-Residential</i>	<i>Bldg SF</i>	<i>per 1,000 SF</i>				<i>Per 1,000 SF</i>
Service/Office Commercial	2,922,903	0.94	2,748	26.60%	\$9,283,469	\$3,176
Retail Commercial	974,301	1.29	1,254	12.14%	\$4,236,343	\$4,348
Subtotal - Non-Residential	3,897,204		4,002	38.74%	\$13,519,811	
Total			10,331	100.00%	\$34,900,842	

Table 4-4
Mossdale Village - Cost Allocation

Land Use ¹	Units / Bldg SF	Adjusted PM Peak Hour Trip Rate	Adjusted PM Peak Hour Trip Volume	Percent Allocation	Total Costs	Cost per Unit / Bldg SF
Area B - MV Cost \$ 20,183,359						
<i>Dwelling</i>						
<i>Residential</i>	<i>Units</i>	<i>per Unit</i>				<i>per Unit</i>
Single Family	3,605	1.01	3,641	62.04%	\$12,521,317	\$3,473
Multi-Family	122	0.62	76	1.29%	\$261,362	\$2,142
Subtotal - Residential	3,727		3,717	63.33%	\$12,782,680	
<i>Non-Residential</i>						
	<i>Bldg SF</i>	<i>per 1,000 SF</i>				<i>Per 1,000 SF</i>
Service/Office Commercial	344,396	1.45	499	8.50%	\$1,716,050	\$4,983
Retail Commercial	1,033,189	1.60	1,653	28.16%	\$5,684,630	\$5,502
Subtotal - Non-Residential	1,377,585		2,152	36.67%	\$7,400,680	
Total			5,869	100.00%	\$20,183,359	

Table 4-5
River Islands - Cost Allocation

Land Use	Units / Bldg SF	Adjusted PM Peak Hour Trip Rate	Adjusted PM Peak Hour Trip Volume	Percent Allocation	Total Costs	Cost per Unit / Bldg SF
Area C - RI Cost \$59,902,306						
<i>Dwelling</i>						
<i>Residential</i>	<i>Units</i>	<i>per Unit</i>				<i>per Unit</i>
Single Family	9,371	1.01	9,465	62.54%	\$37,463,680	\$3,998
Multi-Family	1,629	0.62	1,010	6.67%	\$3,997,709	\$2,454
Subtotal - Residential	11,000		10,475	69.22%	\$41,461,389	
<i>Non-Residential</i>						
	<i>Bldg SF</i>	<i>per 1,000 SF</i>				<i>Per 1,000 SF</i>
Service/Office Commercial	4,267,000	0.93	3,954	26.13%	\$15,650,437	\$3,668
Retail Commercial	420,000	1.68	705	4.66%	\$2,790,480	\$6,644
Subtotal - Non-Residential	4,687,000		4,659	30.78%	\$18,440,917	
Total			15,134	100.00%	\$59,902,306	

WEST/CENTRAL LATHROP REGIONAL TRANSPORTATION FEE

Table 4-6 shows the proposed WCLRT CFF for the four project areas. It should be noted that the CFF for Mossdale Village does not apply to Mossdale Landing developments since their development agreements limit CFF increases to annual ENR 20-City CCI inflation adjustments.

Table 4-6
West/Central Lathrop Regional Transportation CFF

Land Use	Mossdale Village (no DA) ¹	Mossdale Landings (with DA) ²	Central Lathrop	River Islands
<u>Residential</u>				
Single Family	\$3,473 per Unit	\$2,624 per Unit	\$3,412 per Unit	\$3,998 per Unit
Multi-Family	\$2,142 per Unit	\$1,613 per Unit	\$2,098 per Unit	\$2,454 per Unit
<u>Non-Residential</u>				
Service/Office Commercial	\$4,983 per 1,000 sf	\$3,769 per 1,000 sf	\$3,176 per 1,000 sf	\$3,668 per 1,000 sf
Retail Commercial	\$5,502 per 1,000 sf	\$4,159 per 1,000 sf	\$4,348 per 1,000 sf	\$6,644 per 1,000 sf

¹ CFF applies to new development within Mossdale Village, excluding the Mossdale Landings.

² Mossdale Landings CFF is adjusted by the City for inflation only.

5. SURFACE WATER SUPPLY CFF

This section of the report discusses the proposed surface water supply capital facilities, costs, and the Surface Water Supply CFF rates required to fund a these facilities.

SURFACE WATER SUPPLY CAPITAL FACILITIES

In 1995 the City entered into a water supply development agreement with the South San Joaquin Irrigation District (SSJID) to purchase treated surface water through the South County Surface Water Supply Project (SCSWSP). The City's groundwater supplies were limited and surface water would be required to meet future demand from new development planned in the City. In 2005 the SCSWSP became operational and began supplying water to the City. SCSWSP facilities include water treatment plant improvements, pipelines, pump stations, and storage reservoir improvements. The City of Lathrop's share of the total \$148.3 million Phase 1 cost is estimated to be approximately \$43.7 million.

Phase 1 of the water project will supply the City with 7.15 million gallons per day (MGD) of treated water and Phase 2 would increase the total to 10.52 MGD. Of the Phase 1 total, 3.08 MGD was allocated to the River Islands development; 1.34 MGD was allocated to existing City ratepayers; 0.69 MGD was allocated to the Mossdale Village development; 1.91 MGD was allocated to CLSP; and 0.13 MGD was allocated to other future development areas. In 2013 the City sold 1.0 MGD of its surface water supply capacity to the City of Tracy and as a result, CLSP's Phase 1 surface water supply allocation was reduced to 0.91 MGD.

SCSWSP FINANCING

In 2003 the City issued \$32,530,000 revenues bonds ("2003 Bonds") to fund a portion of the construction cost of Phase 1 of the SCSWSP. Debt service was to be paid by existing ratepayers and new developments that receive a share of the surface water allocation. Existing ratepayers were to pay their fair share of the debt service through their monthly water bills. River Islands and Mossdale Landing funded their respective shares of the bond debt service through separate community facilities districts. CLSP was to fund its share of the debt service through payments prescribed in their development agreement. The share of the debt service for each development area was based on the proportionate share of the surface water that was allocated to each. Mossdale Village's debt service allocation also reflected the cost of a new well that benefits the Mossdale development.

In 2013 the 2003 Bonds were refunded. The existing ratepayers' and CLSP's shares of the 2003 remaining bond principal were refunded through the 2013 Subordinate Water Revenue Refunding Bonds ("2013 Bonds"). Mossdale Village's share of the 2003 Bonds was refunded through a separate refunding bond issue - the Lathrop Financing Authority Revenue Bonds 2013 Series A. In June 2017 the City refunded the 2013 Bonds through the 2017 Loan Agreement ("2017 Loan"), which is a private bank loan.

FULL COST AND BUY-IN CFF CALCULATIONS

The 2005 Fee Study identifies two approaches for calculating the Surface Water Supply CFF. The full cost approach is based on calculating the present value of all bond debt service payments. This approach is applied to new development areas, such as CLSP, and will allow new development to pay the full cost of its fair share of the surface water supply project. As a result, no additional facility charges will be included on new development's monthly water bill. The full cost method calculates the Surface Water Supply CFF by taking the sum of the present value of all debt service payments assigned to a development area. For the CLSP development, this means summing the present values of its debt service obligations in past and future years for the 2003 Bonds and 2013 Bonds and the 2017 Loan.

The second approach to calculate the Surface Water Supply CFF is the Buy-In approach. The Buy-In approach is appropriate for infill development in established development areas such as East Lathrop. The City determined that existing water service customers will pay for their surface water supply capacity through a SCSWSP facilities charge included on their monthly water bills. New infill development will also be subject to this SCSWSP facilities charge once they connect to the water system. However, new infill development must also buy-in to the CFF program so that it pays its share of past debt service costs that have been paid by existing customers. Doing this will put new infill development on par with existing customers in terms of funding their full share of the cost of facilities. The buy-in surface water supply CFF is calculated based on historical debt services costs that are inflated to present value dollars.

CLSP SURFACE WATER SUPPLY CFF CALCULATION

Table 5-1 shows the full cost calculation of the updated Surface Water Supply CFF for the CLSP. Past debt service allocations for CLSP for the 2003 Bonds and 2013 Bonds are calculated to a present value for fiscal year 2017-18 based on the past historic California Pooled Money Investment Account ("PMIA") interest rates. Future debt service for the 2017 Loan are discounted to a present value for FY 2017-18 using on the annualized May 2017 PMIA interest

rate of 0.925%. The present value of past and future debt service payments allocated to CLSP equals \$12.2 million. Dividing this total amount by the 0.91 MGD surface water supply allocation for CLSP generates a cost of \$13.36 per gallon of water. Multiplying the cost per gallon by the average water demand per day for a single family residential unit (SFR) equals the Surface Water Supply CFF per SFR or per equivalent dwelling unit (EDU).

The 2005 Fee Study stated that based on data from the Nolte Master Plan, the average residential unit water usage within the City was 320 GPD. This Fee Study uses the updated water usage factor of 430 GPD for a SFR unit or per EDU, based on the City's Integrated Water Resources Master Plan, dated January 2018. The City expects that development in CLSP will only use surface water for Phase 1 development and therefore the full 430 GPD per EDU is applied in the CFF calculation and not a factor of 290 GPD, which would assume 67.4% of water usage will come from surface water and 32.6% will be from ground water sources.

