

MEMORANDUM

To: Patrick Meagher, Reclamation District 784

From: Ellen Martin and Kate O'Beirne

Subject: Inflation-Adjusted Reclamation District 784 Drainage Impact Fees; EPS #192072

Date: May 21, 2020

The Economics of Land Use



Reclamation District No. 784 (RD 784) has a drainage impact fee program in place to fund drainage improvements serving new development in Basins A, B, and C. A discrete fee is computed for each drainage basin based on the drainage improvements required to serve benefitting development in each individual basin. In addition, discrete fees are computed for drainage sub-basins in Basin A (Basin A-1) and Basin C (Basin C-1 and Basin C-2).

The drainage impact fee program also includes an Advance Funding Charge applicable to Basin C development that provides funding for regional improvements benefitting Basin C. After consulting with the District's staff, engineer, and attorney, the Board found that the Drainage Basin C Advanced Funding Impact Fee could be reduced without jeopardizing future drainage improvements or reimbursements to developers that paid into the Drainage Basin C Advanced Funding Impact Fee Program. Per Resolution No. 2019-07-05, the Drainage Basin C Advanced Funding Impact Fee was therefore reduced to match the fee currently imposed under the current Drainage Basin C Impact Fee, such that no additional funds will be collected pursuant to the Drainage Basin C Advance Funding Impact Fee program.

The discussion below and attached tables provide the basis for the Drainage Impact Fee program inflation adjustments by drainage basin. This analysis calculates inflated RD 784 drainage fees for the following basins and sub-basins:

- Drainage Basin A.
- Drainage Basin A-1.
- Drainage Basin B.
- Drainage Basin C (also applies to Drainage Basin C Advance Funding Charge).
- Drainage Basin C-1.
- Drainage Basin C-2.

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Consistent with the methodology set forth in the 2013 RD 784 Nexus Study addenda and the 2015 Basin C-2 Nexus Study, EPS adjusted the improvement cost estimates using the average of the change in the San Francisco Construction Cost Index (CCI) and the change in the 20-City CCI, as reported in the Engineering News-Record.

The table below summarizes the basis for the improvement cost estimate adjustment from May 2019 to May 2020.

Construction Cost Index Adjustment Factor for 2020 Update

Construction Cost Index	May 2019	May 2020	Adjustment Factor
20-City Average	11,230	11,418	1.68%
San Francisco	12,333	12,819	3.94%
Average % Increase			2.81%

cci_20

Source: Engineering News Record.

Table 1 through **Table 5** provide the updated fees for each basin, sub-basin, and the Drainage Basin C Advance Funding Charge.

Please contact Ellen Martin at (916) 649-8010 with questions or comments regarding this memorandum.

Table 1
Reclamation District 784
Drainage Impact Fee Update
Summary of Drainage Impact Fees - Basin A and A-1 (2020\$)

Basin A

Land Use Category	2019 Cost per Acre	2020 Cost per Acre	Plus RD 784 Administration	Plus Yuba County Administration	Total Fee per Acre
		2.81% [1]	3%	1%	
DRAINAGE BASIN A [2]					
Residential Land Uses					
Low Density Residential	\$6,574	\$6,759	\$203	\$68	\$7,030
Medium Density Residential	\$8,218	\$8,448	\$253	\$84	\$8,785
Medium/High Density Residential	\$9,861	\$10,138	\$304	\$101	\$10,543
High Density Residential	\$10,683	\$10,983	\$329	\$110	\$11,422
Nonresidential Land Uses					
Business Park	\$14,792	\$15,207	\$456	\$152	\$15,815
Commercial	\$14,792	\$15,207	\$456	\$152	\$15,815
Industrial	\$13,148	\$13,518	\$406	\$135	\$14,059
Agricultural Building [3]	\$11,818	\$12,149	\$364	\$121	\$12,634
Public/Other Land Uses					
School	\$9,040	\$9,293	\$279	\$93	\$9,665
Other [4]	\$13,148	\$13,518	\$406	\$135	\$14,059

