

August 2024
 SJCOG, Inc. Board

STAFF REPORT

SUBJECT: 2025 SJMSCP Development Fee Annual Adjustment

RECOMMENDED ACTION: Motion to Approve the 2025 SJMSCP Development Fees as Adjusted Pursuant to the Financial Analysis Model

SUMMARY:

Using the adopted five-year financial analysis model to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) the SJCOG Inc. staff, Habitat Technical Advisory Committee (HTAC) Financial Subcommittee members (Table 1) and consultants undertook the annual analysis in summer 2024. The goal of the annual analysis is to establish the next year’s habitat plan fees paid by individual development projects. The fees are for impacts under the countywide SJMSCP permits as defined in the three fee model categories (Category A – Acquisition; Category B - Assessment and Enhancement; and Category C - Land Management and Administration).

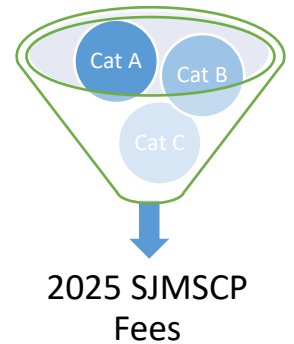


Table 1 – HTAC Financial Subcommittee Members:

<i>John Beckman, BIA</i>	<i>Matt Diaz, Stockton</i>	<i>Zachery Kearns, CDFW</i>
<i>Dan Gifford, Conservation</i>	<i>Alisa Goulart, SJ County</i>	

The proposed 2025 SJMSCP development fees were adjusted using the recommended 2020 SJMSCP Five-Year Financial Model Update for the respective categories and are compared to the 2024 SJMSCP Development fees (Table 2) in the most common habitat categories under the plan. The change is an overall decrease of **7.5%** in the most impacted categories of Agricultural and Natural habitat classifications from the prior year. The decrease is due primarily to a decline in the land acquisition component (Category A) for agricultural land price values of comparable sales even though there was a rise in the reported Consumer Price Index (CPI) for Categories B and C.



Table 2- Compared 2025 & 2024 SJMSCP Development Fees – Most Common Fee Habitat Types

	2025 Fee - Proposed	<i>2024 Fee - Adopted</i>	Difference	Percent Change
Agricultural/Natural	\$16,492	<i>\$17,833</i>	-\$1,341	-7.5%

Table 3 illustrates the history of the SJMSCP development fees over the current 5-year fee model cycle. The fees can fluctuate primarily based on the Category A – acquisition component of the fee formula over time.

Table 3- History and Annual Percentage Change for SJMSCP Development Fees

Fee Category	2020	2021	2022	2023	2024
Multi-Purpose Open Space	\$6,412	\$8,682	\$9,781	\$9,629	\$8,918
Agriculture/Natural	\$12,822	\$17,363	\$19,561	\$19,255	\$17,833
Vernal Pools	\$100,788 (wetted)	\$161,286 (wetted)	\$174,040 (wetted)	\$176,878 (wetted)	\$177,724 (wetted)
	\$52,833 (upland)	\$71,544 (upland)	\$80,453 (upland)	\$75,320 (upland)	\$69,408 (upland)
<i>Percentage of Change Yearly</i>	-4.3%	<i>35.4%</i>	<i>12.7%</i>	-1.6%	-7.4%

Projects participating under the SJMSCP benefit from a predetermined streamlined processing of the project rather than navigating through a potentially very long, cumbersome and expensive regulatory process outside the habitat plan. By opting for participation, the project proponent can choose any number of ways to provide mitigation for the impacts of the project through the plan and even control much of the mitigation costs if desired. The options are:

1. Pay a fee.
2. Redesign the project to avoid/minimize impacts.
3. Provide land in lieu of the SJMSCP fee, which the project proponent will negotiate the easement/fee title costs (Category A component).
4. Any combination of the above options.

And if those options are not sufficient, the project proponent can choose to not participate in the plan (opt out) and fulfill mitigation requirements on their own with state and federal permitting agencies independently.

RECOMMENDATION:

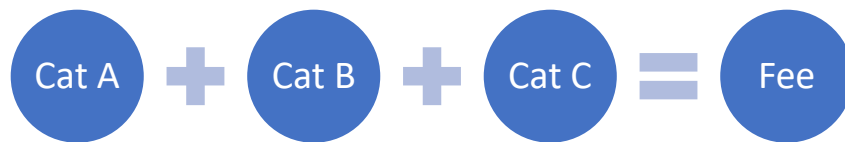
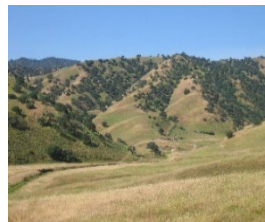
Staff recommends the SJCOG, Inc. Board approve the 2025 SJMSCP development fees as adjusted pursuant to the financial analysis model.

FISCAL IMPACT:

Development fees provide funding for SJCOG Inc. to mitigate project impacts covered under the SJMSCP permits for the subsequent calendar year beginning January 1.

BACKGROUND:

Annually, the SJMSCP development fees are reviewed and calculated using a formula method adopted under the habitat plan. The three components of the formula are adjusted based on the individual components and the most current supporting data. The development fees established must be adopted by each of the jurisdictions and would become effective on January 1 of the subsequent year for projects using the SJMSCP.

**Category A (Acquisition) – Comparable Land Sales**

This category is directly related to land valuation based on comparable land sales in San Joaquin County in specific zones of the plan area (Central Zone, Central Southwest Transition Zone and Delta Zone) over an established two-year period meeting the established criteria used for comparable land sales (Attachment 1). Cost estimates for this category will continue to be evaluated on a yearly basis by taking all qualified fee title comparable sales in each zone to set a weighted cost per acre.

The fee model analysis update results in a **12.7% decrease** in the Agricultural/Natural Habitat types of Category A (Acquisition) component to \$9,608. The reason for the decrease is the decline in overall comparable fee title land sale values from prior year values.

Category B (Assessment and Enhancement) – Refined Cost Factors with Consumer Price Index and Model Data Update



The Category B component of the fee is adjusted using several factors including the California Consumer Price Index (CPI), as reported by the California Department of Finance for the preceding 12-month fiscal year (June 2023 – June 2024) and from the updated model numbers completed annually based on the SJMSCP Annual Report.

The unit cost factors (per acre or per year for some items) are adjusted only by the CPI (the California CPI calculation was an increase of 3.2%). But the total cost for Category B is also a function of the SJMSCP Annual Report data updated annually (acres remaining to be acquired and the number of years remaining in the permit term; the fee per acre is a function of those total calculated costs and the land conversion acres remaining). These parts all feed into the fee model.

The fee model update results in a 0.5% increase in the Agricultural/Natural Habitat types of Category B (Assessment and Enhancement) component to \$6,066.

Category C (Management, Monitoring and Administration) – Refined Cost Factors/Long Term Investment with Consumer Price Index

Annual cost updates use the California Consumer Price Index (CPI), as reported by the California Department of Finance, for the preceding 12-month fiscal year (June 2023 – June 2024) to keep up with inflation on an annual basis.

The fee model update results in a 3.2% increase in the Agricultural/Natural Habitat types of Category C (Management, Monitoring and Administration) component from prior years to \$817.