Based on the 430 GPD water usage factor and the aforementioned debt service schedule, the Surface Water Supply CFF is \$5,744 per SFR unit, which equals 1.0 EDU and is equal to the water demand supplied by a 5/8 inch water meter. Since this is a full cost fee calculation, CLSP development will not have a SCSWSP facilities charge on their monthly water bill.

Table 5-1 on the following page shows that based on an average water usage rate of 430 GPD and a total water allotment of 910,000 GPD, an estimated 2,116 EDUs of surface water will be available for future development in CLSP. A schedule of Surface Water Supply CFFs by water meter size is presented in Table 5-1.

Table 5-1 also presents an annual schedule of future Surface Water Supply CFFs, however, since PMIA interest rates will change in future years, the present values of the debt service will change as well and these fees will therefore need to be adjusted based on the actual interest rates.

Table 5-1 Surface Water Supply CFF - CLSP

Fiscal Year	2003 and 2013 and 2017 Bonds/Loan Debt Service for Water Users ¹	CLSP Portion - Water Supply Bonds and Loan Debt Service ²	Debt Service Obligation Met with \$4M Prepay ³	Total CLSP Portion of Debt Service	Present Value of CLSP CLSP Portion of Debt Serv. ^{4,5}	Surface Water Supply CFF for CLSP (\$/EDU) ⁶
2006-07	\$1,098,173	\$489,871	(\$108,156)	\$381,715	\$451,393	
2007-08	\$1,180,023	\$526,383	(\$94,305)	\$432,077	\$488,651	
2008-09	\$1,298,023	\$579,020	(\$94,305)	\$484,714	\$520,847	
2009-10	\$1,294,973	\$577,659	(\$94,305)	\$483,354	\$503,905	
2010-11	\$1,295,403	\$577,851	(\$94,305)	\$483,546	\$496,508	
2011-12	\$1,294,803	\$577,583	(\$94,305)	\$483,278	\$493,470	
2012-13	\$1,293,143	\$576,843	(\$94,305)	\$482,538	\$490,687	
2013-14	\$1,098,868	\$566,688	\$0	\$566,688	\$574,175	
2014-15	\$1,102,803	\$573,528	\$0	\$573,528	\$579,685	
2015-16	\$750,215	\$389,340	\$0	\$389,340	\$392,624	
2016-17	\$750,215	\$398,520	\$0	\$398,520	\$400,720	
2017-18	\$947,461	\$480,449	\$0	\$480,449	\$480,449	\$5,744
2018-19	\$947,461	\$480,449	\$0	\$480,449	\$476,045	\$5,797
2019-20	\$947,461	\$480,449	\$0	\$480,449	\$471,682	\$5,851
2020-21	\$947,461	\$480,449	\$0	\$480,449	\$467,359	\$5,905
2021-22	\$947,461	\$480,449	\$0	\$480,449	\$463,076	\$5,959
2022-23	\$947,461	\$480,449	\$0	\$480,449	\$458,832	\$6,015
2023-24	\$947,461	\$480,449	\$0	\$480,449	\$454,626	\$6,070
2024-25	\$947,461	\$480,449	\$0	\$480,449	\$450,459	\$6,126
2025-26	\$947,461	\$480,449	\$0	\$480,449	\$446,331	\$6,183
2026-27	\$947,461	\$480,449	\$0	\$480,449	\$442,240	\$6,240
2027-28	\$947,461	\$480,449	\$0	\$480,449	\$438,187	\$6,298
2028-29	\$947,461	\$480,449	\$0	\$480,449	\$434,171	\$6,356
2029-30	\$947,461	\$480,449	\$0	\$480,449	\$430,192	\$6,415
2030-31	\$947,461	\$480,449	\$0	\$480,449	\$426,249	\$6,474
2031-32	\$947,461	\$480,449	\$0	\$480,449	\$422,342	\$6,534
Totals	\$26,668,553	\$13,040,017	(\$673,989)	\$12,366,029	\$12,154,906	
Phase I SCSWSP Capacity for CLSP ⁷						0.91 mgd
Present Value Cost of Surface Water Supply Capacity for CLSP						\$13.36 /gpd
Demand Met by Surface Water per EDU ⁸						430 gpd
Potential Development Served by this Capacity						2116 EDUs
Present Value Cost of Water Supply Capacity Per EDU						\$5,744 /EDU
<u>Proposed CLSP Surface Water Supply CFF for Growth Areas FY 2017-18 ⁹</u>						
	5/8" Meter	\$5,744	3" Meter	\$86,160		
	3/4" Meter	\$8,616	4" Meter	\$143,600		
	1" Meter	\$14,360	6" Meter	\$287,200		
	1 1/2" Meter	\$28,720	8" Meter	\$459,520		
	2" Meter	\$45,952	10" Meter	\$832,880		

¹ Debt service schedule (net) from 2006-07 to 2012-13 is for the \$17,595,000 future development portion of the 2003 bonds; debt service schedule from FY 2013-14 to FY 2016-17 is based on CLSP's portion of the 2013 Subordinate Water Revenue Refunding Bonds; and from FY 2017-18 on, the debt service schedule is based on CLSP's portion of the 2017 Loan Agreement.

² CLSP has been assigned 0.91 mgd of the original 2.04 mgd capacity reserved for future users.

³ As required by Section 7.05.02.02(c)(1) of CLSP Development Agreement. See "Prior Bond Debt Service" prepared by Kelling Northcross & Nobriga (Finance 5.015 lathrop:CLSP-03BDESC,SER2006 Page 3).

⁴ Past debt service costs are present-valued based on prior years' Calif. Pooled Money Investment Account (PMIA) rate for month of May.

⁵ Future debt service costs are discounted at 0.925% per year, which is the 2017 May PMIA rate.

⁶ Surface water supply CFF for CLSP is based on present value of net debt service allocated to CLSP. Customers paying this fee would NOT pay the SCSWSP facilities charge on their monthly water bill. Fees could be adjusted annually as shown in this table or based on actual PMIA rates or inflation in future years.

⁷ Includes 0.91 mgd (Central Lathrop) ONLY.

⁸ Based on average single family demand of 430 gpd being entirely met with surface water supplies.

⁹ A 5/8" meter provides capacity to serve 1.0 EDU. Fees for other meter sizes reflect relative capacity of each meter size.

FUTURE DEVELOPMENT SURFACE WATER SUPPLY CFF CALCULATION

Approximately 0.13 MGD of surface water capacity will be utilized by future development in the City's growth areas. Table 5-2 shows the calculation of the updated Surface Water Supply CFF for this future development allocation. Past debt service allocations for the 2003 Bonds and 2013 Bonds are calculated to a present value for fiscal year 2017-18 based on the past historic PMIA interest rates. Future debt service for the 2017 Loan are discounted to a present value for FY 2017-18 using on the annualized May 2017 PMIA interest rate of 0.925%. The present value of past and future debt service payments allocated to future development equals \$1.9 million. Dividing this total amount by the 0.13 MGD surface water supply generates a cost of \$14.64 per gallon of water. Multiplying the cost per gallon by the average water demand per day for a single family residential unit equals the Surface Water Supply CFF per SFR or per EDU.

The City expects future development will have ground water supply available for use and therefore a surface water usage factor of 290 GPD per EDU is applied in the CFF calculation. The 290 GPD factor is 67.4% of the 430 GPD factor; the remaining 32.6% of water demand will come from ground water sources.

Based on the 290 GPD water usage factor and present value of the debt service allocated to future development, the Surface Water Supply CFF is equal to \$4,242 per SFR unit, or per 5/8 inch water meter. Since this is a full cost fee calculation, future development will not have a SCSWSP facilities charge on their monthly water bill.

Table 5-2 on the following page shows that based on an average water usage rate of 290 GPD and a total water allotment of 130,000 GPD, an estimated 449 EDUs of surface water will be available for future development. A schedule of Surface Water Supply CFFs by water meter size is also presented in Table 5-2.

Table 5-2 presents an annual schedule of future Surface Water Supply CFFs, however, since PMIA interest rates will change in future years, the present values of the debt service will change as well and these fees will therefore need to be adjusted based on the actual interest rates.