DRAINAGE BASIN A-1 [2] <i>(All Development Excl. Sawyer's Landing and Bear River)</i>
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Residential Land Uses					
Low Density Residential	\$11,818	\$12,149	\$364	\$121	\$12,634
Medium Density Residential	\$14,772	\$15,187	\$456	\$152	\$15,795
Medium/High Density Residential	\$17,726	\$18,224	\$547	\$182	\$18,953
High Density Residential	\$19,204	\$19,743	\$592	\$197	\$20,532
Nonresidential Land Uses					
Business Park	\$26,590	\$27,336	\$820	\$273	\$28,429
Commercial	\$26,590	\$27,336	\$820	\$273	\$28,429
Industrial	\$23,635	\$24,299	\$729	\$243	\$25,271
Agricultural Building [3]	\$11,818	\$12,149	\$364	\$121	\$12,634
Public/Other Land Uses					
School	\$16,249	\$16,705	\$501	\$167	\$17,373
Other [4]	\$23,635	\$24,299	\$729	\$243	\$25,271

fee_sum_20

[1] CCI average adjustment factor of San Francisco and 20-City average for May 2019 to May 2020.
[2] Basin A fee rates would apply to Sawyer's Landing and Bear River only. Drainage Basin A-1 rates would apply to all other Basin A development. Note that the fees for each basin are mutually exclusive and not additive.
[3] Agricultural building rate established by the RD 784 Board of Trustees policy, effective June 6, 2018. Agricultural building fee rate applies to infill projects on individual parcels or small development projects of four (4) parcels or fewer and if these structures are located outside of established residential neighborhoods. Nonresidential, agricultural projects anywhere within Basin A will be assessed at the Basin A-1 agricultural rate.
[4] Excludes parks, which are exempt from the fee.

Table 2
Reclamation District 784
Drainage Impact Fee Update
Summary of Drainage Impact Fees - Basin B (2020\$)

Basin B

Land Use Category	2019 Cost per Acre	2020 Cost per Acre	Plus RD 784 Administration	Plus Yuba County Administration	Total Fee per Acre
		2.81% [1]	3%	1%	
Residential Land Uses					
Low Density Residential	\$9,954	\$10,233	\$307	\$102	\$10,642
Medium Density Residential	\$12,443	\$12,792	\$384	\$128	\$13,304
Medium/High Density Residential	\$14,931	\$15,350	\$461	\$154	\$15,965
High Density Residential	\$16,175	\$16,629	\$499	\$166	\$17,294
Nonresidential Land Uses					
Business Park	\$22,397	\$23,025	\$691	\$230	\$23,946
Commercial	\$22,397	\$23,025	\$691	\$230	\$23,946
Industrial	\$19,908	\$20,467	\$614	\$205	\$21,286
Agricultural Building [2]	\$9,954	\$10,233	\$307	\$102	\$10,642
Public/Other Land Uses					
School	\$13,686	\$14,070	\$422	\$141	\$14,633
Other [3]	\$19,908	\$20,467	\$614	\$205	\$21,286

fee_sum_20

[1] CCI average adjustment factor of San Francisco and 20-City average for May 2019 to May 2020.

[2] Agricultural building rate established by the RD 784 Board of Trustees policy, effective June 6, 2018. Agricultural building fee rate applies to infill projects on individual parcels or small development projects of four (4) parcels or fewer and if these structures are located outside of established residential neighborhoods.

[3] Excludes parks, which are exempt from the fee.

Table 3
Reclamation District 784
Drainage Impact Fee Update
Summary of Drainage Impact Fees - Basin C (2020\$)

Basin C

Land Use Category	2019 Cost per Acre	2020 Cost per Acre	Plus RD 784 Administration	Plus Yuba County Administration	Total Fee per Acre
		2.81% [1]	3%	1%	
	DRAINAGE BASIN C [2]				
Residential Land Uses					
Low Density Residential	\$16,720	\$17,189	\$516	\$172	\$17,877
Medium Density Residential	\$20,900	\$21,487	\$645	\$215	\$22,347
Medium/High Density Residential	\$25,079	\$25,783	\$773	\$258	\$26,814
High Density Residential	\$27,170	\$27,933	\$838	\$279	\$29,050
Commercial					
Business Park	\$37,620	\$38,676	\$1,160	\$387	\$40,223
Commercial	\$37,620	\$38,676	\$1,160	\$387	\$40,223
Industrial	\$33,440	\$34,379	\$1,031	\$344	\$35,754
Agricultural Building [3]	\$16,720	\$17,189	\$516	\$172	\$17,877
Other					
School	\$22,990	\$23,635	\$709	\$236	\$24,580
Other [4]	\$33,440	\$34,379	\$1,031	\$344	\$35,754

fee_sum_19

[1] CCI average adjustment factor of San Francisco and 20-City average for May 2019 to May 2020.