In summary, the SJMSCP fees are calculated using the SJMSCP Financial Analysis formula model shown in the final proposed fee table 4 below and Attachment 2 (SJMSCP Cost and Fee Analysis 2025 Update). The overall result in the fee analysis is a **7.5%** decrease in the most impacted Agricultural and Natural Habitat Classifications fees for 2025.

Table 4 - 2025 SJMSCP Development Fees - *Proposed*

Habitat Type	Category A	Category B	Category C	Total Fee	Rounded Fee
Other Open Space	\$4,804	\$3,033.00	\$409.47	\$8,246.47	\$8,246
Natural/Ag Lands	\$9,608.00	\$6,066.00	\$817.74	\$16,491.74	\$16,492
Vernal Pool Grasslands	\$48,084.00	\$15,386.00	\$2,019.72	\$65,489.72	\$65,490
Vernal Pool Wetted	\$48,270.00	\$127,031.00	\$1,980.10	\$177,281.10	\$177,281

NEXT STEPS:

Should the staff and HTAC recommendation be approved by the SJCOG, Inc. Board at the August 22nd Board meeting, the item will be taken out to each jurisdiction for adoption in the coming months for implementation starting January 1, 2025.

COMMITTEE ACTIONS:

- Habitat Technical Advisory Committee: Recommended Approval
- Management & Finance Committee: Action Item (*Has not met by time of mail out*)
- Executive Committee: Recommended Approval
- SJCOG, Inc. Board – Action Required

ATTACHMENTS:

1. 2025 Fee Study Property List
2. SJMSCP Cost and Fee Analysis 2025 Update

Prepared by: Steven Mayo, Program Manager

DRAFT MATERIAL ONLY

Attachment 1 - SMLCST Compatible Land Sales

Attachment 1 – 2025 Fee Study Property List - Properties 24 Month

Table A. Central Zone Properties

Parcel ID	Address	APN	Zone	Sale Date	Price	Acres	Price/Acre	Hab Type	Appraised Price	Appraised Price/Acre
PH04 C17P09 12	19279 Madrone Rd, Cupertino, CA	029 128134	Cent	9/19/2022	\$725,000.00	41.48	\$17,240.36	CS20/6	\$619,296.23	\$16,110.88
PH04 C17P09 12A	72800 Compton Rd, Tracy, CA	252 08802 81033 04	Cent	1/01/2022	\$658,500.00	88.80	\$7,516.00	CS4	\$6,126,625.00	\$69,375.00
PH04 C17P09 12B	14531 Campbell Rd, Escalon, CA	200 2202 1 2 21	Cent	1/10/2022	\$359,722.00	285.71	\$1,259.19	CS4	\$3,598,900.20	\$25,928.28
PH04 C17P09 14	25251 Highway 4, Fremont, CA	261 3008 8 15	Cent	1/27/2022	\$171,150.00	100.21	\$1,707.62	CS4	\$1,718,008.73	\$17,090.22
PH04 C17P09 15A	2322 S Wilson Rd, Tracy, CA	241 5302 04	Cent	1/9/2023	\$135,000.00	574.85	\$231.71	CS4/GR	\$9,330,625.00	\$17,107.15
PH04 C17P09 15 B	2302 Woodridge Rd, Manteca, CA	029 2002 02 202 210 07	Cent	1/9/2023	\$2,500,000.00	329.16	\$7,595.81	CS4/GR	\$9,246,092.00	\$27,826.32
PH04 C17P09 15	13501 Delta View Rd, CA	055 6464 01 13 14	Cent	1/11/2023	\$2,653,000.00	159.10	\$16,672.82	CS4	\$9,265,426.23	\$58,246.52
PH04 C17P09 10	13501 Delta View Rd, CA	059 7228 10	Cent	2/1/2023	\$1,600,000.00	126.53	\$12,642.82	CS4	\$1,951,000.00	\$15,451.25
PH04 C17P09 11	13501 Delta View Rd, CA	055 6024	Cent	2/1/2023	\$2,845,000.00	126.53	\$22,485.06	CS4	\$1,951,000.00	\$15,451.25
PH04 C17P09 14	13011 Laurel Rd, CA	051 5645 10	Cent	2/1/2023	\$1,910,000.00	50.02	\$38,195.06	CS4	\$1,918,893.28	\$38,369.38
PH04 C17P09 13A	13855 S. Hwy, Manteca, CA	232 0029 11	Cent	5/9/2023	\$1,464,000.00	198.93	\$7,363.88	CS4	\$1,918,893.28	\$38,369.38
PH04 C17P09 21	13855 S. Hwy, Manteca, CA	232 0029 11	Cent	1/19/2023	\$2,600,000.00	198.93	\$13,071.81	CS4	\$1,918,893.28	\$38,369.38
PH04 C06 14	6717 Knappton St, Escalon, CA	228 1193 13	Cent	1/19/2023	\$2,600,000.00	145.90	\$17,819.54	CS4	\$1,918,893.28	\$38,369.38
PH04 C06 14	6505 Delta Rd, Escalon, CA	065 0202 14 15 13 15	Cent	1/19/2023	\$2,442,931.50	148.86	\$16,416.82	CS4/GR	\$1,918,893.28	\$38,369.38
PH04 C06 14 B	2213 S. Hill, Escalon, CA	201 0301 010	Cent	1/19/2023	\$2,442,931.50	148.86	\$16,416.82	CS4	\$2,332,283.98	\$38,369.38
PH04 C17P09 14B	3588 Winchester Rd, Tracy, CA	212 3501 11	Cent	6/29/2024	\$4,000,000.00	123.07	\$32,481.34	CS4	\$4,200,000.00	\$7,244.13
TOTAL					\$52,111,780.50	2626.20	\$19,857.53		\$48,351,666.83	\$18,378.56

Table B. Delta Properties

Parcel ID	Address	APN	Zone	Sale Date	Price	Acres	Price/Acre	Hab Type	Appraised Price	Appraised Price/Acre
PH04 C17P09 13 A 1 B	7901 Contra del Sol, CA	025 0900 03 05 06 025 110 01 05	Delta	5/29/2023	\$3,839,000.00	428.00	\$8,981.78	CS4	\$3,070,280.50	\$7,188.74
PH04 C06 14	4300 Urdinola Rd, Stockton, CA	181 0703 02 26 2 9	Delta	6/19/2024	\$5,813,975.00	300.86	\$19,021.61	CS4	\$5,419,275.00	\$18,012.61
PH04 C17P09 8	13371 Walnut Ave, Stockton, CA	188 230 16	Delta	6/19/2024	\$1,300,000.00	51.98	\$25,009.62	CS4	\$1,300,000.00	\$25,009.62
TOTAL					\$10,952,975.00	780.84	\$13,905.63		\$9,789,555.50	\$12,546.53

Table C. Southwest Zone Properties (NHO ONLY)