Table 5-2 Surface Water Supply CFF - Future Development

Fiscal Year	2003 and 2013 and 2017 Bonds/Loan Debt Service for Water Users ¹	Future Dev. Portion - Water Supply Bonds and Loan Debt Service ²	Debt Service Obligation Met with \$4M Prepay	Total Future Dev. Portion of Debt Service	Present Value of Future Dev. Portion of Debt Service. ^{3,4}	Surface Water Supply CFF for Future Development (\$/EDU) ⁵
2006-07	\$1,098,173	\$69,982	\$0	\$69,982	\$82,756	
2007-08	\$1,180,023	\$75,198	\$0	\$75,198	\$85,044	
2008-09	\$1,298,023	\$82,717	\$0	\$82,717	\$88,883	
2009-10	\$1,294,973	\$82,523	\$0	\$82,523	\$86,031	
2010-11	\$1,295,403	\$82,550	\$0	\$82,550	\$84,763	
2011-12	\$1,294,803	\$82,512	\$0	\$82,512	\$84,252	
2012-13	\$1,293,143	\$82,406	\$0	\$82,406	\$83,798	
2013-14	\$1,098,868	\$83,179	\$0	\$83,179	\$84,278	
2014-15	\$1,102,803	\$82,725	\$0	\$82,725	\$83,613	
2015-16	\$750,215	\$56,404	\$0	\$56,404	\$56,880	
2016-17	\$750,215	\$54,969	\$0	\$54,969	\$55,273	
2017-18	\$947,461	\$72,993	\$0	\$72,993	\$72,993	\$4,242
2018-19	\$947,461	\$72,993	\$0	\$72,993	\$72,324	\$4,281
2019-20	\$947,461	\$72,993	\$0	\$72,993	\$71,661	\$4,321
2020-21	\$947,461	\$72,993	\$0	\$72,993	\$71,005	\$4,361
2021-22	\$947,461	\$72,993	\$0	\$72,993	\$70,354	\$4,401
2022-23	\$947,461	\$72,993	\$0	\$72,993	\$69,709	\$4,442
2023-24	\$947,461	\$72,993	\$0	\$72,993	\$69,070	\$4,483
2024-25	\$947,461	\$72,993	\$0	\$72,993	\$68,437	\$4,524
2025-26	\$947,461	\$72,993	\$0	\$72,993	\$67,810	\$4,566
2026-27	\$947,461	\$72,993	\$0	\$72,993	\$67,188	\$4,608
2027-28	\$947,461	\$72,993	\$0	\$72,993	\$66,573	\$4,651
2028-29	\$947,461	\$72,993	\$0	\$72,993	\$65,962	\$4,694
2029-30	\$947,461	\$72,993	\$0	\$72,993	\$65,358	\$4,738
2030-31	\$947,461	\$72,993	\$0	\$72,993	\$64,759	\$4,781
2031-32	\$947,461	\$72,993	\$0	\$72,993	\$64,165	\$4,826
Totals	\$26,668,553	\$1,930,064	\$0	\$1,930,064	\$1,902,940	
Phase I SCSWSP Capacity for Future Development ⁶						0.13 mgd
Present Value Cost of Surface Water Supply Capacity for Future Dev.						\$14.64 /gpd
Demand Met by Surface Water per EDU ⁷						290 gpd
Potential Development Served by this Capacity						449 EDUs
Present Value Cost of Water Supply Capacity Per EDU						\$4,242 /EDU
<u>Proposed Future Development Surface Water Supply CFF FY 2017-18 ⁸</u>						
	5/8" Meter	\$4,242	3" Meter	\$63,630		
	3/4" Meter	\$6,363	4" Meter	\$106,050		
	1" Meter	\$10,605	6" Meter	\$212,100		
	1 1/2" Meter	\$21,210	8" Meter	\$339,360		
	2" Meter	\$33,936	10" Meter	\$615,090		

¹ Debt service schedule (net) from 2006-07 to 2012-13 is for the \$17,595,000 future development portion of the 2003 bonds; debt service schedule from FY 2013-14 to FY 2016-17 is based on future developments's portion of the 2013 Subordinate Water Revenue Refunding Bonds; and from FY 2017-18 on, the debt service schedule is based on future development's portion of the 2017 Loan Agreement.

² Future development has been assigned 0.13 mgd (6.37%) of the 2.04 mgd of capacity reserved for future users and is allocated 6.37% of 2003 bond debt service and based on the City's debt allocations, 15.63% of the debt service for the 2013 Bonds and the 2017 Loan Agreement.

³ Past debt service costs are present-valued based on prior years' California Pooled Money Investment Account (PMIA) rate for the Month of May.

⁴ Future debt service costs are discounted at 0.925% per year, which is the 2017 May PMIA rate.

⁵ Surface water supply CFF for future development is based on the present value of net debt service allocated to future development. Customers paying this fee would NOT pay the SCSWSP facilities charge on their utility bill. Fees could be adjusted annually as shown in this table or based on the actual PMIA rates in future years.

⁶ Includes 0.13 mgd (future dev.) ONLY.

⁷ Based on average single family demand of 430 gpd (from EKI 2016 Master Plan) and 67.4% of future demands being met with surface water.

⁸ A 5/8" meter provides capacity to serve 1.0 EDU. Fees for other meter sizes reflect relative capacity of each meter size.

EXISTING INFILL DEVELOPMENT SURFACE WATER SUPPLY CFF CALCULATION

Approximately 1.34 MGD of surface water supply capacity is allocated to future infill development in the existing City. This CFF is applied to infill development in East Lathrop. Table 5-3 shows the buy-in fee calculation for the updated Surface Water Supply CFF. The buy-in fee is calculated based on past costs that have been incurred by existing customers. Costs incurred include \$575,672 for initial design costs as well as past debt service payments on the 2000 COP bonds, the 2012 Water Loan, which refunded the 2000 COP bonds, the 2003 Bonds, the 2013 Bonds, and the 2017 Loan. Once infill development connects to the water system, it will also be subject to a SCSWSP facilities charge on its monthly water bill.

These past costs are calculated to a present value total for fiscal year 2017-18 based on the past historic PMIA interest rates. Table 5-3 shows the surface water supply buy-in CFF is \$2,489 for a SFR unit, or per 5/8' inch water meter. Future infill development will have ground water supply available for use and therefore a surface water usage factor of 290 GPD per EDU is applied in the CFF calculation. The 290 GPD factor is 67.4% of the 430 GPD average usage per EDU; the remaining 32.6% of water usage will be supplied from ground water sources.

Table 5-3 on the following page shows that based on an average surface water demand rate of 290 GPD and a total infill development water allotment of 1,340,000 GPD, an estimated 4,624 EDUs of surface water will be available for infill development. A schedule of Surface Water Supply CFFs by water meter size is also presented in Table 5-3.

Table 5-3 also presents a schedule of future Surface Water Supply CFFs. The annual escalation rate of the CFF will depend not only on future PMIA interest rates but will also be due to the accumulated debt service costs and therefore the annual increases will be greater than inflation rates or PMIA interest rates.

Table 5-3 Surface Water Supply CFF - Existing Infill Development

Fiscal Year	Initial Design Costs ¹	Existing Infill's Portion Only - 2000 COPs and 2012 Water Loan Debt Service ²	Infill's Portion Only- Water Supply 2003 & 2013 Bonds & 2017 Loan Debt Service ³	Annual Totals	Discounted Value of Infill Portion of Debt Service ⁴	Cumulative Present Value	Cumulative Future Value ⁵	Surface Water Supply CFF for Existing Infill (\$/EDU) ⁶
1999-00	\$575,672			\$575,672	\$575,672	\$575,672	\$575,672	-
2000-01		\$210,374		\$210,374	\$200,192	\$775,864	\$815,325	-
2001-02		\$209,053		\$209,053	\$187,339	\$963,203	\$1,074,846	-
2002-03		\$208,908		\$208,908	\$177,739	\$1,140,942	\$1,341,022	-
2003-04		\$208,636	\$305,768	\$514,404	\$425,983	\$1,566,925	\$1,892,170	-
2004-05		\$210,046	\$349,449	\$559,495	\$455,270	\$2,022,195	\$2,485,138	-
2005-06		\$209,448	\$444,449	\$653,897	\$524,605	\$2,546,800	\$3,174,473	-
2006-07		\$208,738	\$441,599	\$650,337	\$507,262	\$3,054,062	\$3,915,473	-
2007-08		\$209,725	\$443,274	\$652,999	\$487,111	\$3,541,173	\$4,747,135	-
2008-09		\$208,666	\$444,274	\$652,940	\$462,781	\$4,003,954	\$5,649,204	-
2009-10		\$209,301	\$439,707	\$649,008	\$446,284	\$4,450,238	\$6,471,756	-
2010-11		\$209,691	\$439,772	\$649,463	\$439,867	\$4,890,104	\$7,220,237	-
2011-12		\$209,359	\$439,772	\$649,131	\$437,194	\$5,327,298	\$7,909,801	-
2012-13		\$177,296	\$443,857	\$621,153	\$416,630	\$5,743,928	\$8,563,622	-
2013-14		\$177,296	\$449,001	\$626,297	\$418,560	\$6,162,488	\$9,221,004	-
2014-15		\$177,296	\$446,550	\$623,846	\$415,903	\$6,578,392	\$9,867,442	-
2015-16		\$177,296	\$304,471	\$481,767	\$320,452	\$6,898,844	\$10,371,707	-
2016-17		\$177,296	\$296,726	\$474,022	\$314,389	\$7,213,232	\$10,875,806	-
2017-18		\$177,296	\$394,019	\$571,315	\$376,837	\$7,590,069	\$11,507,156	\$2,489
2018-19		\$177,296	\$394,019	\$571,315	\$373,383	\$7,963,452	\$12,184,912	\$2,635
2019-20		\$177,296	\$394,019	\$571,315	\$369,961	\$8,333,413	\$12,868,937	\$2,783
2020-21		\$177,296	\$394,019	\$571,315	\$366,570	\$8,699,983	\$13,559,290	\$2,933
2021-22		\$177,296	\$394,019	\$571,315	\$363,210	\$9,063,193	\$14,256,028	\$3,083
2022-23		\$177,296	\$394,019	\$571,315	\$359,881	\$9,423,075	\$14,959,211	\$3,235
2023-24		\$177,296	\$394,019	\$571,315	\$356,583	\$9,779,658	\$15,668,899	\$3,389
2024-25		\$177,296	\$394,019	\$571,315	\$353,315	\$10,132,973	\$16,385,151	\$3,544
2025-26		\$177,296	\$394,019	\$571,315	\$350,077	\$10,483,050	\$17,108,029	\$3,700
2026-27		\$177,296	\$394,019	\$571,315	\$346,868	\$10,829,918	\$17,837,593	\$3,858
2027-28		\$177,296	\$394,019	\$571,315	\$343,689	\$11,173,607	\$18,573,906	\$4,017
2028-29		\$177,296	\$394,019	\$571,315	\$340,539	\$11,514,146	\$19,317,029	\$4,178
2029-30			\$394,019	\$394,019	\$232,707	\$11,746,853	\$19,889,730	\$4,302
2030-31			\$394,019	\$394,019	\$230,574	\$11,977,427	\$20,467,729	\$4,427
2031-32			\$394,019	\$394,019	\$228,461	\$12,205,888	\$21,051,074	\$4,553
Totals	\$575,672	\$5,525,981	\$11,598,948	\$17,700,601	\$12,205,888			
Phase I SCSWSP Capacity for Existing Ratepayers ⁷								1.34 mgd
Total In-Fill Present Value Cost of Surface Water Supply Capacity								\$9.11 /gpd
Demand Met by Surface Water per EDU ⁸								290 gpd
Potential Development Served by this Capacity								4,624 EDUs
Buy-In Cost of Water Supply Capacity Per EDU ⁹								Varies by Year
Proposed Existing Infill Surface Water Supply CFF FY 2017-18 ^{9,10}								
5/8" Meter				\$2,489	3" Meter	\$37,332		
3/4" Meter				\$3,733	4" Meter	\$62,220		
1" Meter				\$6,222	6" Meter	\$124,440		
1 1/2" Meter				\$12,444	8" Meter	\$199,105		
2" Meter				\$19,910	10" Meter	\$360,877		