[2] Applies to all Basin C development, including outside sub-basins C-1 and C-2.

[3] Agricultural building rate established by the RD 784 Board of Trustees policy, effective June 6, 2018. Agricultural building fee rate applies to infill projects on individual parcels or small development projects of four (4) parcels or fewer and if these structures are located outside of established residential neighborhoods.

[4] Excludes parks, which are exempt from the fee.

**Table 4
Reclamation District 784
Drainage Impact Fee Update
Summary of Drainage Impact Fees - Basin C-1 (2020\$)**

Basin C-1 Development

Land Use Category	2019 Cost per Acre	2020 Cost per Acre	Plus RD 784 Administration	Plus Yuba County Administration	Total Fee per Acre
		2.81% [1]	3%	1%	
DRAINAGE BASIN C FEE					
Residential Land Uses					
Low Density Residential	\$16,720	\$17,189	\$516	\$172	\$17,877
Medium Density Residential	\$20,900	\$21,487	\$645	\$215	\$22,347
Medium/High Density Residential	\$25,079	\$25,783	\$773	\$258	\$26,814
High Density Residential	\$27,170	\$27,933	\$838	\$279	\$29,050
Commercial					
Business Park	\$37,620	\$38,676	\$1,160	\$387	\$40,223
Commercial	\$37,620	\$38,676	\$1,160	\$387	\$40,223
Industrial	\$33,440	\$34,379	\$1,031	\$344	\$35,754
Agricultural Building [2]	\$16,720	\$17,189	\$516	\$172	\$17,877
Other					
School	\$22,990	\$23,635	\$709	\$236	\$24,580
Other [3]	\$33,440	\$34,379	\$1,031	\$344	\$35,754
DRAINAGE BASIN C-1 SURCHARGE					
Residential Land Uses					
Low Density Residential	\$8,861	\$9,110	\$273	\$91	\$9,474
Medium Density Residential	\$11,077	\$11,388	\$342	\$114	\$11,844
Medium/High Density Residential	\$13,292	\$13,665	\$410	\$137	\$14,212
High Density Residential	\$14,400	\$14,804	\$444	\$148	\$15,396
Commercial					
Business Park	\$19,938	\$20,498	\$615	\$205	\$21,318
Commercial	\$19,938	\$20,498	\$615	\$205	\$21,318
Industrial	\$17,723	\$18,220	\$547	\$182	\$18,949
Agricultural Building [2]	\$8,861	\$9,110	\$273	\$91	\$9,474
Other					
School	\$12,184	\$12,526	\$376	\$125	\$13,027
Other [3]	\$17,723	\$18,220	\$547	\$182	\$18,949
TOTAL DRAINAGE BASIN C-1 FEE					
Residential Land Uses					
Low Density Residential	\$25,581	\$26,299	\$789	\$263	\$27,351
Medium Density Residential	\$31,977	\$32,874	\$987	\$329	\$34,190
Medium/High Density Residential	\$38,371	\$39,448	\$1,183	\$395	\$41,026
High Density Residential	\$41,570	\$42,737	\$1,282	\$427	\$44,446
Commercial					
Business Park	\$57,558	\$59,174	\$1,775	\$592	\$61,541
Commercial	\$57,558	\$59,174	\$1,775	\$592	\$61,541
Industrial	\$51,163	\$52,599	\$1,578	\$526	\$54,703
Agricultural Building [2]	\$25,581	\$26,299	\$789	\$263	\$27,351
Other					
School	\$35,174	\$36,161	\$1,085	\$361	\$37,607
Other [3]	\$51,163	\$52,599	\$1,578	\$526	\$54,703

c1_2020

[1] CCI average adjustment factor of San Francisco and 20-City average for May 2019 to May 2020.