Parcel ID	Address	APN	Zone	Sale Date	Price	Acres	Price/Acre	Hab Type	Appraised Price	Appraised Price/Acre
PH04 C17P09 15B 1 1 2	23501 Hudson Rd, Tracy, CA	251 3200 07 810 811 8 14	SW	1/19/2022	\$5,186,500.00	14.15	\$3,665.37	G	\$4,346,880.25	\$3,072.21
PH04 C17P09 12 7	13455 Panama Rd, Red Bluff, CA	209 100 1 9	SW	4/19/2023	\$550,000.00	1.00	\$550,000.00	G	\$48,480.50	\$48,480.50
PH04 C17P09 12 7 B	13503 S. Graham Rd, Tracy, CA	267 2380 01 02 03	SW	6/19/2023	\$83,000.00	9.97	\$8,315.95	CS4/GR	\$74,534.00	\$12,485
PH04 C17P09 15 2	13515 W. Central Highway, Red Bluff, CA	263 1380 03	SW	1/19/2023	\$50,000.00	80.25	\$622.05	CS4/GR	\$46,600.00	\$380.05
TOTAL					\$5,970,000.00	2152.25	\$2,764.82		\$4,514,904.75	\$2,094.44

10 comparables required for study

4.52% Indoor Fee Title - Central and Southwest Transition Zone
-10.29% Indoor Fee Title - Delta Zone

Attachment 2 – SJMSCP Cost and Fee Analysis 2025 Update

Table of Contents	List of worksheet tabs and contents
Notes to User	Model overview and instructions for annual updates
Fee Summary Comparison	Table showing calculated fee amounts by habitat type and category; comparison to adopted fees; linked from other sheets; includes California CPI factor for Category C annual update
A1 PerAcreCostFactorsbyZone	Per acre easement cost factors by zone based on input from comparables and appraisal analysis
A2 PerAcreAcquisitionCost	Weighted acquisition cost factors by habitat type based on distribution of preserves by zone; adds transaction costs
A3 AcquisitionCostHabitatType	Total acquisition cost by habitat type, for preserves remaining to be acquired
A4 AcquisitionFEE	Category A fee by habitat type, based on remaining land conversion
B1 PreserveEnhancementCost	Weighted enhancement cost factors by habitat type based on estimate of acres enhanced and detailed per acre enhancement cost factors
B2 AssessmentEnhancementCost	All assessment and enhancement cost factors by habitat type, for preserves remaining to be acquired
B3 AssessEnhancementCostAllocation	Total assessment and enhancement cost by habitat type, remainder of permit term, for preserves remaining to be acquired
B4 AssessmentEnhancementFEE	Category B fee by habitat type, based on remaining land conversion
C MonitoringAdminFEE	Category C fee by habitat type, based on remaining land conversion; links to summary comparison for annual update
For 5-Year Update Only =>	Workbook break: the following tabs for Category C are only used in the 5-year economic analysis update
C1 MonitoringCost	Monitoring cost factors by habitat type, including post-permit annual cost; costs for remainder of permit term, all preserve acres
C2 PMAdminCost	Project management and administrative cost factors, including post-permit annual cost; costs for remainder of permit term, all preserve acres
C3 Permit Term Cost Adjustments	Category C fund balance deducted from Category C costs remainder of permit term to calculate net cost for cost allocation and fee
C4 Endowment	Endowment cash flow, return assumptions, and total in year 51 to support post-permit annual cost
C5 MonitoringAdminCostAlloc	Total monitoring, management, and administrative cost by habitat type, remainder of permit term and endowment for post permit cost
C6 MonitoringAdminFEE	Category C fee by habitat type, based on remaining land conversion
Source for update acres =>	Workbook break: the following tabs are updated annually and every 5 years for acres inputs
1 SJMSCP Acres 6_4_2015	Land conversion and preserve acres by habitat type for the 50-year permit term (source table)
2.1 RemainingPreservetoAcquire	Preserve Acres, Total and Remaining to be Acquired (from Table 1 and Annual Report updates)
2.2 Preserves_Habitat_Zone_2019	Detail on preserve acquisition by habitat type and zone for use in monitoring cost estimates (not used in annual updates)
3 Cumulative Take_Remaining	Allowed and Remaining Incidental Take Acreage (from Table 1 and Annual Report updates)
4 PreserveAcquisitionSchedule	Preserve Acquisition Schedule, All Habitat Types, by Index Zone, Remaining Permit Term (from Table 2.1 and 2.2)
Fund Balance Analysis =>	Workbook break: the following tabs are updated every 5 years for Category C cost analysis
5 FundBalanceAllocation	Allocation of Fund Balance to Category B and Category C (permit term) and post-permit endowment
B1 ExistingPreserveEnhanceCost	Estimate of enhancement costs on existing preserves with updated cost factors, to allocate fund balance to Category B

This workbook of linked worksheets calculates SJMSCP Impact Fees for Categories A, B, and C. The workbook contains all of the elements needed for annual updates as well as the framework for the more complex 5-year economic analysis updates.

Action items for annual updates indicated in red italics.

Category A and **Category B** are fees for **one-time costs** for land acquisition, enhancement, restoration and associated site assessments and planning.

These fees will be updated annually by updating the per-acre cost factors **and** updating the *acres remaining to be acquired* and the *remaining acres of land conversion* based on data from SJMSCP Annual Reports.

- Category A per-acre cost factors updated by annual comparables analysis, as established in past practice, and evaluation of easement cost percent of fee title based on SJMSCP appraisals
- Category B per-acre and annual cost factors updated by applying California CPI to unit cost factors
- The total costs in Category A and Category B for each annual update will reflect the *acres remaining to be acquired* and the fees for each annual update will reflect the *remaining acres of land conversion* from SJMSCP Annual Reports.

Category C is a fee for **on-going annual costs** for the remainder of the permit term and post-permit in perpetuity. practice.

- Incorporating Annual Report data in the annual updates of **on-going** permit term and post-permit costs adds unnecessary complexity to the annual update of this component of the SJMSCP fees. the endowment cash flow analysis required to estimate post-permit costs, are more complex work efforts not justified to generally keep Category C fees in line with annual cost inflation. Moreover, because management and administration costs are not sensitive to habitat type, it is not as important to account for the annual variation in preserve acquisition and land conversion captured in the annual updates to Categories A and B.

Components of the workbook:

1. The Fee Summary Comparison worksheet compares calculated updated fees to fees currently in effect and includes the California CPI for Category C updates.
2. Category A tabs A1 - A4 calculate the fees for Category A Acquisition.
3. Category B tabs B1 - B4 calculate the fees for Category B Assessment and Enhancement.

4. Category C Fee tab shows the fees by habitat type calculated in the 2020 Economic Analysis Update, the basis for the *UPDATE ONLY* the SJMSCP Annual Report; Table 4 showing the preserve monitoring schedule by habitat type and zone is used only in the 5-year update.
7. Tables 5 and B1 ExistingPreserveEnhanceCost provide the fund balance analysis completed every five years as part of the Category C update.

Fee Summary Comparison

Calculates new annual fees and compares to prior year adopted fees.

- 1. Paste values of prior year adopted fees in cells C11:E14.*
- 2. Insert updated annual California CPI factor in cell F1.*
3. Updated fees for Category A show in cells C5:C8 and updated fees for Category B show in cells D5:D8. The fees are linked.
4. Formulas in cells E5:E8 calculate Category C fee update amounts based on prior year adopted fee amounts in cells E11:E14 and the California CPI.

Category A Acquisition

A.1 Category A Per-Acre Acquisition Cost Factors by Zone

Delta.

- 2. Update SJCOG, Inc. appraisal list each year and calculate weighted average percent by dividing cumulative total easement value (cost) by cumulative total before value (fee title value).*
3. Value of Southwest Zone easement cost remains unchanged until experience indicates it should be updated.