¹ Preliminary design costs paid with available water system reserves.

² Design and property acquisition costs financed using a portion of 2000A COPs. Amounts shown are the portion (69.1%) attributed to the SCSWSP, less the amount of debt service paid by River Islands (32.69%). Debt service reflects the refunding of the 2000A COPs by the 2012 Water Loan in FY 2012-13.

³ Existing Ratepayer portion of 2003 Water Revenue Bond, 2013 Subordinate Water Revenue Refunding Bonds, and 2017 Loan Agreement debt service.

⁴ Debt service payments discounted to 1999 dollars based on actual PMIA rates for May of the prior years. Future debt service costs are discounted at 0.925% per year, which is the 2017 May PMIA rate.

⁵ Includes cumulative debt service costs in future value dollars, escalated by the actual PMIA rate for the month of May for each past year.

⁶ Future CFF rates are projected based on the May 2017 PMIA rate of 0.925%. The City may elect to update the future fee rates based on actual PMIA rate or inflation rate in future years. New connections paying this fee would also pay the SCSWSP facilities charge in their monthly water bill.

⁷ SCSWSP capacity allocated to existing ratepayers.

⁸ Based on average single family demand of 430 gpd (from EKI 2016 Master Plan) and 67.4% of future water demand assumed to be met with surface water.(15.62 mgd total and 5.09 mgd from wells.

⁹ A 5/8" meter provides capacity to serve 1.0 EDU. Fees for other meter sizes reflect relative capacity of each meter size.

¹⁰ Would apply to infill areas within East Lathrop.

SURFACE WATER SUPPLY CFF

Table 5-4 summarizes the Surface Water Supply CFFs based on water meter size.

Table 5-4
Surface Water Supply Capital Facilities Fees

Meter Size	Central Lathrop Full-Cost Fee ¹	Future Development Full-Cost Fee ²	Existing Infill Buy-In Fee ³
5/8" Meter	\$5,744 per Unit	\$4,242 per Unit	\$2,489 per Unit
3/4" Meter	\$8,616 per Unit	\$6,363 per Unit	\$3,733 per Unit
1" Meter	\$14,360 per Unit	\$10,605 per Unit	\$6,222 per Unit
1 1/2" Meter	\$28,720 per Unit	\$21,210 per Unit	\$12,444 per Unit
2" Meter	\$45,952 per Unit	\$33,936 per Unit	\$19,910 per Unit
3" Meter	\$86,160 per Unit	\$63,630 per Unit	\$37,332 per Unit
4" Meter	\$143,600 per Unit	\$106,050 per Unit	\$62,220 per Unit
6" Meter	\$287,200 per Unit	\$212,100 per Unit	\$124,440 per Unit
8" Meter	\$459,520 per Unit	\$339,360 per Unit	\$199,105 per Unit
10" Meter	\$832,880 per Unit	\$615,090 per Unit	\$360,877 per Unit

¹ Applies to new development in the Central Lathrop Specific Plan. Those paying this fee would NOT pay the SCSWSP facilities charge in their monthly water bill.

² Applies to future development areas. Those paying this fee would NOT pay the SCSWSP facilities charge in their monthly water bill.

³ Applies to existing infill areas. New connections paying this fee would also pay the SCSWSP facilities charge in their monthly water bill.

6. WATER SYSTEM CFF

This section of the report identifies the facilities, costs, and the CFF rates required to fund water system facilities in the City.

WATER SYSTEM CFF APPROACH AND ASSUMPTIONS

The Water System CFF includes four separate CFF components. These include 1) an East Lathrop water system Buy-In CFF, 2) a Well Improvement CFF for West/Central Lathrop to fund the costs of arsenic treatment for groundwater wells and for a portion of the cost of a standby well, 3) a Water Storage CFF for the Mossdale Landing developments to construct a 1.0 MG water storage reservoir, and 4) a Reimbursement CFF for the Crossroads area. The City does not currently have updated costs for the West/Central Lathrop Well Improvement CFF or the Mossdale Landing Water Storage CFF so these fees have been updated recently by the City for inflation only.

EAST LATHROP WATER SYSTEM BUY-IN CFF

Since the water system for East Lathrop is mostly complete and any additions are to rehabilitate or upgrade the distribution system, a buy-in approach is used to determine this CFF for future infill development. The buy-in approach essentially puts a value on all existing water system assets and any past debt interest payments or associated costs and divides these assets and costs by the number of users (EDUs) in the system to calculate the cost per user. The cost per system user is then the basis of the buy-in CFF.

EAST LATHROP WATER SYSTEM CFF CALCULATION

Table 6-1 shows the water system facilities in East Lathrop. Several water system facilities have been added to the list since the 2005 Fee Study. The facilities list includes the original cost when the facility was purchased or constructed, the replacement cost based on ENR CCI index inflation, and a depreciated replacement cost that incorporates straight-line cost depreciation based on the facilities' service life. Based on these factors, Table 6-1 shows the total East Lathrop depreciated replacement cost of the water system facilities is \$7.4 million.

