



San Joaquin Area Flood Control Agency

**FLOOD PROTECTION RESTORATION
ASSESSMENT DISTRICT
(REASSESSMENT AND REFUNDING OF 2002)**

**2025/2026 ENGINEER'S ANNUAL REPORT
FOR THE OPERATION AND MAINTENANCE**

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I. OVERVIEW

A. INTRODUCTION

The San Joaquin Area Flood Control Agency (“Agency”) is authorized to annually levy and collect special assessments in order to provide and maintain the facilities, improvements and services within Flood Protection Restoration Assessment District (Reassessment and Refunding of 2002) (“District”). The District was formed in 1996 and the Agency annually levies and collects assessments to maintain the improvements installed and constructed within the District pursuant to the Municipal Improvement Act of 1913, Division 12 of the California Streets and Highways Code §10000 (the “1913 Act”).

This Engineer’s Annual Report (“Report”) describes the District, any changes to the District, the method of apportionment established at the time of formation, and the proposed assessments for Fiscal Year 2025/2026. The proposed assessments are based on the estimated cost to maintain the improvements that provide a special benefit to properties assessed within the District. Each parcel within the District is assessed proportionately for the special benefits provided to the parcel from the improvements.

The word “parcel” for the purposes of this Report refers to an individual property assigned its own Assessment Number by the San Joaquin County Assessor’s Office. The San Joaquin County Auditor/Controller uses Assessment Numbers and specific Fund Numbers to identify on the tax roll properties assessed for special district benefit assessments.

Following consideration of all public comments and written protests at an annual noticed public hearing, and review of the Engineer’s Annual Report, the Board of Directors for the Agency may order amendments to the Report or confirm the Report as submitted. Following final approval of the Report, and confirmation of the assessments, the Board will order the levy and collection of assessments for Fiscal Year 2025/2026. In such case, the assessment information will be submitted to the San Joaquin County Auditor/Controller, and included on the property tax roll for each parcel in Fiscal Year 2025/2026.

B. COMPLIANCE WITH CURRENT LEGISLATION

The Agency has reviewed the provisions of the California Constitutional Article XIID (established by the passage of Proposition 218 in November 1996) and has made the following findings and determinations:

Pursuant to Article XIID Section 5 of the California Constitution, certain property related assessments existing on July 1, 1997 (“the effective date”) are exempt from the substantive and procedural requirements of Article XIID Section 4 and property owner balloting for the assessments is not required until such time that the assessments are increased. Specifically, Section 5 of Article XIID reads:

“...the following assessments existing on the effective date of this article shall be exempt from the procedures and approval process set forth in Section 4:

(a) Any assessment imposed exclusively to finance the capital costs or maintenance and operation expenses for sidewalks, streets, sewers, water, flood control, drainage systems or

vector control. Subsequent increases in such assessments shall be subject to the procedures and approval process set forth in Section 4.”

Since, the improvements and the annual assessment for maintaining the District improvements are exclusively for flood control purposes, the method of assessment and maximum assessment rate formula, as established by the Agency prior to the effective of the article (July 1, 1997), are exempt from the procedural requirements of Article XIID Section 4 of the California Constitution.

The proposed assessment for Fiscal Year 2025/2026 may be less than or equal to the maximum assessment rate previously approved and adopted by the Agency. Future assessments that exceed the previously approved schedule of adjustments, including the clearly defined formula for inflation adjustment that was adopted by the Agency prior to November 6, 1996, will be subject to the substantive and procedural requirements of the California Constitution Article XIID Section 4.

// ANNUAL ASSESSMENT

When the District was formed, pursuant to Section 10100.8 of the Streets and Highways Code, the Board approved the levy of assessments to pay in whole or in part: a.) The costs and expenses of constructing or acquiring the Improvements; b.) The estimated annual costs and expenditures required during the ensuing years for the operation and maintenance of those improvements. The assessments so approved are collected through special assessment levied on the County tax rolls upon all lots, parcels and subdivisions of land within the District that benefit from the improvements.