A.2 Per-Acre Acquisition Cost Factors by Preserve/Habitat Type

No annual input needed. Links and formulas calculate total cost factors per acre for each habitat type.

1. Easement cost factor input linked from A.1.
2. Distribution by preserve type is not changed from 1996 Economic Analysis.
3. Transaction cost and VP acquisition assumptions not changed.

A.3 Total Acquisition Costs by Habitat Type, Remainder of Permit Term

No annual input needed. Links and formulas calculate total cost for each habitat type.

1. Land acquisition cost factors linked from A.2.
2. Preserve acres remaining to be acquired linked from Table 2.1 (updated annually based on SJMSCP Annual Report).

A.4 Fee Calculations

No annual input needed. Links and formulas calculate fee for each habitat type.

1. Cost by habitat type linked from A.3.
2. Land conversion remaining linked from Table 3 (updated annually based on SJMSCP Annual Report).

Category B Assessment and Enhancement

B.1 SJMSCP Preserve land by habitat type, enhancement analysis, and enhancement cost factors per preserve acre refined, and update of costs for enhancements and restoration. 2020 Analysis included further cost updates based on actual SJCOG, Inc. experience and other relevant cost updates. Table calculates weighted average cost per preserve acre for agricultural lands, non-vernal pool natural lands, and vernal pool preserves. Update enhancement cost analysis every five years.

formula. Formula references updated annual California CPI factor in cell E1. Formulas calculate updated weighted average cost per preserve acre.

3. Insert updated annual California CPI factor in cell E1.

B.2 Category B Assessment, Planning, Restoration and Enhancement Cost Factors

1. Update remaining years in permit term.

enhancement plans in the formula. Formula references updated annual California CPI factor in cell C1. Formulas calculate updated annual costs.

3. Insert updated annual California CPI factor in cell C1.

4. Enhancement and restoration cost factors linked from B.1.

B.3 Category B Assessment, Planning, Restoration, and Enhancement Cost Allocation by Habitat Type

No annual input needed. Links and formulas calculate total cost for each habitat type factors in B.2.

2. Preserve acres remaining to be acquired linked from Table 2.1 (updated annually based on SJMSCP Annual Report).

B.4 Fee Calculations

No annual input needed. Links and formulas calculate fee for each habitat type.

1. Cost by habitat type linked from B.3.

2. Land conversion remaining linked from Table 3 (updated annually based on SJMSCP Annual Report).

Category C Monitoring, Management, and Administration

C.5 Fee Calculations - Annual Update Only

No input needed. Cost and land conversion values frozen based on 2020 Economic Analysis.

1. For 2020 update, Category C fee amounts by habitat type linked to Fee Summary Comparison table.

2. Update annually by applying California CPI factor to prior year Category C fee amounts, as in past practice.

Note: this is done in the Fee Summary Comparison worksheet.

Category C Monitoring, Management, and Administration - INSTRUCTIONS FOR FIVE-YEAR UPDATE**C.1 Category C (part) Compliance and Effectiveness Monitoring Cost Assumptions**

1. Remaining years in permit term linked from Table 4 Preserve Monitoring Schedule.
2. Update monitoring cost factors (annual costs and annual costs per acre).
3. Total costs by type of monitoring for the remainder of the permit term calculated by worksheet formula. With links to Table 4 Preserve Monitoring Schedule.
4. Post permit cost updates by worksheet formula based on updates to detail in rows above. Acres input linked from Table 4 Preserve Monitoring Schedule.

C.2 Category C (part) Project Management and Administrative Cost Assumptions

1. Remaining years in permit term linked from Table 4 Preserve Monitoring Schedule.
2. Update annual management and administrative staff cost and cost allocation, Habitat Plan Environmental Consulting, and Land Manager Coordination costs from analysis of Cumulative Schedule of Receipts and Disbursements in SJMSCP Annual Report, supplemented as needed by cost code detail provided by SJCOG, Inc. staff.
3. Update Financial Plan Five-Year Review and Update cost based on contracts.
4. Post permit cost updates by worksheet formula based on updates to detail in rows above.

C.3 Adjustments for Remaining Fund Balance

No input needed. Links and formulas calculate net Category C cost for remainder of permit term.

1. Costs for the remainder of the permit term by cost category linked from Table C.1 and C.2.
2. Category C fund balance as of prior year end for costs on existing preserves linked from Table 5.

C.4 SJMSCP Endowment Fund Cash Flow

This table uses estimates of annual post permit costs, existing fund balance allocated to post-permit costs (based on cumulative take to date as a share of total take), and interest earnings assumptions to estimate the endowment needed at the end of the permit term to fund annual costs in perpetuity.

This analysis is to be updated at each 5-year economic analysis review. The worksheet solves for fund balance amount in year 51 that generates the annual income to fully fund annual post permit costs. The worksheet calculates the annual fee revenue required over the remainder of the permit term to achieve that fund balance when added to the existing fund balance for management and administrative costs post permit and interest earnings over the remainder of the permit term. That amount is the total cost to be allocated by habitat type remaining to be acquired and links to

C.5 Category C Monitoring and Project Management/Administration, including endowment for post-permit costs, Cost Allocation

No input needed. Links and formulas calculate cost for each habitat type.

costs by habitat type.

2. Preserve acres remaining to be acquired linked from Table 2 (updated based on SJMSCP Annual Report).

C.6 Fee Calculations

No input needed. Links and formulas calculate fee for each habitat type.

1. Cost by habitat type linked from C.5.

2. Land conversion remaining linked from Table 3 (updated based on SJMSCP Annual Report).

Tables 1 - 5 (Source Tables)

Table 1 Land Conversion and Preserve Acres by Habitat Type for the 50-year permit term

This table was finalized on June 4, 2015 as part of the Economic Analysis update. This table provides the source data by detailed habitat type for the 50-year permit term totals.

Table 2.1 Preserve Acres, Total and Remaining to be Acquired

1. Total Preserve Acres by habitat type linked from Table 1.

2. Annually, update Total Preserve Acres Acquired through 12/31 from the SJMSCP Annual Report. Note that as of the 2020 update and going forward, grassland acquired to mitigate agricultural land impacts has a new line item in Table 2.1. This amount is deducted from total grassland acquired in cell E11.

worksheets.

Table 2.2 Preserves_Habitat_Zone_2019 (new in 2020 update) - ONLY USED ON 5-YEAR UPDATE

Monitoring Schedule.

preserve to a habitat type and zone. Note that the habitat type represents the type of habitat acquired regardless of the type of impacts mitigated, i.e, grassland preserves acquired to mitigate agricultural impacts are categorized as grassland preserves in this table.

Table 3 Allowed and Remaining Incidental Take Acreage

1 and Table 4.2-2.

2. Annually, update the Cumulative Acres of Take through 12/31 from the SJMSCP Annual Report.

3. Remaining Acres of Land Conversion calculated by worksheet formula; links to cost and fee calculation worksheets.

UPDATE

This table is used in Table C.1 Monitoring Cost All Acres to calculate monitoring costs for the remainder of the permit term for all preserve acres, assuming future acquisition at an average annual pace calculated by dividing the number of acres remaining to be acquired by the number of years remaining in the permit term.

1. Preserve acres remaining to be acquired by zone linked from Table 2.1 (updated based on SJMSCP Annual Report) and Table 2.2 (updated every 5 years).