[2] Agricultural building rate established by the RD 784 Board of Trustees policy, effective June 6, 2018. Agricultural building fee rate applies to infill projects on individual parcels or small development projects of four (4) parcels or fewer and if these structures are located outside of established residential neighborhoods.

[3] Excludes parks, which are exempt from the fee.

Table 5
Reclamation District 784
Drainage Impact Fee Update
Summary of Drainage Impact Fees - Basin C-2 (2020\$)

Basin C-2 Development

Land Use Category	2019 Cost per Acre	2020 Cost per Acre	Plus RD 784 Administration	Plus Yuba County Administration	Total Fee per Acre
		2.81% [1]	3%	1%	
DRAINAGE BASIN C FEE					
Residential Land Uses					
Low Density Residential	\$16,720	\$17,189	\$516	\$172	\$17,877
Medium Density Residential	\$20,900	\$21,487	\$645	\$215	\$22,347
Medium/High Density Residential	\$25,079	\$25,783	\$773	\$258	\$26,814
High Density Residential	\$27,170	\$27,933	\$838	\$279	\$29,050
Commercial					
Business Park	\$37,620	\$38,676	\$1,160	\$387	\$40,223
Commercial	\$37,620	\$38,676	\$1,160	\$387	\$40,223
Industrial	\$33,440	\$34,379	\$1,031	\$344	\$35,754
Agricultural Building [2]	\$16,720	\$17,189	\$516	\$172	\$17,877
Other					
School	\$22,990	\$23,635	\$709	\$236	\$24,580
Other [3]	\$33,440	\$34,379	\$1,031	\$344	\$35,754
DRAINAGE BASIN C-2 SURCHARGE					
Residential Land Uses					
Low Density Residential	\$6,954	\$7,149	\$214	\$71	\$7,434
Medium Density Residential	\$8,692	\$8,936	\$268	\$89	\$9,293
Medium/High Density Residential	\$10,431	\$10,724	\$322	\$107	\$11,153
High Density Residential	\$11,300	\$11,617	\$349	\$116	\$12,082
Commercial					
Business Park	\$15,646	\$16,086	\$483	\$161	\$16,730
Commercial	\$15,646	\$16,086	\$483	\$161	\$16,730
Industrial	\$13,908	\$14,298	\$429	\$143	\$14,870
Agricultural Building [2]	\$6,954	\$7,149	\$214	\$71	\$7,434
Other					
School	\$9,562	\$9,830	\$295	\$98	\$10,223
Other [3]	\$13,908	\$14,298	\$429	\$143	\$14,870
TOTAL DRAINAGE BASIN C-2 FEE					
Residential Land Uses					
Low Density Residential	\$23,674	\$24,338	\$730	\$243	\$25,311
Medium Density Residential	\$29,593	\$30,423	\$913	\$304	\$31,640
Medium/High Density Residential	\$35,510	\$36,507	\$1,095	\$365	\$37,967
High Density Residential	\$38,470	\$39,550	\$1,187	\$396	\$41,133
Commercial					
Business Park	\$53,267	\$54,762	\$1,643	\$548	\$56,953
Commercial	\$53,267	\$54,762	\$1,643	\$548	\$56,953
Industrial	\$47,348	\$48,677	\$1,460	\$487	\$50,624
Agricultural Building [2]	\$23,674	\$24,338	\$730	\$243	\$25,311
Other					
School	\$32,552	\$33,465	\$1,004	\$335	\$34,804
Other [3]	\$47,348	\$48,677	\$1,460	\$487	\$50,624

c2_2019

[1] CCI average adjustment factor of San Francisco and 20-City average for May 2019 to May 2020.

[2] Agricultural building rate established by the RD 784 Board of Trustees policy, effective June 6, 2018. Agricultural building fee rate applies to infill projects on individual parcels or small development projects of four (4) parcels or fewer and if these structures are located outside of established residential neighborhoods.

[3] Excludes parks, which are exempt from the fee.