Since the improvements are to be funded by the levying of assessments, the law requires and the statutes provide that assessments levied pursuant to the “1913 Act”, must be based on the special benefit that the properties receive from the works of improvement. However, the statute does not specify the method or formula that should be used in any special assessment district proceedings. The responsibility for apportioning the costs to properties which special benefit from the improvements rests with the Assessment Engineer, who is appointed to make an analysis of the facts and to determine the apportionment of the assessment obligation to properties proportionate to the special benefit which each will receive from the improvements.

To apportion the assessment to each parcel in direct proportion to the special benefit it will receive from the improvements, an analysis was made to initially identify the special benefit that the public improvements would render to the properties within the boundaries of the District. In making the analysis to levy an assessment on a specific parcel, it is necessary that the parcel receive a special benefit distinguished from a benefit to the general public.

A. DEFINITION OF OPERATION AND MAINTENANCE

The costs and expenses for “Operation and Maintenance” include all applicable operation, maintenance and repair costs incurred annually, or that may not be reasonably collected in a single annual assessment to maintain the level of benefit to the assessed parcels in the District. Operation and Maintenance, as determined by the Board of the San Joaquin Area Flood Control Agency, may include, but is not limited to:

- Personnel costs;
- Utilities (water, electric and other);

- Maintenance equipment (purchase and repair);
- Weed abatement (herbicide spraying, mowing, debris burning);
- Rodent control;
- Road maintenance (Access Roads);
- Stream bed and detention basin clearing;
- Sedimentation removal;
- Erosion control;
- Patrolling and inspecting improvements and facilities;
- Pump station operation (including maintenance and repair);
- Flood wall repairs;
- Graffiti removal;
- Administration expenses; and
- Providing for an “Emergency Repair/Replacement Fund”.

B. OPERATION AND MAINTENANCE BENEFIT

The District assessments were established to provide funding and financing for the design construction, maintenance and operation of flood control facilities (improvements) that benefit parcels within the District. Properties within the District have been designated within the 100-year flood plain by the Federal Emergency Management Agency (FEMA)—according to the preliminary revised Flood Insurance Rate Maps (FIRM's), dated February 28, 1995. The District's flood control facilities restore flood protection to properties that are subject to flooding during a storm of 100-year intensity and thereby preserve the ability to use and develop the properties within the District without the requirements placed on parcels located within Special Flood Hazard Areas. Therefore, the improvements and the maintenance and operation of those improvements are a special benefit to the properties within the District.

The following outlines the special benefits properties within the District receive from the construction and maintenance of the flood protection improvements:

- Reduction in the risk of loss that would occur if a flood were to damage the improvements on the property: i.e., structural damage and/or damages affecting the revenue-producing environment.
- Removal of the flood plain disclosure required during the sale of a property.
- Removal of the requirement for properties that are removed from Special Flood Hazard Areas (as designated by FEMA) to adhere to the building and design “flood plain management” criteria required by FEMA for communities participating in the Flood Insurance Program (FIP). These criteria apply to new construction, as well as renovations and additions in most circumstances, and increase the costs of development.
- Removal of the mortgage/lender requirement to purchase flood insurance if a property is within a designated Special Flood Hazard Area shown on the preliminary revised FIRM's, or providing the ability to purchase flood insurance at a reduced cost.
- Protection of public improvements required to provide access and service to properties.

- Enhanced ability to develop property to its “highest and best use” in accordance with existing zoning and land use regulations.

C. CALCULATION OF ANNUAL MAINTENANCE AND OPERATION ASSESSMENT

The benefit formula used for calculating the annual operation and maintenance benefit to each property within the District is based on the Benefit Units (BU's) used to calculate the original benefits and assessments each parcel received from the construction of the District improvements and facilities. However, when the development or land use of a property changes the special benefits the parcel receives from the operation and maintenance of the District improvements also changes. The Maintenance Benefit Units (MBU's) for each parcel is recalculated each year utilizing the same methodology and formula established in the District's original Engineers Report and outlined in Part III of this report (Method of Apportionment) to accurately reflect each parcel's current special benefit from the improvements. Therefore, if the development status or land use of a particular parcel has changed since the previous year, the MBU's and the resulting operation and maintenance portion of the parcel's assessment will likely change.