Column C.

3. At five-year update, double check the formula count of years remaining in permit term in cell C42. This is used as the denominator of the cell formulas for the monitoring schedule above.

Table 5 Fund Balance Allocation - ONLY USED IN 5-YEAR UPDATE

This table is used in Table C.3 Permit Term Cost Adjustments to calculate the net Category C costs for the remainder of the permit term. Category B and Category C fund balance is allocated to permit term and post-permit needs.

1. Every 5 years, update the beginning fund balance from the 12/31 year-end statement.
2. Calculate Category B Fund Balance for Category B Enhancements (remaining enhancement cost for existing preserves) based on Table B.1 ExistingPreserveEnhanceCost (five-year update cost factors applied to existing preserves by type) and subtracting expenditures through the prior year-end on preserve enhancement.
3. Fund Balance for Post-Permit Costs on Existing Preserves is linked from Table C.4 Endowment. This fund balance adjustment is only required for the 2020 five-year update and will not be necessary in subsequent years once the separate post-permit endowment account is established.
4. The table subtracts the Fund Balance for Category B Enhancements and the Fund Balance for Post-Permit Costs on Existing Preserves from the year-end statement balance to generate Remaining Fund Balance for Permit Term Category C Costs on Existing Preserves. This result links to Table C.3 Permit Term Cost Adjustments.

	Category A	Category B	Category C		
2025 Fees - Proposed	Acquisition	Assessment & Enhancement	Monitoring, Management & Administration, & Post-permit Endowment	Total	Total Rounded
Other Open Space	\$4,804.00	\$3,033.00	\$409.47	\$8,246.47	\$8,246
Natural/Ag Lands	\$9,608.00	\$6,066.00	\$817.74	\$16,491.74	\$16,492
Vernal Pool Grasslands	\$48,084.00	\$15,386.00	\$2,019.72	\$65,489.72	\$65,490
Vernal Pool Wetted	\$48,270.00	\$127,031.00	\$1,980.10	\$177,281.10	\$177,281
	Category A	Category B	Category C		
2024 Fees - Adopted	Acquisition	Assessment & Enhancement	Monitoring, Management & Administration, & Post-permit Endowment	Total	Total Rounded
Other Open Space	\$5,502.00	\$3,019.00	\$396.66	\$8,917.66	\$8,918
Natural/Ag Lands	\$11,003.00	\$6,038.00	\$792.15	\$17,833.15	\$17,833
Vernal Pool Grasslands	\$52,545.00	\$14,906.00	\$1,956.53	\$69,407.53	\$69,408
Vernal Pool Wetted	\$52,748.00	\$123,058.00	\$1,918.14	\$177,724.14	\$177,724

Difference Per Acre (\$)	Acquisition	Assessment & Enhancement	Monitoring, Management & Administration, & Post-permit Endowment	Total	Total Rounded
Other Open Space	(\$698)	\$14	\$13	(\$671)	(\$671)
Natural/Ag Lands	(\$1,395)	\$28	\$26	(\$1,341)	(\$1,341)
Vernal Pool Grasslands	(\$4,461)	\$480	\$63	(\$3,918)	(\$3,918)
Vernal Pool Wetted	(\$4,478)	\$3,973	\$62	(\$443)	(\$443)

Percent Difference	Acquisition	Assessment & Enhancement	Monitoring, Management & Administration, & Post-permit Endowment	Total	Total Rounded
Other Open Space	-12.7%	0.5%	3.2%	-7.5%	-7.5%
Natural/Ag Lands	-12.7%	0.5%	3.2%	-7.5%	-7.5%
Vernal Pool Grasslands	-8.5%	3.2%	3.2%	-5.6%	-5.6%
Vernal Pool Wetted	-8.5%	3.2%	3.2%	-0.2%	-0.2%

TABLE A.1
2020 Five-Year Economic Analysis and Fee Update
SJMSCP Fee Update - 2024 (for 2025 SJMSCP Development Fee Cycle)
Category A Per-Acre Acquisition Cost Factors by Zone (2024 dollars)

		Central Zone	Primary Zone of the Delta	Southwest Zone ³
Fee title value ¹	a	\$18,799	\$12,555	na
Easement percent of fee title value ²	b	55%	55%	na
Easement costs	a × b	\$10,339	\$6,905	\$1,000

1. SJCOG, Inc. Fee Study Property List, Table A and Table B

2. SJCOG, Inc. Appraisals as of June 2024

3. Based on standard easement cost in Southwest Zone of \$1,000/acre.

TABLE A.2
2020 Five-Year Economic Analysis and Fee Update
SJMSCP Fee Update - 2024 (for 2025 SJMSCP Development Fee Cycle)
Per Acre Acquisition Cost by Preserve/Habitat Type (2024 dollars)

Preserve/Habitat Type		SJMSCP Zone			Total Weighted Acquisition Cost	Transaction Costs ⁵	Total Land Acquisition Costs Per Acre
		Central Zone	Primary Zone of the Delta	Southwest Zone			
		A	B	C	A + B + C = D	D × 5% = E	D + E
Easement cost by zone ¹	d	\$10,339	\$6,905	\$1,000			
Agricultural Lands							
Percent in zone ²	e	98%	2%	0%			
Weighted costs ³	d × e	\$10,152	\$125	\$0	\$10,277	\$514	\$10,791
Natural Lands							
Non-vernal pool natural lands							
Percent in zone ²	f	77%	4%	18%			
Weighted costs ³	d × f	\$7,988	\$307	\$183	\$8,478	\$424	\$8,902
Vernal pool grasslands ⁴		n/a	n/a	n/a	\$15,039	\$752	\$15,791
Vernal pool wetted ⁴		n/a	n/a	n/a	\$15,039	\$752	\$15,791

1. See Table A.1.
 2. Percent of total lands in each category assumed to be in a given zone. Based on 1996 Economic Analysis.
 3. Weighted average cost based on generalized proportion of total preserve land in each zone. Assumes easement acquisition for lands categorized as agriculture and all natural lands except vernal pool habitat.
 4. Assumes fee title acquisition for vernal pool lands. Vernal pool habitat fee title land costs assumed to be about 80% of average Central Zone fee title costs.
 5. Transaction costs include biological baseline reporting, appraisal, escrow, and survey costs. Costs are estimated at 5 percent of acquisition cost.

TABLE A.3

2020 Five-Year Economic Analysis and Fee Update

SJMSCP Fee Update - 2024 (for 2025 SJMSCP Development Fee Cycle)

Total Acquisition Costs by Habitat Type, Remainder of Permit Term (2024 dollars)

Preserves by Habitat Type	Land Acquisition Cost Per Acre	Preserve Acres Remaining to be Acquired	Total Costs of Acquisition
Agricultural lands	\$10,791	36,531.45	\$394,210,888
Natural lands			
Non-vernal pool natural lands	\$8,902	23,605.84	\$210,139,188
Total for Non-vernal pool Natural /Ag Land	\$10,050	60,137.29	\$604,350,076
Vernal pool grasslands	\$15,791	15,720.66	\$248,244,863
Vernal pool wetted	\$15,791	2,115.00	\$33,397,965

Sources: SJCOG, Inc., SJMSCP 2023 Annual Report, and Hausrath Economics Group.