Table 6-1 Water System Capital Facilities for East Lathrop

Description	Year Added	Service Life (yrs)	Original Cost	Depreciated Cost	Replacement Cost ¹	Depreciated Repl. Cost ¹
Land						
Land as per F/S of Wtr. Distr.	1990	N/A	\$170,389	\$170,389	\$391,513	\$391,513
Buildings						
Public Works Building	1990	22	\$35,516	\$0	\$81,607	\$0
Water System						
Booster Station	1989	40	\$18,610	\$5,583	\$43,845	\$13,154
Phase 1	2000	20	\$15,141	\$2,271	\$26,391	\$3,959
Pumps & Improv. to Wells	1994	20	\$4,146,473	\$0	\$8,336,650	\$0
Premia Pump	1995	20	\$423,880	\$0	\$848,462	\$0
Alarm System	1999	8	\$1,588	\$0	\$2,859	\$0
Badger Meters - McBail Homes	1997	15	\$2,228	\$0	\$4,134	\$0
Telemetry System Phase 1	1999	20	\$39,969	\$3,997	\$71,963	\$7,196
Chlorine Feed Pump & Mixers	1999	10	\$3,702	\$0	\$6,665	\$0
Project 93-13	1999	40	\$2,241,764	\$1,232,970	\$4,036,215	\$2,219,918
Harlan Rd. Realignment	2000	20	\$420,114	\$63,017	\$732,270	\$109,840
Water System	2001	20	\$17,843	\$3,569	\$30,707	\$6,141
SCADA System	2001	20	\$3,404	\$681	\$5,858	\$1,172
Project 93-12	2001	20	\$2,703	\$541	\$4,652	\$930
IMG Reservoir Telemetry	2001	20	\$55,162	\$11,032	\$94,931	\$18,986
Master Plan EIR	2001	40	\$74,571	\$44,743	\$128,333	\$77,000
North Harlan Improv. District	2000	40	\$632,397	\$363,628	\$1,102,285	\$633,814
Upgrade water line PW0106	2002	20	\$77,622	\$19,406	\$129,208	\$32,302
Pump Accessories	2004	20	\$760	\$266	\$1,162	\$407
Booster Pump #2	2004	20	\$18,300	\$6,405	\$27,989	\$9,796
10" Magmeter	2004	20	\$10,548	\$3,692	\$16,133	\$5,646
Data Collector-Upgr. Handhelds	2004	20	\$7,650	\$2,678	\$11,700	\$4,095
Well #9 Pump	2004	20	\$13,891	\$4,862	\$21,246	\$7,436
Stenner Peristaltic Pump	2004	20	\$1,149	\$402	\$1,757	\$615
Pump Test Kit	2004	20	\$1,810	\$634	\$2,768	\$969
Connection Fee Study	2004	20	\$26,523	\$9,283	\$40,566	\$14,198
PW0301 - Well 10	2009	40	\$1,945,293	\$1,556,234	\$2,465,746	\$1,972,597
PW1505 - Well 10 Emergency Power & PGE Improvement	2015	40	\$104,119	\$98,913	\$112,769	\$107,131
PW0506 - Well 7 Security Upgrade	2005	20	\$69,175	\$27,670	\$101,436	\$40,574
Well 6 & 7 - Variable Frequency Drives Installation (VFD)	2008	20	\$29,560	\$16,258	\$39,268	\$21,597
Well 8 - Variable Frequency Drives	2006	20	\$6,481	\$2,917	\$9,152	\$4,118
PW0601 - Well 6, 7, 8 and 9 - Security Upgrade	2006	20	\$41,381	\$18,621	\$58,433	\$26,295
PW0820 - Booster Station Rehabilitation 1 & 3	2008	20	\$100,000	\$55,000	\$132,841	\$73,062
PW0504 - Booster Station 1 & 2 - Paint	2008	20	\$231,350	\$127,242	\$307,326	\$169,029
Booster Station 3 - Variable Frequency Drives	2012	20	\$37,590	\$28,193	\$43,991	\$32,993
PW0505 - Update SCADA System	2007	20	\$488,608	\$244,304	\$669,182	\$334,591
PW0211 - Shilling Water Line Replacement	2009	40	\$143,571	\$114,856	\$181,982	\$145,586
PW1018 - SCADA Improvement to add GRP 3	2010	20	\$187,621	\$121,954	\$231,687	\$150,596
PW1105 - SCADA Radio Antenna Tower and Equipment Relocation	2012	20	\$142,263	\$106,697	\$166,486	\$124,864
Tower Installation - Corp Yard and Community Center	2014	40	\$11,843	\$10,955	\$13,140	\$12,154
Tower Antenna and Installation - Stonebridge	2014	40	\$7,891	\$7,300	\$8,755	\$8,099
PW0808 - Potable Water Technical Study	2007	40	\$480,167	\$360,125	\$657,621	\$493,216
SaveMart 12" Pipeline	2008	40	\$47,200	\$36,580	\$62,701	\$48,593
4 Fire Hydrants	2008	40	\$12,000	\$9,300	\$15,941	\$12,354
Harley Davidson 8" Water Pipe, 6" Water Pipe, and 2 Hydrants	2008	40	\$7,765	\$6,018	\$10,315	\$7,994
Lathrop Crossing 68 3" Water Pipe, 120 8" Water Pipe, 770 12" Water Pipe, and 2 Hydrants	2008	40	\$38,100	\$29,528	\$50,612	\$39,224
Fixed Asset Records Totals			\$12,595,686	\$4,928,712	\$21,541,255	\$7,383,758

¹ Inflated using CCI from June of the year the asset was added to December 2017.

Past debt service interest costs are also included in the Buy-In CFF calculation. These costs are inflated to present value dollars using the consumer price index (“CPI”) and added to the CFF calculation. Table 6-2 below shows the debt used to fund East Lathrop water system facilities. This debt includes the 1993 COPs, a CSCDA loan, 2000 bonds, a portion of the 2000A COPs, and the 2012 water loan. The sum total of the present value of the interest on these bonds is approximately \$5.0 million. In addition, past debt issuance costs were also inflated to current dollars based on the CPI index and included in the Buy-In CFF calculation. The total present value of past debt issuance costs is \$974,233.

Table 6-2 Historical Water Debt Service Payments

Fiscal Year	1993 COPs		CSCDA Loan		2000 Bonds ¹		2000A COPs ²			2012 Water Loan			CPI	PV of Int. Payments ³
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Net Interest Applicable ²	Principal	Interest	Net Interest Applicable ²		
1993-94		\$93,850	\$13,046	\$27,774									148.0	\$205,079
1994-95		\$131,976	\$13,887	\$26,933									152.5	\$260,042
1995-96		\$131,976	\$14,783	\$26,037									156.7	\$251,645
1996-97		\$131,976	\$15,736	\$25,084									160.3	\$244,510
1997-98		\$131,976	\$16,752	\$24,068									163.0	\$238,904
1998-99	\$35,000	\$131,976	\$17,832	\$22,988									166.2	\$232,683
1999-00	\$2,240,000	\$130,296	\$18,983	\$21,838									172.4	\$220,218
2000-01			\$20,207	\$20,613		\$43,200	\$110,000	\$470,231	\$145,486				178.0	\$293,435
2001-02			\$21,510	\$19,310	\$15,885	\$67,121	\$120,000	\$456,588	\$141,265				179.9	\$315,856
2002-03			\$287,872	\$17,922	\$30,000	\$65,688	\$125,000	\$451,188	\$139,594				183.7	\$303,219
2003-04					\$30,000	\$63,813	\$130,000	\$445,438	\$137,815				189.7	\$265,245
2004-05					\$30,000	\$61,938	\$140,000	\$439,328	\$135,925				194.5	\$253,868
2005-06					\$35,000	\$59,906	\$145,000	\$432,678	\$133,867				202.9	\$238,329
2006-07					\$35,000	\$57,719	\$150,000	\$425,718	\$131,714				208.4	\$226,893
2007-08					\$40,000	\$55,375	\$160,000	\$418,443	\$129,463				218.8	\$210,804
2008-09					\$40,000	\$52,875	\$165,000	\$410,523	\$127,012				215.7	\$208,127
2009-10					\$40,000	\$50,375	\$175,000	\$402,273	\$124,460				218.0	\$200,173
2010-11					\$45,000	\$47,719	\$185,000	\$393,348	\$121,699				225.7	\$187,305
2011-12					\$50,000	\$44,531	\$0	\$191,216	\$59,161	\$0	\$0	\$0	229.5	\$112,764
2012-13					\$50,000	\$40,969				\$252,797	\$236,203	\$73,079	233.5	\$121,887
2013-14					\$55,000	\$37,228				\$283,199	\$205,801	\$63,673	238.3	\$105,647
2014-15					\$60,000	\$33,131				\$293,198	\$195,802	\$60,580	238.6	\$97,997
2015-16					\$60,000	\$28,856				\$303,550	\$185,450	\$57,377	241.0	\$89,287
2016-17					\$65,000	\$24,403				\$314,267	\$174,733	\$54,061	245.0	\$79,937
2017-18					\$70,000	\$19,594				\$325,363	\$163,637	\$50,628	249.6	\$71,540
Totals	\$2,275,000	\$884,026	\$440,608	\$232,567	\$750,885	\$854,440	\$1,605,000	\$4,936,968	\$1,527,460	\$1,772,374	\$1,161,626	\$359,398		\$5,035,396

¹ Limited Obligation Improvement Bonds for the North Harlan Water Improvement District.

² The 2000A COPs provided \$2,240,000 to refund the 1993 COPs and \$5,000,000 for SCSWSP development costs not related to the East Lathrop water system buy-in CFF; therefore only 30.9% of the interest is applicable to the water system buy-in CFF. The 2000A COPs were refinanced in April 2012 by the 2012 Water Loan; only 30.9% of the interest from the 2012 Water Loan is applicable to the water system buy-in CFF.

³ Excludes portion of 2000A COP interest cost related to the SCSWSP.

Existing water system funds balances are also considered to be water system assets and therefore are added to the calculation of the Water System Buy-In CFF. The City reports that Water System Capital Replacement Reserve (Fund 560) has an existing balance of \$3,400,829 and Water System CFF Fund (Fund 561) has a fund balance of \$1,747,002.

Lastly, any outstanding bond principal balance is subtracted from the total water system value to reflect that this cost is still outstanding and therefore reduces the net value of the system.

Table 6-3 below shows the Buy-In CFF calculation for East Lathrop. The total valuation of the water system is approximately \$16.9 million. This total valuation is divided by 13,712, which City staff estimates is the capacity of the water system in East Lathrop. This results in a Buy-In CFF of \$1,231 per SFR or EDU. CFF rates by water meter size are presented in the table below. CFF rates for North Harlan are reduced since property assessments in this area fund water system improvements and therefore North Harlan development receives a credit for their funding contribution.

