

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 18, 2021

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. According to 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.

Economic & Planning Systems, Inc.
P.O. Box 340176
Sacramento, CA 95834
916 649 8010 tel
916 649 2070 fax

Oakland
Sacramento
Denver
Los Angeles

www.epsys.com

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 2020 to May 2021.

Construction Cost Index Adjustment Factor for 2021 Update

Construction Cost Index	May 2020	May 2021	Adjustment Factor
20-City Average	11,418	11,990	5.01%
San Francisco	12,819	13,425	4.73%
Average % Increase			4.87%

cci_21

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.

DRAFT

Table 1
Reclamation District 784
Drainage Impact Fee Update
Summary of Drainage Impact Fees - Basin A and A-1 (2021\$)

Basin A

Land Use Category	2020 Cost per Acre	2021 Cost per Acre	Plus RD 784 Administration	Plus Yuba County Administration	Total Fee per Acre
		4.87% [1]	3%	1%	
DRAINAGE BASIN A [2]					
Residential Land Uses					
Low Density Residential	\$6,759	\$7,088	\$213	\$71	\$7,372
Medium Density Residential	\$8,448	\$8,860	\$266	\$89	\$9,215
Medium/High Density Residential	\$10,138	\$10,632	\$319	\$106	\$11,057
High Density Residential	\$10,983	\$11,518	\$346	\$115	\$11,979
Nonresidential Land Uses					
Business Park	\$15,207	\$15,948	\$478	\$159	\$16,585
Commercial	\$15,207	\$15,948	\$478	\$159	\$16,585
Industrial	\$13,518	\$14,176	\$425	\$142	\$14,743
Agricultural Building [3]	\$12,149	\$12,741	\$382	\$127	\$13,250
Public/Other Land Uses					
School	\$9,293	\$9,746	\$292	\$97	\$10,135
Other [4]	\$13,518	\$14,176	\$425	\$142	\$14,743
DRAINAGE BASIN A-1 [2] <i>(All Development Excl. Sawyer's Landing and Bear River)</i>					
Residential Land Uses					
Low Density Residential	\$12,149	\$12,741	\$382	\$127	\$13,250
Medium Density Residential	\$15,187	\$15,926	\$478	\$159	\$16,563
Medium/High Density Residential	\$18,224	\$19,111	\$573	\$191	\$19,875
High Density Residential	\$19,743	\$20,704	\$621	\$207	\$21,532
Nonresidential Land Uses					
Business Park	\$27,336	\$28,667	\$860	\$287	\$29,814
Commercial	\$27,336	\$28,667	\$860	\$287	\$29,814
Industrial	\$24,299	\$25,481	\$764	\$255	\$26,500
Agricultural Building [3]	\$12,149	\$12,741	\$382	\$127	\$13,250
Public/Other Land Uses					
School	\$16,705	\$17,519	\$526	\$175	\$18,220
Other [4]	\$24,299	\$25,481	\$764	\$255	\$26,500

fee_sum_21

- [1] CCI average adjustment factor of San Francisco and 20-City average for May 2020 to May 2021.
- [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.

DRAFT

Table 2
Reclamation District 784
Drainage Impact Fee Update
Summary of Drainage Impact Fees - Basin B (2021\$)

Basin B

Land Use Category	2020 Cost per Acre	2021 Cost per Acre	Plus RD 784 Administration	Plus Yuba County Administration	Total Fee per Acre
		4.87% [1]	3%	1%	
Residential Land Uses					
Low Density Residential	\$10,233	\$10,732	\$322	\$107	\$11,161
Medium Density Residential	\$12,792	\$13,415	\$402	\$134	\$13,951
Medium/High Density Residential	\$15,350	\$16,098	\$483	\$161	\$16,742
High Density Residential	\$16,629	\$17,438	\$523	\$174	\$18,135
Nonresidential Land Uses					
Business Park	\$23,025	\$24,146	\$724	\$241	\$25,111
Commercial	\$23,025	\$24,146	\$724	\$241	\$25,111
Industrial	\$20,467	\$21,463	\$644	\$215	\$22,322
Agricultural Building [2]	\$10,233	\$10,732	\$322	\$107	\$11,161
Public/Other Land Uses					
School	\$14,070	\$14,755	\$443	\$148	\$15,346
Other [3]	\$20,467	\$21,463	\$644	\$215	\$22,322

fee_sum_21

[1] CCI average adjustment factor of San Francisco and 20-City average for May 2020 to May 2021.