TABLE A.4
2020 Five-Year Economic Analysis and Fee Update
SJMSCP Fee Update - 2024 (for 2025 SJMSCP Development Fee Cycle)
Category A Acquisition
Fee Calculations (2024 dollars)

Habitat Type	Preserve Land Acquisition
Costs associated with non-vernal pool natural/agricultural lands conversion	\$604,350,076
Natural (non vernal pool)/Agricultural land conversion (acres) , remaining	45,955.30
Multi-purpose open space conversion (acres), remaining ¹	33,896.57
Multiplier for natural/agricultural land conversion	1
Multiplier for multi-ourpose open space conversion ¹	0.5
Acquisition Component of Natural (non vernal pool)/Agricultural Lands	\$9,608
Acquisition Component of Multi-Purpose Open Space Fee¹	\$4,804
Costs associated with vernal pool grasslands	\$248,244,863
Vernal pool grassland conversion (acres), remaining	5,162.74
Acquisition Component of Vernal Pool Grasslands Fee	\$48,084
Costs associated with vernal pool wetted	\$33,397,965
Vernal pool wetted conversion (acres), remaining	691.90
Acquisition Component of Vernal Pool Wetted Fee	\$48,270

1. As described in SJMSCP Section 7.4.1.2, the fee calculation allocates the costs associated with agricultural habitat and non-vernal pool natural lands preserves to conversion of both those high value lands (agricultural land and non-vernal pool natural land) and lower value multi-purpose open space. In other words, the SJMSCP does not enhance multi-purpose open space lands but allocates some of the costs of enhancements on agricultural and natural lands preserves to the conversion of multi-purpose open space lands to assist with the financing of those enhancements.

Sources: SJCOG, Inc., [SJMSCP 2022 Annual Report](#), and Hausrath Economics Group.

TABLE B.1

2020 Five-Year Economic Analysis and Fee Update

SJMSCP Fee Update - 2024 (for 2025 SJMSCP Development Fee Cycle)

Category B Assessment, Planning, Restoration and Enhancement

SJMSCP Preserve land by habitat type, enhancement analysis, and enhancement cost per preserve acre (2024 dollars)

Habitat Type	Total Preserve Acres (including neighboring lands preserves)	Percent of Preserve Acres Enhanced ¹	Acres Benefiting from Enhancements	Hedgerow or Other Linear Habitat Feature (acres) ²	Enhancement Cost per Acre ³	Total Enhancement Cost	Enhancement Cost per Preserve Acre
	1	2	3	4	5	6	7
Agricultural Habitat Lands⁴	57,935	10%	5,794	776	\$85,256	\$66,158,340	\$1,142
Natural Lands							
Ditches	378	33%	126		\$372,243	\$46,902,650	
Grasslands	14,559	33%	4,853		\$23,534	\$114,212,324	
Oak woodlands	858	33%	286		\$34,823	\$9,959,257	
Riparian	2,725	33%	908		\$102,067	\$92,710,493	
Submerged aquatic in the Delta	10	100%	10		\$70,846	\$708,457	
<i>Subtotal</i>	<i>18,530</i>		<i>6,183</i>		<i>\$42,775</i>	<i>\$264,493,180</i>	
Other natural lands ⁵	6,445	33%	2,148		\$42,775	\$91,895,339	
Subtotal Non VP Natural	24,975					\$356,388,520	\$14,270
Vernal pool wetted	2,121	33%	707		\$124,522	\$88,037,209	\$41,507
Vernal pool grasslands	15,811	33%	5,270		\$15,010	\$79,105,817	\$5,003
Subtotal All Natural Lands	42,907		14,309			\$523,531,546	
Total	100,842		20,103			\$589,689,886	

1. Enhancement criteria derived from the SJMSCP, Section 5.4.6.

2. Unlike most other habitat types, agricultural lands are enhanced by treating linear features that run along the edge of or through fields--features such as roads or drainage ditches. In these cases, the land area of direct enhancement activity is substantially less than that area benefiting from the enhancement. This has the advantage of minimizing impacts to agricultural land production. Installing pollinator hedgerows at the edges of fields and grassland borders along irrigation and drainage ditches, and planting nest trees and associated shrubs and grasses, are enhancements used in the cost analysis to represent the range of types of agricultural land enhancements outlined in the SJMSCP. In addition to benefits to species, these linear features offer benefits of preventing soil erosion and reducing costs for weed control and linear water conveyance infrastructure maintenance. They also enhance the entire field they are associated with, meeting the 10 percent enhancement criterion while also minimizing loss of productive agricultural land. The enhancement cost estimate for agricultural lands is therefore based on the acres of hedgerow or other linear feature multiplied by the cost per acre to install hedgerows and similar linear features.

3. The enhancement cost applies to the acres where construction and/or installation actually takes place. In the case of hedgerows or other linear features, this is only the relatively small area of activity, not the total area that is thereby enhanced. Enhancement cost includes costs for materials, construction labor, and equipment. In addition to the installation activity, the cost per enhanced acre also includes a cost for project oversight and contract administration and three years of maintenance and monitoring. For vernal pool wetted restoration, the cost includes 5 monitoring years during a 10 year post-restoration monitoring period.

4. For agricultural habitat lands, a SJMSCP describes a broad range of enhancement activities and a generalized target of 10 percent enhancement; providing benefits to species without substantially reducing the amount of agricultural land in production. This can be achieved by implementing the linear features described in footnote 2. Pollinator hedgerows or similar linear features enhance the entire field that they are associated with, thereby counting toward the 10 percent enhancement criteria while taking substantially less land out of production.

5. Estimated based on the weighted average cost for all other non-vernal pool natural lands.

Sources: Table A.1, SJCOG, Inc., ICF, and Hausrath Economics Group

TABLE B.2

2020 Five-Year Economic Analysis and Fee Update

SJMSCP Fee Update - 2024 (for 2025 SJMSCP Development Fee Cycle)

Category B Assessment, Planning, Restoration and Enhancement Cost Factors (2024 dollars)

Remainder of Permit Term

Remaining years in permit term 27 used in formulae below to calculate costs for the remainder of the permit

Biological Site Assessment

Number of site visits per year 8 assumes 6 hours per visit

Annual cost \$8,005

Total Site Assessment cost remainder of permit term \$216,148

Preserve Management Plan Preparation

Number of management plans per year 12 assumes 40 hours per plan

Annual cost \$80,053

Total Preserve Management Plan cost remainder of permit term \$2,161,426

Preserve Enhancement Plan Preparation

Average cost per enhancement plan \$4,670 assumes 28 hours per plan for each enhancement project

Average acres per project 240

Average cost per preserve acre \$19

Preserve Enhancements on Agricultural Lands

Enhancement cost per preserve acre \$1,142 from Table B1

Preserve Enhancements on Non-Vernal Pool Natural Lands

Enhancement cost per preserve acre \$14,270 from Table B1

Vernal Pool Creation/Enhancement

Enhancement cost per preserve acre \$41,507 from Table B1

Vernal Pool Upland Grassland Enhancement

Enhancement cost per preserve acre \$5,003 from Table B1

Sources: SJCOG, Inc., [SJMSCP 2023 Annual Report](#), ICF, and Hausrath Economics Group.