The assessment rate per MBU is calculated by dividing the total annual Operation and Maintenance Budget by the total number of MBU's in the District each year. The number of MBU's will vary year to year based upon development and land use changes in the District.

In the year the District was formed (Fiscal Year 1996-97), the maximum annual assessment rate (“maximum rate”) for Operation and Maintenance was established at \$3.59 per MBU, plus an annual inflation escalator equal to the National Consumer Price Index (CPI). This maximum rate of \$3.59 was established using an estimated annual operation and maintenance cost of \$450,000 for the first full year of maintenance, and the total number of Maintenance Benefit Units in Fiscal Year 1996-97 (125,474.396 MBU's).

The first assessments for Operation and Maintenance were collected in Fiscal Year 1996-97 pursuant to resolution of the Agency Board approved after a duly noticed public hearing, as provided in the Act. Annual assessments for Operation and Maintenance are anticipated to be levied and collected each fiscal year and shall be approved by resolution at an annual public hearing on the matter. The annual assessment approved each year may not exceed the CPI adjusted maximum assessment (\$3.59 plus the annual inflation escalator) approved, without approval of the property owners subject to the assessment through a property owner protest ballot procedure pursuant to the California Constitution Article XIID.

Based on the initial Annual Assessment Rate of \$3.59 per MBU and the annual CPI inflation factor, the following table summarizes the application of the annual inflation escalator allowed to the assessment rate for the operation and maintenance assessments since Fiscal Year 1996-97. The “Maximum Assessment Rate” reflects the assessment rate per MBU that may be applied for the respective fiscal year without constituting an increased assessment or once again obtaining property owner approval in accordance with the provisions of the California Constitution Article XIID. The “CPI” applied each year is the National Consumer Price Index (CPI) from January 1st of the previous year to January 1st of the current year (or similar period). (Example—the CPI applied for Fiscal Year 1997-98 is based on the CPI calculated from January 1, 1996 to January 1, 1997 to the first decimal place 0.0).

Fiscal Year	Base Year Rate	Calendar Year CPI	CPI Adjustment	Maximum Assessment Rate	Assessment Rate Applied
1996-97	N/A	N/A	N/A	\$3.5900	\$3.59
1997-98	\$3.5900	3.30%	\$0.1185	\$3.7085	\$3.59
1998-99	\$3.7085	1.70%	\$0.0630	\$3.7715	\$3.60
1999-00	\$3.7715	2.95%	\$0.1113	\$3.8828	\$3.56
2000-01	\$3.8826	2.70%	\$0.1048	\$3.9874	\$3.54
2001-02	\$3.9874	3.90%	\$0.1555	\$4.1429	\$3.53
2002-03	\$4.1429	3.50%	\$0.1450	\$4.2879	\$3.51
2003-04	\$4.2879	1.10%	\$0.0472	\$4.3351	\$3.49
2004-05	\$4.3351	1.90%	\$0.0824	\$4.4174	\$3.95
2005-06	\$4.4174	3.00%	\$0.1325	\$4.5500	\$3.95
2006-07	\$4.5500	4.00%	\$0.1820	\$4.7320	\$4.25
2007-08	\$4.7320	2.10%	\$0.0994	\$4.8314	\$4.36
2008-09	\$4.8314	4.30%	\$0.2078	\$5.0392	\$5.03
2009-10	\$5.0392	0.00%	\$0.0000	\$5.0392	\$5.03
2010-11	\$5.0392	2.60%	\$0.1310	\$5.1702	\$5.17
2011-12	\$5.1702	1.60%	\$0.0827	\$5.2529	\$5.25
2012-13	\$5.2529	2.90%	\$0.1523	\$5.4052	\$5.40
2013-14	\$5.4052	1.60%	\$0.0865	\$5.4917	\$5.49
2014-15	\$5.4917	1.60%	\$0.0879	\$5.5796	\$5.57
2015-16	\$5.5796	0.00%	\$0.0000	\$5.5796	\$5.57
2016-17	\$5.5796	1.40%	\$0.0781	\$5.6577	\$5.65
2017-18	\$5.6577	2.50%	\$0.1414	\$5.7991	\$5.79
2018-19	\$5.7991	2.10%	\$0.1218	\$5.9209	\$5.92
2019-20	\$5.9209	1.60%	\$0.0947	\$6.0156	\$6.01
2020-21	\$6.0156	2.50%	\$0.1504	\$6.1660	\$6.16
2021-22	\$6.1660	1.40%	\$0.0863	\$6.2523	\$6.25
2022-23	\$6.2523	7.50%	\$0.4689	\$6.7213	\$6.72
2023-24	\$6.7213	6.40%	\$0.4302	\$7.1515	\$7.15
2024-25	\$7.1515	3.10%	\$0.2217	\$7.3731	\$7.37
2025-26	\$7.3731	3.00%	\$0.2212	\$7.5943	\$7.59