Table 6-3 Water System Buy-In CFF - East Lathrop

Depreciated Replacement Cost of Water System Assets	\$7,383,758
Plus: Available Water System CFF Reserves (Fund 561) ¹	\$1,747,002
Plus: Available Capital Replacement Reserves (Fund 560) ¹	\$3,400,829
Plus: PV of Past Interest on Debt ²	\$5,035,396
Plus: PV of Past Debt Issuance Costs ³	\$974,233
Less: Outstanding Principal on Debt Obligations ⁴	(\$1,661,570)
Total Water System Valuation	\$16,879,648
Estimated System Capacity - Number of 5/8" Equiv. Meters ⁵	13,712
Water System Buy-In CFF for East Lathrop	\$1,231
Water System Buy-in CFF in No. Harlan Water ID ⁶	\$1,157
<u>Water System Buy-In Capital Facilities Fees</u>	
	East Lathrop North Harlan
5/8" Meter	\$1,231 \$1,157
3/4" Meter	\$1,847 \$1,735
1" Meter	\$3,078 \$2,892
1 1/2" Meter	\$6,155 \$5,785
2" Meter	\$9,848 \$9,256
3" Meter	\$18,466 \$17,354
4" Meter	\$30,776 \$28,924
6" Meter	\$61,552 \$57,847
8" Meter	\$98,483 \$92,555
10" Meter	\$178,501 \$167,756

¹ As of April 2018.

² Present value of interest payments on 1993 COPs, CSCDA loan, 2000 Bonds, the portions of the 2000 COPs and 2012 Water Loan allocable to the water system.

³ Present value of issuance costs of the 1993 COPs, CSCDA loan, 2000 Bonds, the portions of the 2000 COPs and 2012 Water Loan allocable to the water system. Only 30.9% of the issuance costs are applicable to the Water System buy-in CFF.

⁴ Outstanding principal from 2000 Bonds and the portion of the 2012 Water Loan allocable to the water system.

⁵ Based on City staff estimate.

⁶ Adjusted to add back 2000 Bonds outstanding balance and reduce by the present value of payments toward North Harlan Water Improvement District.

CROSSROADS WATER SYSTEM REIMBURSEMENT CFF

The Crossroads water system includes a 1.0 MG water storage tank, a well, booster pump station, transmission main, and a water distribution system. The total original cost of this system was approximately \$1.9 million. Table 6-4 on the following page shows that the replacement cost in today's dollars is approximately \$3.8 million, based on the ENR CCI index. But applying straight-line depreciation, based on the service life of the facilities, reduces the total value of the water system to approximately \$1.8 million.

The Crossroads Water System Reimbursement CFF was originally adopted by the City in 1995 for the purpose of reimbursing the developer for constructing the water system facilities. Under the terms of the reimbursement agreement, interest accruing at a rate of 8.0% per year is added to the outstanding balance.

WATER SYSTEM REIMBURSEMENT CFF CALCULATION

Table 6-4 shows the calculation of the Crossroads Water System Reimbursement CFF. The total cost of the water system facilities, \$1.8 million, is added to the accumulated interest, \$3.4 million, to arrive at a total water system valuation of approximately \$5.2 million. This amount is divided by the system capacity, 608,000 GPD, to produce a cost of \$8.54 per gallon of water.

Based on actual historical water use, the City had estimated that average water usage in Crossroads is 500 GPD for a 5/8" water meter. The City assumes that by build out of the City approximately two-thirds of Crossroads' water usage will be supplied through surface water and one-third will be supplied with groundwater. Based on this assumption, the average share that is groundwater supplied per 5/8" water meter is 163 GPD. The Reimbursement CFF is calculated by multiplying the \$8.54 cost per gallon by 163 GPD, which produces a Water System Reimbursement CFF of \$1,392 per 5/8" meter.

Table 6-4 Crossroads Water System Reimbursement CFF

Asset No.	Description	Year Added	Service Life (yrs)	Original Cost	Depreciated Cost	Replacement Cost ¹	Depreciated Repl. Cost ¹
130-00	1 MG Water Tank	1993	40	\$205,813	\$82,325	\$425,438	\$170,175
131-00	Pump House	1993	40	\$247,508	\$99,003	\$511,626	\$204,651
132-00	Well House	1993	40	\$318,936	\$127,574	\$659,276	\$263,710
135-00	Transmission Line	1993	40	\$192,500	\$77,000	\$397,919	\$159,167
136-00	Well No. 9 Construction	1993	40	\$49,155	\$19,662	\$101,609	\$40,644
137-00	Carpenter Waterline	1993	40	\$18,360	\$7,344	\$37,952	\$15,181
138-00	Inspect./A&E/Misc.	1993	40	\$50,000	\$20,000	\$103,356	\$41,342
139-00	Contingencies	1993	40	\$162,341	\$64,936	\$335,577	\$134,231
140-00	Construction Supervision	1993	40	\$124,461	\$49,784	\$257,275	\$102,910
141-00	Land for Well & Tank Site	1993	N/A	\$180,680	\$180,680	\$373,485	\$373,485
142-00	Legal Fees	1993	40	\$4,033	\$1,613	\$8,337	\$3,335
145-00	Testing	1993	40	\$26,583	\$10,633	\$54,950	\$21,980
150-00	Water Master Plan	1993	40	\$24,760	\$9,904	\$51,182	\$20,473
151-00	Engineering	1993	40	\$192,945	\$77,178	\$398,839	\$159,535
152-00	City and Railroad Fees	1993	40	\$53,651	\$21,460	\$110,903	\$44,361
Fixed Asset Record Totals				\$1,851,726	\$849,098	\$3,827,722	\$1,755,180
Interest Through March 2018 (on outstanding balance owned) ¹							\$3,391,149
Additional Interest Through May 2018 (on outstanding balance owned) ¹							\$45,215
Total Water System Valuation							\$5,191,544
Crossroads Water System Capacity (gpd)							608,000
Crossroads Water System Reimbursement CFF (\$/gpd)							\$8.54
Water Demand (gpd) Met by Ground Water per 5/8" Meter ²							163
Cost of Ground Water Supply Capacity per 5/8" Meter							\$1,392
<u>Crossroads Water System Reimbursement CFF ²</u>							
				5/8" Meter	\$1,392		
				3/4" Meter	\$2,088		
				1" Meter	\$3,480		
				1 1/2" Meter	\$6,959		
				2" Meter	\$11,134		
				3" Meter	\$20,877		
				4" Meter	\$34,795		
				6" Meter	\$69,591		
				8" Meter	\$111,345		
				10" Meter	\$201,813		

¹ Interest accrues at 8% per year on the outstanding balance to be reimbursed under terms of the reimbursement agreement. Interest on the outstanding balance owed is accrued through May 2018. Accrued interest provided by the City Finance Department.

² Based on 500 gpd for a 5/8" water meter and assuming groundwater will supply 32.6% of this amount and surface water supplying the remaining 67.4% of water demand. Fees for larger meters are scaled based on relative capacity.

WATER SYSTEM CFF SCHEDULES

Table 6-5 shows the Water System CFF schedules for East Lathrop, North Harlan, Crossroads, West/Central Lathrop, and Mossdale Landing. CFFs for West/Central Lathrop and Mossdale Landing show the recently updated rates as increased by the City to reflect the ENR 20-City CCI index change since the City last updated the CFF rates in 2017.

Table 6-5 Summary of Water System CFFs

	East Lathrop Water System Buy-In CFF	North Harlan WID Water System Buy-In CFF	Crossroads Water System Reimbursement CFF	West/Central Lathrop - Well Improvement CFF¹	Mossdale Landing Water Storage CFF ^{1,2}
5/8" Meter	\$1,231	\$1,157	\$1,392	\$756	\$895
3/4" Meter	\$1,847	\$1,735	\$2,088	\$1,135	\$1,343
1" Meter	\$3,078	\$2,892	\$3,480	\$1,891	\$2,238
1 1/2" Meter	\$6,155	\$5,785	\$6,959	\$3,782	\$4,477
2" Meter	\$9,848	\$9,256	\$11,134	\$6,051	\$7,162
3" Meter	\$18,466	\$17,354	\$20,877	\$11,345	\$13,430
4" Meter	\$30,776	\$28,924	\$34,795	\$18,909	\$22,383
6" Meter	\$61,552	\$57,847	\$69,591	\$37,817	\$44,766
8" Meter	\$98,483	\$92,555	\$111,345	\$60,507	\$71,625
10" Meter	\$178,501	\$167,756	\$201,813	\$109,670	\$129,820

¹ Water system CFF was adjusted by the City for inflation only.

² New development within Mossdale Landings developments would pay both the well improvement and water storage CFFs.

7. SEWER/RECYCLED WATER CAPITAL FACILITIES FEE

This section of the report identifies the sewer and recycled water facilities, costs, and CFF rates required to fund reimbursement costs for oversizing the sewer and recycled water facilities in the CLSP area.

FACILITIES AND COSTS

Tables 1 through 3 in the appendix of this report provide details of the sewer and recycled water backbone facilities and costs that have been constructed or funded by Saybrook to serve the CLSP area. Facilities include a pump station, force mains, sewer pipelines, and recycled water pipelines. Table 7-1 shows the total cost of these facilities in 2018 dollars is \$11.6 million.

Table 7-1
Sewer/Recycled Water Capital Facilities for CLSP

No.	Improvement	Project Cost (2017 \$)	Project Cost (2018 \$)
1	Portion of Pump Station and Force Mains ¹	\$5,302,500	\$5,475,000
2	Sanitary Sewer Mains	\$2,849,175	\$2,942,000
3	Recycled Water Mains	\$3,095,280	\$3,196,000
Total		\$11,246,955	\$11,613,000

1. Includes 1/4 of the total pump station cost.

COST ALLOCATION FACTORS

The allocation of the CLSP sewer and recycled water facilities is based on the wastewater flow factors provided by the City and summarized in Table 7-2 below. Wastewater flow is a reasonable method of allocating sewer facilities costs since it accurately measures the demand placed on the sewer system by various types of development.