[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 (2021\$)

Basin C

Land Use Category	2020 Cost per Acre	2021 Cost per Acre	Plus RD 784 Administration	Plus Yuba County Administration	Total Fee per Acre
		4.87% [1]	3%	1%	
	DRAINAGE BASIN C [2]				
Residential Land Uses					
Low Density Residential	\$17,189	\$18,026	\$541	\$180	\$18,747
Medium Density Residential	\$21,487	\$22,533	\$676	\$225	\$23,434
Medium/High Density Residential	\$25,783	\$27,038	\$811	\$270	\$28,119
High Density Residential	\$27,933	\$29,293	\$879	\$293	\$30,465
Commercial					
Business Park	\$38,676	\$40,559	\$1,217	\$406	\$42,182
Commercial	\$38,676	\$40,559	\$1,217	\$406	\$42,182
Industrial	\$34,379	\$36,052	\$1,082	\$361	\$37,495
Agricultural Building [3]	\$17,189	\$18,026	\$541	\$180	\$18,747
Other					
School	\$23,635	\$24,786	\$744	\$248	\$25,778
Other [4]	\$34,379	\$36,052	\$1,082	\$361	\$37,495

fee_sum_21

- [1] CCI average adjustment factor of San Francisco and 20-City average for May 2020 to May 2021.
- [2] Applies to all Basin C development, including outside sub-basins C-1 and C-2, as well as Drainage Basin C Advanced Funding Charge.
- [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 (2021\$)

Basin C-1
Development

Land Use Category	2020 Cost per Acre	2021 Cost per Acre	Plus RD 784 Administration	Plus Yuba County Administration	Total Fee per Acre
		4.87% [1]	3%	1%	
DRAINAGE BASIN C FEE					
Residential Land Uses					
Low Density Residential	\$17,189	\$18,026	\$541	\$180	\$18,747
Medium Density Residential	\$21,487	\$22,533	\$676	\$225	\$23,434
Medium/High Density Residential	\$25,783	\$27,038	\$811	\$270	\$28,119
High Density Residential	\$27,933	\$29,293	\$879	\$293	\$30,465
Commercial					
Business Park	\$38,676	\$40,559	\$1,217	\$406	\$42,182
Commercial	\$38,676	\$40,559	\$1,217	\$406	\$42,182
Industrial	\$34,379	\$36,052	\$1,082	\$361	\$37,495
Agricultural Building [2]	\$17,189	\$18,026	\$541	\$180	\$18,747
Other					
School	\$23,635	\$24,786	\$744	\$248	\$25,778
Other [3]	\$34,379	\$36,052	\$1,082	\$361	\$37,495
DRAINAGE BASIN C-1 SURCHAGE					
Residential Land Uses					
Low Density Residential	\$9,110	\$9,554	\$287	\$96	\$9,937
Medium Density Residential	\$11,388	\$11,942	\$358	\$119	\$12,419
Medium/High Density Residential	\$13,665	\$14,330	\$430	\$143	\$14,903
High Density Residential	\$14,804	\$15,524	\$466	\$155	\$16,145
Commercial					
Business Park	\$20,498	\$21,495	\$645	\$215	\$22,355
Commercial	\$20,498	\$21,495	\$645	\$215	\$22,355
Industrial	\$18,220	\$19,107	\$573	\$191	\$19,871
Agricultural Building [2]	\$9,110	\$9,554	\$287	\$96	\$9,937
Other					
School	\$12,526	\$13,136	\$394	\$131	\$13,661
Other [3]	\$18,220	\$19,107	\$573	\$191	\$19,871
TOTAL DRAINAGE BASIN C-1 FEE					
Residential Land Uses					
Low Density Residential	\$26,299	\$27,580	\$828	\$276	\$28,684
Medium Density Residential	\$32,874	\$34,475	\$1,034	\$344	\$35,853
Medium/High Density Residential	\$39,448	\$41,369	\$1,241	\$413	\$43,023
High Density Residential	\$42,737	\$44,817	\$1,345	\$448	\$46,610
Commercial					
Business Park	\$59,174	\$62,054	\$1,862	\$621	\$64,537
Commercial	\$59,174	\$62,054	\$1,862	\$621	\$64,537
Industrial	\$52,599	\$55,159	\$1,655	\$552	\$57,366
Agricultural Building [2]	\$26,299	\$27,580	\$828	\$276	\$28,684
Other					
School	\$36,161	\$37,922	\$1,138	\$379	\$39,439
Other [3]	\$52,599	\$55,159	\$1,655	\$552	\$57,366