The Fiscal Year 2025/2026 Maximum Assessment Rate allowed is \$7.5943.

The Fiscal Year 2025/2026 Assessment Rate proposed is \$7.59.

The "Base Rate" equals the prior year's "Maximum Assessment Rate" allowed.

The "Maximum Assessment Rate" is calculated to four decimal places, however, the actual assessment applied to each parcel is rounded down to the nearest even penny when applied to the tax rolls.

D. PROPOSED BUDGET FOR FISCAL YEAR 2025/2026

Item Descriptions		
San Joaquin County Operation and Maintenance Budget:		
Rents & Leases – Equipment Use of San Joaquin County Flood Control and Water Conservation District equipment to perform operation and maintenance activities and provide emergency services, if needed Equipment Maintenance Equipment Rental County Owned Communications cell phone Small Tools and Instruments	\$15,750 \$73,500 \$1,250 \$10,500	\$101,000
Professional Services – County Services provided for bridge parapet wall accident repair	\$26,250	\$26,250
Materials Includes expenses for vegetation management materials, rodent control materials, and materials and supplies unique to operation and maintenance activities	\$52,500	\$52,500
Labor Costs Services provided by San Joaquin County Flood Control and Water Conservation District for operation and maintenance activities and to provide emergency activities, if needed Allocated Service Department Costs Operation and Maintenance	\$239,570 \$565,680	\$805,250
Miscellaneous Expense -	\$0	\$0
Fixed Asset Funds needed to acquire additional equipment for the Agency	\$0	\$0
SUB-TOTAL SAN JOAQUIN COUNTY OPERATION AND MAINTENANCE BUDGET		\$985,000

Aquatic Weed Control Program – Five Mile Slough This program is conducted in an approximate 5,100 ft lineal section of Five Mile Slough and is managed by SJAFCA; work during FY 25-26 will be carried out by a professional contractor Contractor – herbicide application; compliance and monitoring and reporting	\$54,000	\$54,000
SUB-TOTAL SJAFCA OPERATION AND MAINTENANCE BUDGET		\$54,000
<u>SJAFCA Administration Budget:</u> Contribution To Capital Outlay Reserve (future floodwall replacement) Property Tax Administration Charges Charges by the County Tax Collector for the collection of property assessments. Administration Costs Annual General and Administration and Engineer's Report SUB-TOTAL SJAFCA O&M AND ADMINISTRATION BUDGET	\$0 \$11,500 \$318,000	\$329,500 \$383,500
TOTAL OPERATION AND MAINTENANCE BUDGET FY 2025/2026		<u>\$1,368,500</u>
FY 2025/2026 – Revenue and Appropriations: FY 2025/2026 Assessment to be levied FY 2025/2026 Agency Reserve Appropriation to cover budget shortfall FY 2025/2026 Agency Reserve Appropriation for Emergencies or Additional Work		\$1,176,255 \$192,245 \$100,000
TOTAL FY 2025/2026 REVENUE AND APPROPRIATIONS		<u>\$1,468,500</u>

- (1) Assessment to be levied may be slightly different from total amount on preliminary roll due to the rounding of assessment to even pennies as required by San Joaquin County.
- (2) The surplus appropriation of \$192,245 is needed to cover the difference between the amount collected by the O&M assessments and the additional amount requested by the District in the proposed FY 2025/2026 budget.
- (3) The surplus appropriation of \$100,000 will allow the Executive Director, without additional Board Authorization, to promptly deal with emergencies, or to authorize additional work not included in the budget.