Table 7-2
Sewer Cost Allocation Factors

Land Use	Wastewater Flow Factor
Low Density Residential	245 gpd/du
Medium Density Residential	170 gpd/du
High Density Residential	170 gpd/du
Commercial	590 gpd/ac
Industrial	355 gpd/ac

Sources: City of Lathrop

CLSP SEWER/RECYCLED WATER FACILITIES CFF CALCULATION

Table 7-3 summarizes the cost allocation of the sewer and recycled water facilities costs. The estimated development in CLSP includes 5,144 single family units and approximately 5.0 million square feet of commercial development. The residential development estimate varies from the CLSP EIR which shows nearly 6,800 units as potentially developing in the CLSP. However development densities in approved tentative maps for CLSP show residential development at lower densities than were originally contemplated. As a result, the costs allocation shown in Table 7-3 includes the lower density residential estimates. If these densities change in future years, the CFF should be updated to account for the revised development plans.

Table 7-3
Sewer/Recycled Water Cost Allocation

Land Use	Units / Bldg SF	Wastewater Flow Factor	Wastewater Flow Daily Volume	Percent Allocation	Cost Allocation	Cost per Unit / Bldg SF
Total Improvement Cost \$11,613,000						
<u>Residential</u>	<u>Dwelling</u> <u>Units</u>	<u>GPD</u> <u>per Unit</u>	<u>GPD</u>			<u>per Unit</u>
Single Family	5,144	245	1,260,280	84.8%	\$9,850,660	\$1,915
Multi-Family	0	170	0	0.0%	\$0	\$1,329
Subtotal - Residential	5,144		1,260,280	84.8%	\$9,850,660	
<u>Non-Residential</u>	<u>Acres</u>	<u>Building</u> <u>Sq. Ft</u>	<u>GPD</u> <u>per acre</u>			<u>Per</u> <u>1,000 SF</u>
Commercial	382.2	4,994,000	590	15.2%	\$1,762,340	\$353
Industrial	0.0	0	355	0.0%	\$0	\$212
Total			1,485,751	100.0%	\$11,613,000	

CLSP SEWER/RECYCLED WATER FACILITIES CFF

The sewer and recycled water facilities, or portions of facilities, identified in this chapter will serve the CLSP area and therefore the Sewer/Recycled Water CFF calculated here is to be charged only to development in the CLSP area. Table 7-4 summarizes the Sewer/Recycled Water CFFs. Since the sewer and recycled water facilities have been constructed by Saybrook, CFF revenue will be used to reimburse the developer.

Table 7-4
Sewer/Recycled Water Capital Facilities Fees

<u>Land Use</u>	<u>Fee</u>
<u>Residential</u>	
Single Family	\$1,915 per Unit
Multi-Family	\$1,329 per Unit
<u>Non-Residential</u>	
Commercial	\$353 per 1,000 sf
Industrial	\$212 per 1,000 sf

8. CIP UPDATE FOR THE CULTURE AND LEISURE FACILITIES

In 2014 the City completed construction of the Lathrop Generations Center. The Generation Center building includes a 4,200 square foot public library and a 5,300 square foot youth and teen center. Additionally, the 5.76 acre site on Spartan Way includes play equipment, a skate park, parkour course, outdoor stage, turf seating, landscaping and irrigation, and a parking lot. In 2012, the City received a \$5.0 million grant to help fund the facility. The 5.76 acre site itself was purchased by the City from Saybrook at a cost of \$6.00 per square foot, for a total of approximately \$1.5 million.

While the CFF program includes a teen center and library facility space in the Culture and Leisure Facilities CFF, it does not include sufficient land associated with the teen center or library facilities to be able to provide CFF funding for acquiring the 5.76 acre site.

ADJUSTMENT OF THE CULTURE AND LEISURE FACILITIES CIP

Public agencies regularly update their impact fee capital improvement plans. Fee program updates, as is being done through this Fee Study, provide public agencies the opportunity to reevaluate the planned facilities to determine whether their facilities are still needed or whether the size or amenities associated with their facilities need to be revised or adjusted to their changing needs. With this fee program update, City staff has determined that the 5.76 acres of land associated with the Generation Center should be included in the CFF program. However, due to development agreement limitations regarding increasing the CFF fees or adding new facilities to the fee program, the City will need to reduce the size of another Culture and Leisure facility such that there is no net increase in the CFF rates for the Culture and Leisure Facilities sub-component.

LIBRARY FACILITY

The Culture and Leisure CFF includes 32,700 square feet of library space to serve the population at build out of the City. This is based on a level of service equal to 500 square feet of space per 1,000 residents. City staff feels that this level of service can be reduced without significantly impacting future library services. By reducing the library square footage standard to 475 square feet per 1,000 residents such that the total library space will be 31,100 square feet at build out, the City will be able to include the cost of the 5.76 acres of the Generation Center land in the CFF program without increasing the overall Culture and Leisure Facility sub-component of the Culture and Leisure CFF. Tables 8-1 through 8-3 show the calculations behind the change in facilities while keeping the Culture and Leisure CFF rates the same as they currently are in the

CFF program. Table 8-1 below shows the total cost of the 31,100 square feet of library facilities is \$18,361,000.

Table 8-1

Updated Library Facilities Space at Build Out

<u>Facility Needs</u>			
Building Requirements (sf) ¹			31,100
Land Requirements (acres)			1.88
	Square	Cost per	Total
<u>Cost Estimate</u>	<u>Footage</u>	<u>SF</u>	<u>Cost</u>
		<u>(2018 \$)</u>	
Land	81,750	\$6.00	\$490,500
Land Improvements	81,750	\$6.00	\$490,500
Subtotal - Land and Land Improvements			\$981,000
Basic Building	31,100	\$325	\$10,102,510
Special Construction & Equip	31,100	\$65	\$2,020,502
Subtotal - Construction			\$12,123,012
Contingencies (12% of Construction)			\$1,454,761
Engr., CM, Fees, Etc. (28% of Const. and Contingencies)			\$3,801,777
Subtotal - Contingencies & Soft Costs			\$5,256,538
Total Library Costs (2018 \$)			\$18,360,551
Total Library Costs (Rounded)			\$18,361,000

¹ Updated estimate of required library facilities.

Table 8-2 shows the total cost of teen/youth center, including the cost of the 5.76 acres of land. The total cost of the building and land is \$6,053,000.

Table 8-2
Updated Teen/Youth Facilities Space at Build Out

<u>Facility Needs</u>			
Building Requirements (sf) ¹			7,500
Land Acquisition (acres) ²			5.76
	Square	Cost per	
	Footage	SF	Total
<u>Cost Estimate</u>		<u>(2018 \$)</u>	<u>Cost</u>
Land ²	250,735	\$6.00	\$1,504,410
Land Improvements ³	30,000	\$6.00	\$180,000
Subtotal - Land and Land Improvements			\$1,684,410
Basic Building	7,500	\$325	\$2,437,875
Spec. Constr. & Equip	7,500	\$81	\$609,469
Subtotal - Construction			\$3,047,344
Contingencies (12% of Construction)			\$365,681
Engr., CM, Fees, Etc. (28% of Const. and Contingencies)			\$955,647
Subtotal - Contingencies & Soft Costs			\$1,321,328
Total Youth Center Costs (2018 \$)			\$6,053,082
Total Youth Center Costs (Rounded)			\$6,053,000

¹ Updated teen/youth center facilities.

² Based on the actual land acquired for \$1.5 million.

³ Land Improvements for the building site associated with the youth center only.

Table 8-3 shows the updated fee calculation of the Culture and Leisure Facilities sub-component. Facilities costs have been inflated to 2018 dollars based on the ENR 20-city construction cost index of 10,873 as of December 2017. The CFF for a single family residence is \$3,386 per unit and \$2,417 per multifamily unit. These CFF rates are equal to the Culture and Leisure Facilities subcomponent that is in effect for 2018.

Table 8-3
Culture and Leisure Facilities and CFF Sub-Component

Culture and Leisure Facility	Quantity	Estimated Cost (2018 \$)	Buildout Population	Cost per Resident
Community Pool	1	\$4,872,000	65,400	\$74.50
Gym	7,500 SF	\$4,549,000	65,400	\$70
Sports Complex	2	\$6,496,000	65,400	\$99
Library	31,100 SF	\$18,361,000	65,400	\$281
Senior Center	19,600 SF	\$11,452,000	65,400	\$175
Youth Center	7,500 SF	\$6,053,000	65,400	\$93
Community Center	7,800 SF	\$4,069,000	9,750 ¹	\$417
Total Facilities		\$55,852,000		\$1,209

Fee Calculation			Culture & Leisure Facilities
	Persons per Household	Cost per Resident	Fee
<u>Residential</u>			
Single Family	2.8	\$1,209	\$3,386
Multi-Family	2.0	\$1,209	\$2,417

¹ The expansion to the Community Center is only projected to accommodate an additional 9,750

REMAINING LIBRARY AND YOUTH FACILITIES

With the construction of the Lathrop Generations Center, the total remaining library and youth center facilities needed by build out of the City are reduced; the CFF program assumes a buildout population of 65,400 for the City. Table 8-4 below summarizes the required facilities, the existing facilities that were constructed at the Generations Center, and the remaining facilities that need to be constructed in the future to serve the City's build out population.