ct_2021

[1] CCI average adjustment factor of San Francisco and 20-City average for May 2020 to May 2021.

[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 (2021\$)**

**Basin C-2
Development**

Land Use Category	2020 Cost per Acre	2021 Cost per Acre	Plus RD 784 Administration	Plus Yuba County Administration	Total Fee per Acre
		4.87% [1]	3%	1%	
DRAINAGE BASIN C FEE					
Residential Land Uses					
Low Density Residential	\$17,189	\$18,026	\$541	\$180	\$18,747
Medium Density Residential	\$21,487	\$22,533	\$676	\$225	\$23,434
Medium/High Density Residential	\$25,783	\$27,038	\$811	\$270	\$28,119
High Density Residential	\$27,933	\$29,293	\$879	\$293	\$30,465
Commercial					
Business Park	\$38,676	\$40,559	\$1,217	\$406	\$42,182
Commercial	\$38,676	\$40,559	\$1,217	\$406	\$42,182
Industrial	\$34,379	\$36,052	\$1,082	\$361	\$37,495
Agricultural Building [2]	\$17,189	\$18,026	\$541	\$180	\$18,747
Other					
School	\$23,635	\$24,786	\$744	\$248	\$25,778
Other [3]	\$34,379	\$36,052	\$1,082	\$361	\$37,495
DRAINAGE BASIN C-2 SURCHARGE					
Residential Land Uses					
Low Density Residential	\$7,149	\$7,497	\$225	\$75	\$7,797
Medium Density Residential	\$8,936	\$9,371	\$281	\$94	\$9,746
Medium/High Density Residential	\$10,724	\$11,246	\$337	\$112	\$11,695
High Density Residential	\$11,617	\$12,183	\$365	\$122	\$12,670
Commercial					
Business Park	\$16,086	\$16,869	\$506	\$169	\$17,544
Commercial	\$16,086	\$16,869	\$506	\$169	\$17,544
Industrial	\$14,298	\$14,994	\$450	\$150	\$15,594
Agricultural Building [2]	\$7,149	\$7,497	\$225	\$75	\$7,797
Other					
School	\$9,830	\$10,309	\$309	\$103	\$10,721
Other [3]	\$14,298	\$14,994	\$450	\$150	\$15,594
TOTAL DRAINAGE BASIN C-2 FEE					
Residential Land Uses					
Low Density Residential	\$24,338	\$25,523	\$766	\$255	\$26,544
Medium Density Residential	\$30,423	\$31,904	\$957	\$319	\$33,180
Medium/High Density Residential	\$36,507	\$38,284	\$1,149	\$383	\$39,816
High Density Residential	\$39,550	\$41,475	\$1,244	\$415	\$43,134
Commercial					
Business Park	\$54,762	\$57,428	\$1,723	\$574	\$59,725
Commercial	\$54,762	\$57,428	\$1,723	\$574	\$59,725
Industrial	\$48,677	\$51,046	\$1,531	\$510	\$53,087
Agricultural Building [2]	\$24,338	\$25,523	\$766	\$255	\$26,544
Other					
School	\$33,465	\$35,094	\$1,053	\$351	\$36,498
Other [3]	\$48,677	\$51,046	\$1,531	\$510	\$53,087

c2_2021

- [1] CCI average adjustment factor of San Francisco and 20-City average for May 2020 to May 2021.
- [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.