The appropriations in the budget are funded from the unexpended balance in the O&M reserve, carried forward from previous year's O&M assessments. No increase in the current annual assessment charge is either required or made. The result of this request to the Engineer's Report will not affect the proposed FY 2025/2026 assessment rate of \$7.59 per Maintenance Benefit Unit.

E. CALCULATION OF ASSESSMENT RATE FOR FISCAL YEAR 2025/2026

The assessment rate per MBU is calculated by dividing the total amount to be funded "O&M Budget" by the total "MBU's" estimated for the District.

O&M Budget-Surplus Appropriations/Maintenance Benefit Units (MBU's) = Assessment Rate

- The Total Maintenance Benefit Units (MBU's) that are estimated for the District in Fiscal Year 2025/2026 are 155,068.98 **MBU's**.
- Based on the estimated budget and the surplus appropriation for Fiscal Year 2025/2026, the assessment rate for Fiscal Year 2025/2026 is approximately \$7.59 per Maintenance Benefit Unit.

III. METHOD AND FORMULA OF ASSESSMENT SPREAD

A. CALCULATION OF BENEFIT UNITS

To apportion the costs of the improvements to parcels that benefit, a method of assigning Benefit Units to each parcel was developed and approved when the District was formed. Benefit Units (BUs) were assigned to each parcel based upon the benefits to real property that the District improvements (levee system and other flood control improvements) provided to each parcel in proportion to the estimated benefit the parcel receives relative to the other parcels in the District from the flood protection facilities.

The specific number of Benefit Units assigned to each parcel was calculated based upon the formula shown below:

Improvement BUs + Land BUs = Total BUs

The single-family residence (SFR) was used as a basis of comparison since it represented approximately 70 percent of the assessable parcels of land in the District. BUs assigned to other parcels and land uses were based upon the relative benefit they receive as compared to a single-family residence. The total number of BU's for all assessable parcels in the District were then divided into the total cost to fund the District to determine the assessment rate per Benefit Unit.

The BUs assigned or calculated for each parcel for construction and installation of the improvements was based on the land use for the parcel as shown on the records of the San Joaquin County Assessor's office at the time of formation. Recognizing that under the 1913 Act, the assessment on each parcel may not be increased once it has been levied without further public hearings and property owner approval, the District was formed and the assessments

approved provided for annual adjustments to the assessments for operation maintenance of the improvements. The annual operation and maintenance assessment rate was established at \$3.59 per Maintenance Benefit Unit (MBU) plus an annual escalator equal to the National Consumer Price Index (CPI). However, the assessment formula approved also established that the operation and maintenance assessment applied to each parcel would be recalculated annually based on the current development status or land use of each parcel. Therefore, if the development status or land use of a particular parcel changed from the previous year, the MBU's and the resulting assessment would change to more accurately reflect the parcel's current proportional benefit from the District improvements.

The methodology used to calculate the original BUs for the construction and installation of the improvements as well as the Maintenance Benefit Units calculated for future operation and maintenance of the improvements are assigned to each parcel based on land use. The method of apportionment for each land use is described in the following sections, with sample calculations provided in Appendix A.

B. IMPROVEMENT BENEFIT

Since the primary benefit to parcels from the construction, operation and maintenance of the flood control improvements is to remove them from the proposed new Special Flood Hazard Areas (new areas of the 100-year flood plain as identified by FEMA), the risk of loss or damage to improvements installed or constructed on developed parcels of land is significantly reduced.

The construction, operation and maintenance of the flood control improvements within the District significantly reduce the risk of damage and loss of real property, particularly to developed parcels of land. The improvements also facilitate the removal of properties from the proposed new Special Flood Hazard Areas (new areas of the 100-year flood plain as identified by FEMA). As a result, the special benefits to be enjoyed by property owners include:

- elimination of the requirements to purchase flood insurance in order to obtain financing;
- ability to purchase flood insurance at a reduced cost in comparison to parcels which are located within a Special Flood Hazard Area as designated by FEMA; and
- reduction of a flood event occurring and the probability of loss or damage to the property and improvements on the property.