For library facilities, 31,100 square feet of building space is required by build out. With the construction of the 4,200 square foot library at the Generations Center, 26,900 square feet of library building space remains to be constructed on 1.62 acres of land. For the youth center, 5,300 square foot of space are in the Generations Center leaving 2,200 square feet of youth center building space remaining to be constructed on 0.13 acres of land.

Table 8-4
Library and Youth Center Net Remaining Facilities by Build Out

<u>Library Facilities</u>		
	<u>Land (acres)</u>	<u>Building (sf)</u>
Requirements by Buildout ¹	1.88	31,100
Existing Library Facilities ²	<u>(0.25)</u>	<u>(4,200)</u>
Net Remaining Library Building Requirements	1.62	26,900
 <u>Youth Center Facilities</u>		
Requirements by Buildout ³	0.43	7,500
Existing Youth Center Facilities ²	<u>(0.30)</u>	<u>(5,300)</u>
Net Remaining Youth Center Building Requirements	0.13	2,200

¹ Updated estimate of required library facilities.

² Library space at the Generations Center.

³ Youth center space at the Generations Center.

9. NEXUS FINDINGS

Development in the City will create a need for additional public facilities as well as expansion of existing facilities to serve future residents and employees. The CFF program will provide funding for public facilities in accordance with the policies and goals set forth by the City. As required pursuant to the Mitigation Fee Act, the CFFs calculated in this Fee Study meet the nexus requirements of the law, as outlined below.

NEXUS TEST

Purpose of the Fees

The purpose of the CFFs is to provide funding for the infrastructure and facilities identified in this Fee Study.

Use of Fee

CFF revenue will be used to fund future development's fair share of the cost of infrastructure and facilities that have been identified by the City as necessary to serve new development in the City.

Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.

New residential and non-residential development will generate additional demand for the infrastructure and facilities identified in this Fee Study. The facilities, infrastructure improvements, and capacity enhancements included in this Fee Study will ensure that the City will maintain the desired level of service standards that are identified for the facility categories included in this Fee Study.

Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed.

CFF revenue collected will fund the facilities included in this Fee Study. These facilities will serve development in the City and the proposed fees in this Fee Study are a fair-share cost allocation based on the impact that future development will have on these facilities and improvements. Separate CFF accounts will be established to ensure that fee revenue is applied to the infrastructure and facilities for which it is collected.

Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.

A reasonable relationship between the amount of each CFF and the cost of the public facility, or portion thereof, is established in this Fee Study through the use of cost allocation factors to estimate the demand for a facility or, the impact that a land use will have on a facility. For example, the cost allocation for the Sewer/Recycled Water Fee is based on the gallons per day of wastewater generated for each specific land use. The wastewater generation rates, which differ between land use categories, measure each land use's impact on sewer facilities and infrastructure. As a result, each land use category or development type is allocated its fair share of the cost based on its impact, as identified by its cost allocation factor.

By assigning the demand for infrastructure and facilities based on the cost allocation factors for each land use and quantifying that demand in the calculation of the CFFs, a reasonable relationship is established between the amount of the fee and the cost of the facilities attributable to the different types of development in the City.

10. FEE PROGRAM ADMINISTRATION

FEE IMPLEMENTATION

According to the California Government Code, prior to levying a new fee or increasing an existing fee, a public agency must hold at least one open and public meeting. At least 10 days prior to this meeting, the agency must make data on facility costs and funding sources available to the public. Notice of the time and place of the meeting, and a general explanation of the matter, are to be published in accordance with Section 6062a of the Government Code, which states that publication of notice shall be posted over a 10-day period in a newspaper regularly published once a week or more. Two publications, with at least five days intervening between the dates of the first and last publication, not counting such publication dates, are sufficient. The Fee Study and fees established herein will be adopted through a City ordinance and resolution. Once the fee program is adopted by the Lathrop City Council, it shall become effective no sooner than sixty days after the final legislative action.

FEE ADJUSTMENTS

The CFFs will be adjusted in future years to reflect revised facility standards, receipt of funding from alternative sources (i.e., state or federal grants), revised costs, or changes in land uses or development plans. In addition to such adjustments, each year the CFF Fees will be adjusted by the change in the Engineering News Record 20-City CCI over the prior calendar year. This Fee Study adjusted costs in this report based on the ENR 20-City CCI value for December 2018, which is 10,873. For inflating facilities costs that are in the City's 2005 CFF Fee Study, this Fee Study applied ENR 20-City CCI values of 6,695 (July 2003) for costs that were established in 2003 and an ENR 20-City CCI value of 7,422 (July 2005) for costs established in 2005.

ANNUAL ADMINISTRATIVE DUTIES

The Government Code requires a public agency to report, every year and every fifth year, certain financial information regarding their impact fees. Within 180 days after the last day of each fiscal year the public agency must make the following information available for the past fiscal year:

- (a) A brief description of the type of fee in the account or fund
- (b) The amount of fee revenue
- (c) The beginning and ending balance of the account or fund

- (d) The amount of fee revenue collected and interest earned
- (e) An identification of each public improvement on which fees were expended and the amount of expenditures on each improvement, including the total percentage of the cost of public improvement that was funded with fees
- (f) An identification of an approximate date by which time construction on the improvement will commence if the local agency determines that sufficient funds have been collected to complete financing on an incomplete public improvement
- (g) A description of each interfund transfer or loan made from the account or fund, when it will be repaid and at what interest rate
- (h) The amount of any refunds made once it is determined that sufficient monies have been collected to fund all projects

The public agency must make this information available for public review and must also present it at the next regularly scheduled public meeting not less than 15 days after this information is made available to the public.

FIFTH-YEAR ADMINISTRATIVE DUTIES

For the fifth year following the first deposit into the fee account and every five years thereafter, the public agency must make the following findings with respect to any remaining funds in the fee accounts:

- (a) Identify the purpose to which the fee is to be put
- (b) Demonstrate a reasonable relationship between the fee and the purpose for which it is charged
- (c) Identify all sources and amounts of funding anticipated to complete financing incomplete improvements
- (d) Designate the approximate dates on which funding is expected to be deposited into the appropriate accounts or funds

As with the annual report, the five-year report must be made public within 180 days after the end of the public agency's fiscal year and must be reviewed at the next regularly scheduled public meeting. The public agency must make these findings; otherwise the law states that the City must refund the fee revenue to the then current owners of the development project.

APPENDIX A

Sewer System Capital Facilities Costs

Table 1
PUMP STATION AND FORCE MAINS

ITEM	UNIT	UNIT COST	CFF AREA		REMARKS
			QTY	ITEM SUB- TOTAL	
A. Sewer System Work					
Pump Station Construction Work	LS	\$1,750,000	1	\$1,750,000	1/4 of the total pump station cost
14"SSFM	LF	\$65.00	11900	\$773,500	
18"SSFM	LF	\$85.00	11900	\$1,011,500	
CONSTRUCTION SUBTOTAL				\$3,535,000	
F. Right of Way Acquisition	SF	\$2.00		\$0	
G. Contingences		30%		\$1,060,500	
H. Design / Plan Check / Bonding / Staking / Inspection		20%		\$707,000	
TOTAL				\$5,302,500	

Table 2
OVERSIZED SEWER MAINS

All Sanitary Sewer Gravity Lines larger than 12"

ITEM	UNIT	UNIT COST	CFF AREA		REMARKS
			QTY	ITEM SUB- TOTAL	
A. Sewer System Work - Constructed by Saybrook					
24" Sanitary Sewer	LF	\$105.00	4000	\$420,000	
18" Sanitary Sewer	LF	\$90.00	1850	\$166,500	
14" Sanitary Sewer	LF	\$75.00	1200	\$90,000	
Dewatering	LF	\$75.00	7050	\$528,750	
CONSTRUCTION SUBTOTAL				\$1,899,450	
F. Right of Way Acquisition	SF	\$2.00		\$0	
G. Contingences		30%		\$569,835	
H. Design / Plan Check / Bonding / Staking / Inspection		20%		\$379,890	
TOTAL				\$2,849,175	

Table 3**RECYLCED WATER MAINS**

All Sanitary Sewer Gravity Lines larger than 12"

ITEM	UNIT	UNIT COST	CFF AREA		REMARKS
			QTY	ITEM SUB-TOTAL	
A. Recycled Water System Work - Constructed by Saybrook					
24" Recycled Water	LF	\$95.00	3400	\$323,000	
20" Recycled Water	LF	\$80.00	6350	\$508,000	
10" Recycled Water	LF	\$40.00	3300	\$132,000	
6" Recycled Water	LF	\$24.00	5100	\$122,400	
CONSTRUCTION SUBTOTAL				\$2,063,520	
F. Right of Way Acquisition	SF	\$2.00		\$0	
G. Contingences		30%		\$619,056	
H. Design / Plan Check / Bonding /		20%		\$412,704	
Staking / Inspection					
TOTAL				\$3,095,280	