TABLE B.3
2020 Five-Year Economic Analysis and Fee Update
SJMSCP Fee Update - 2024 (for 2025SJMSCP Development Fee Cycle)
Category B Assessment, Planning, Restoration and Enhancement (2024 dollars)
Cost Allocation by Habitat Type
Remainder of Permit Term

Preserves by Habitat Type	Acres Remaining to be Acquired ¹	Percent of Total	Costs - Remainder of Permit Term				
			<u>Total cost allocated by preserve type percent of total preserve acres remaining to be acquired²</u>		<u>multiplied by preserve acres remaining to be acquired</u>	<u>Cost per acre multiplied by preserve acres remaining to be acquired</u>	
			Biological Site Assessment	Preserve Management Plans	Preserve Enhancement Plans	Preserve Enhancements	Vernal Pool Restoration
Agricultural lands	36,531.45	47%	\$101,268	\$1,012,659	\$694,098	\$41,716,754	na
Non-vernal pool natural lands	23,605.84	30%	65,438	654,359	448,511	\$336,850,866	na
Vernal pool grasslands	15,720.66	20%	43,579	435,780	298,692	\$78,653,801	na
Vernal pool wetted	2,115.00	3%	5,863	58,628	40,185	na	\$87,788,165
	77,972.95	100%	\$216,148	\$2,161,426	\$1,481,486	\$457,221,421	\$87,788,165

1. Includes 600 acres of neighboring lands preserves.

2. SJCOG, Inc. spending through 12/31/19 on site visits and preserve management plans totals at least \$400,000; assume all of these types of costs for existing preserves are included in spe

Sources: SJCOG, Inc., [SJMSCP 2023 Annual Report](#), ICF, and Hausrath Economics Group.

TABLE B.4
2020 Five-Year Economic Analysis and Fee Update
SJMSCP Fee Update - 2024 (for 2025 SJMSCP Development Fee Cycle)
Category B Assessment, Planning, Restoration and Enhancement
Fee Calculations (2024 dollars)
Remainder of Permit Term

Habitat Type	Biological Site Assessment	Preserve Management Plans	Preserve Enhancement Plans	Agricultural and Non VP Natural Land Enhancement	Total for Agricultural and Non VP Natural Land (incl. assessment and plans)	Vernal Pool Restoration / Enhancement	Total for Vernal Pool (incl. assessment and plans)
Costs associated with non-vernal pool natural/agricultural lands conversion	\$166,706	\$1,667,018	\$1,142,609	\$378,567,620	\$381,543,953		
Natural (non vernal pool)/Agricultural land conversion (acres), remaining	45,955.30	45,955.30	45,955.30	45,955.30	45,955.30		
Multi-purpose open space conversion (acres), remaining ¹	33,896.57	33,896.57	33,896.57	33,896.57	33,896.57		
Multiplier for natural/agricultural land conversion	1	1	1	1	1		
Multiplier for multi-purpose open space conversion ¹	0.5	0.5	0.5	0.5	0.5		
Assessment & Enhancement Component of Natural (non-vernal pool)/Agricultural Lands Fee	\$3	\$27	\$18	\$6,018	\$6,066		
Assessment & Enhancement Component of Multi-Purpose Open Space	\$2	\$14	\$9	\$3,009	\$3,033		
Costs associated with vernal pool grasslands	\$43,579	\$435,780	\$298,692			\$78,653,801	\$79,431,852
Vernal pool grassland conversion (acres), remaining	5,162.74	5,162.74	5,162.74			5,162.74	5,162.7
Assessment & Enhancement Component of Vernal Pool Grasslands Fee	\$8	\$84	\$58			\$15,235	\$15,386
Costs associated with vernal pool wetted	\$5,863	\$58,628	\$40,185			\$87,788,165	\$87,892,841
Vernal pool wetted conversion (acres), remaining	691.90	691.90	691.90			691.90	691.9
Assessment & Enhancement Component of Vernal Pool Wetted Fee	\$8	\$85	\$58			\$126,880	\$127,031

1. As described in SJMSCP Section 7.4.1.2, the fee calculation allocates the costs associated with agricultural habitat and non-vernal pool natural lands preserves to conversion of both those high value lands (agricultural land and non-vernal pool natural land) and lower value multi-purpose open space. In other words, the SJMSCP does not enhance multi-purpose open space lands but allocates some of the costs of enhancements on agricultural and natural lands preserves to the conversion of multi-purpose open space lands to assist with the financing of those enhancements.

Sources: SJCOG, Inc., SJMSCP 2023 Annual Report, ICF, and Hausrath Economics Group.

TABLE C.5 for Annual Update
2020 Five-Year Economic Analysis and Fee Update
SJMSCP Fee Update - 2024 (for 2025 SJMSCP Development Fee Cycle)
Category C Monitoring and Program Management/Administration, including endowment for post-permit costs
Fee Calculations (2024 dollars)

Habitat Type	Remainder of			Post Permit % of Total Fee
	Permit Term	Post permit	Total	
Costs associated with non-vernal pool natural/agricultural lands conversion	\$38,737,435	\$6,809,704	\$45,547,139	
Non-vernal pool Natural/Agricultural land conversion (acres), remaining	49,654.31	49,654.31	49,654.31	
Multi-purpose open space conversion (acres), remaining ¹	34,494.82	34,494.82	34,494.82	
Multiplier for natural/agricultural land conversion	1	1	1	
Multiplier for multi-purpose open space conversion ¹	0.5	0.5	0.5	
Monitoring & Administration Component of Natural (non-vernal pool)/Agricultural Lands Fee	\$579	\$102	\$681	15%
Monitoring & Administration Component of Multi-Purpose Open Space Fee	\$290	\$51	\$341	15%
Costs associated with vernal pool grasslands	\$7,387,258	\$1,298,616	\$8,685,874	
Vernal pool grassland conversion (acres), remaining	5,163.08	5,163.08	5,163.08	
Monitoring & Administration Component of Vernal Pool Grasslands Fee	\$1,431	\$252	\$1,682	15%
Costs associated with vernal pool wetted	\$990,979	\$174,206	\$1,165,185	
Vernal pool wetted conversion (acres), remaining	706.75	706.75	706.75	
Monitoring & Administration Component of Vernal Pool Wetted Fee	\$1,402	\$246	\$1,649	15%

Note: Net of existing fund balance allocated to Category C permit-term and post-permit costs.

1. The fee calculation allocates the costs associated with agricultural habitat and non-vernal pool natural lands preserves to conversion of both those high value lands (agricultural land and non-vernal pool natural land) and lower value multi-purpose open space, thereby assisting with the financing of management and monitoring on agricultural and natural lands preserves.

Sources: SJCOG, Inc., [SJMSCP 2024 Annual Report](#), ICF, Urban Economics, and Hausrath Economics Group.

- C MonitorAdminFEE -

TABLE 1
2020 Five-Year Economic Analysis and Fee Update
Land Conversion and Preserve Acres by Habitat Type for the 50-year Permit Term

Habitat Type	Land Conversion ¹	Number of Preserve Acres to Land Conversion Acres	Total Preserve Acres for Compensation	Neighboring Land Protection Preserves	Total All Preserve Acres	Percent Total Acres
Agricultural lands²	57,635	1.00	57,635	300	57,935	57%
Natural Lands						
Ditches ³	126	3.00	378		378	0.37%
Grasslands ⁴	4,853	3.00	14,559		14,559	14.44%
Oak woodlands ⁵	286	3.00	858		858	0.85%
Riparian ⁶	900	3.00	2,700	25	2,725	2.70%
Submerged aquatic in the Delta Zone	3	3.00	10		10	0.01%
Vernal pool grasslands ⁷						
VP - wetted surface area	707	3.00	2,121		2,121	2.10%
VP - upland grassland	5,187	3.00	15,561		15,561	15.43%
VP - Neighboring Land Protection preserves ⁸		na		250	250	0.25%
Other natural lands ⁹	2,140	3.00	6,420	25	6,445	6.39%
Subtotal Natural Lands	14,202		42,607	300	42,907	42.55%
Total	71,837		100,242	600	100,842	100.00%

NOTE: In the following footnotes, "type" refers to the mapped habitat unit identified in the SJMSCP Biological Analysis (Chapter 2). The following footnotes provide summaries only and the reader should refer to the Biological Analysis for a detailed description of each habitat type.

1. Land conversion includes results of Tier 1 and Tier 2 analyses. Agricultural land conversion includes 9,720 acres from Tier 2 Analysis and Natural Lands conversion includes 5,000 acres from Tier 2 Analysis of vernal pool conversion to orchards and vineyards and 744 acres of other natural lands conversion.
2. Neighboring Land Protection Preserves consist of ditched agricultural lands providing habitat for giant garter snake and pond turtle and other lands as needed for compensation to other covered species associated with agricultural land preserves.
3. Drainage ditches (unlined) generally found in agricultural fields (D types).
4. Valley grasslands (G types) and Foothill grasslands (G2 types).
5. Blue Oak woodlands, savanna and forests (BL types), Blue Oak Conifer woodlands, savanna and forests (BCN types), Valley Oak Woodland, savanna and forests (V types), and Mixed Oak Woodlands, savanna and forests (O types).
6. This category includes those portions of rivers and major streams located outside the Primary Zone of the Delta (Mokelumne, Calaveras, Stanislaus, and San Joaquin Rivers). These were originally included in a separate "Riparian Zone" during the SJMSCP planning process (i.e., "Riparian" refers to a zone rather than to the "Riparian" habitat type. The Riparian Zone was "absorbed" or combined into its surrounding zone (i.e., Central/Central-Southwest) in the final SJMSCP. It generally included River and Deep water channel (W), Tributary Streams (W2), Creeks-intermittent and perennial (W3, W3-i, W3-p), Dead-end sloughs (W-4) and their associated riparian habitats (Great Valley Riparian - R, R2, R3, R5, R4, S, S2). This category includes 25 acres of Neighboring Lands Protection Preserves for Valley elderberry longhorn beetle habitat.
7. Vernal pool grasslands (G3 type) .
8. The vernal pool preserves for Neighboring Land Protection consist of existing vernal pools (no creation requirement). Enhancements will benefit the tiger salamander.
9. This category includes all natural land types **except for Vernal Pools**. **Cost estimates in this category are an average of the costs of acquiring, restoring, enhancing the Natural Land categories specified in the preceding categories excluding Vernal Pools**. This category also includes natural lands not included in other categories: All Water Features (W types), Channel islands (I types), tule island and mudflat (I2) marsh, and Diablan sage scrub (S3 types) and all other types of Natural Lands.

TABLE 2.1
2020 Five-Year Economic Analysis and Fee Update
Preserve Acres, Total and Remaining to be Acquired¹

Preserve/Habitat Type	Total Preserve Acres - 50-year Permit	Total Preserve Acres Acquired through 12/31/2023²	Total Preserve Acres Remaining to Be Acquired (links to A.3, B.3. and C.4)
Agricultural lands	57,935	13,360.549	36,531.45
Grasslands mitigating agricultural land impacts		8,043	
Natural lands			
Ditches	378	-	378.00
Grasslands	14,559	1,266.510	13,292.49
Oak woodlands	858	-	858.00
Riparian	2,725	49.850	2,675.15
Submerged aquatic in the Delta	10	-	10.00
Other natural lands	6,445	52.800	6,392.20
<i>Subtotal non-vp natural lands</i>	24,975	1,369.160	23,605.84
Total Non VP Natural/Ag Lands	82,910	22,772.709	60,137.29
Vernal pool wetted	2,121	6.000	2,115.00
Vernal pool grasslands	15,811	90.345	15,720.66
Total	100,842	22,869.054	77,972.95

Notes:
 1. Includes six acres of vernal pool jumpstart.
 2. The Mizuno Preserve (row and field crop agricultural land preserve) is recorded at 181.449 acres (3 decimals). All other preserve acres recorded at 2 decimals or less.

Sources: Table 1 in this workbook, Table 6 from Annual Reports through 2023, and SJCOG Inc. staff.

Table 2.2
2020 Five-Year Economic Analysis and Fee Update

A. Preserves Acquired by Habitat Type and Zone as of 12/31/2023

Habitat Type	SJMSCP Index Zone				
	Central	Delta	Southwest	Vernal Pool	Total
Agricultural lands	6,327.299	4,347.850			10,675.149
Natural lands					
Ditches					
Grasslands	243.250		7,121.280		7,364.530
Oak woodlands					
Riparian	44.050				
Submerged aquatic in the Delta					
Other natural lands	30.600				
<i>Subtotal non-vp natural lands</i>	<i>317.900</i>	<i>-</i>	<i>7,121.280</i>	<i>-</i>	<i>7,439.180</i>
Total Non VP Natural/Ag Lands	6,645.199	4,347.850	7,121.280	-	18,114.329
Vernal pool wetted				6.000	6.000
Vernal pool grasslands (upland)	71.760			18.585	90.345
Total	6,716.959	4,347.850	7,121.280	24.585	18,210.674

Source: SJMSCP 2022 Annual Report , Table 6 and Table 12

B. Preserves Acquired by Summary Habitat Type and Zone as of 12/31/2022

Habitat Type	SJMSCP Index Zone				
	Central	Delta	Southwest	Vernal Pool	Total
Agricultural Land	6,327.299	4,347.850	-	-	10,675.149
Natural Land	389.66	-	7,121.280	24.585	7,535.525
Total	6,716.959	4,347.850	7,121.280	24.585	18,210.674

Source: SJMSCP 2022 Annual Report , Table 6 and Table 12

C. Estimate of Future Southwest Zone Preserves, July 2020

2,500

Source: SJCOG, Inc. staff.

TABLE 3
2020 Five-Year Economic Analysis and Fee Update
Allowed and Remaining Incidental Take Acreage

Preserve/Habitat Type	Take Authorizations - 50-year Permit (including multi-purpose open space) ¹	Cumulative Acres of Take through 12/31/2023	Remaining Acres of Land Conversion (links to A.4, B.4. and C.5)
Agriculture	57,635	19,244.12	38,390.88
Multi-purpose (other open space)	37,465	3,568.43	33,896.57
Natural lands			
Vernal pool wetted	707	15.10	691.90
Vernal pool upland grassland	5,187	24.26	5,162.74
All other natural lands	8,308	743.91	7,564.42
Total	109,302	23,595.82	85,706.51

Notes:
 1. Land conversion includes results of both Tier 1 and Tier 2 analysis. See Table 1 note 1.

Sources: Table 1 in this workbook, SJMSCP Table 1-1 and Table 4.2-2; SJCOG, Inc., 2023 Annual Report Table 4