The degree to which each developed property will benefit in relationship to any other property is based upon the intensity of development on the parcel (i.e., the percentage of the total parcel area which has or is allowed to have improvements constructed thereon) and the relative risk of loss of those improvements in relation to other land uses. The following describes the benefit relationship rational established in the original Engineer's Report.

Intensity of Development — Based upon an average parcel size of 1/6 acre for single-family development and a typical building footprint of about 1,600 sq. ft., the intensity of development on single-family residential parcels is approximately 20 percent. By comparison, a review of land use data within the Agency's sphere of influence showed that on retail/service commercial

parcels of one acre or less, the average intensity of development is approximately 40 percent of the parcel area. This means that for each acre of land used for single-family residential, on average approximately 20 percent of the area (or about 9600 square feet per acre) is covered by improvements; whereas, on each acre of land used for retail/service commercial, over 40 percent is covered by improvements (or about 19,500 square feet per acre). Since an acre of land developed for retail/service commercial use has a higher intensity of development than an acre of land used for single-family residential, it receives a greater benefit because there is more that would be damaged should a flood occur. Based upon a review of parcel area and intensity of development by land use for over 2,500 parcels, the following represents the average intensity of development per acre relative to single-family residential development within the District. The average intensity of development, by land use category (retail/service commercial, office/professional, personal care/recreational, manufacturing/industrial, institutional), was calculated by computing the average building coverage on the parcels analyzed after excluding those parcels that were significantly underdeveloped. Underdeveloped parcels were defined as those parcels within each land use category, which had the lowest 20th percentile current improvement density.

Unlike non-residential parcels, SFR parcels do not have a strong correlation between parcel size and the area which can be covered by improvements; therefore, they are assessed according to the size of the building footprint based on adjusting the improvement density factor for single-family residential as a function of the area of the structure footprint. A review of the available data showed that approximately 25 percent of the homes have a building footprint that would be 1,000 square feet or less, approximately 50 percent of the homes would fall in the 1-2,000 square foot range and the remainder would be over 2,000 square feet. Considering the number of houses in each category and the relative amount of replacement necessary should flooding occur, the improvement density factor reflects a 20% differentiation in replacement costs for the three categories of SFR, as shown in the table below.

Land Use	Improvement Density Factor
Single-Family Residential	
Less than 1,000 SF	0.8
1,000 to 2,000 SF	1.0
More than 2,000 SF	1.2
Multi-Family Residential	1.0
Retail/Service Commercial	2.0
Office/Professional	2.0
Personal Care/Recreational	2.0
Manufacturing/Industrial	2.0
Institutional	1.5

Risk of Loss — In determining the benefit that a parcel receives, it was also necessary to look at the relative replacement costs of the improvements constructed on the parcel relative to other land uses since the relative risk of loss in the event of a flood is directly proportional to the relative cost of the improvements at risk. For example, a review of published building construction cost data showed that the average cost range per square foot for single-family residential improvements was \$45-60/square foot while the average cost range per square foot for industrial improvements was \$25-45/square foot. Therefore, each developed single-family residential parcel receives a greater benefit than developed manufacturing/industrial parcels per unit of improvement since the loss or damage would be significantly higher should a flood

occur. Also, since the cost of flood insurance is based on the value of improvements to be insured, it would cost the single-family property owner more to purchase flood insurance per 100 square feet of single-family residential improvements in comparison to 100 square feet of manufacturing/industrial improvements; therefore, the single-family residential property would receive a greater benefit.

Based upon an analysis of the average cost per square foot for structures allowed under existing land use regulations for each land use, the table below shows the relative benefit per unit (i.e., square foot) for improvements by land use relative to single-family residential development within the District:

Land Use	Risk Factor
Single-family Residential	1.0
Multi-Family Residential	0.9
Retail/Service Commercial	0.9
Office/Professional	1.1
Personal Care/Recreational	1.2
Manufacturing/Industrial	0.7
Institutional	1.1

Therefore, it was determined that developed properties benefit differently from the flood protection facilities depending on the type of land use on the property and the average intensity of development; the potential damage to the structure, its contents, and/or the financial loss in revenues in the event of a flood would be different for the different types of land use based upon the relative cost per unit of improvement within the different land use categories.

In order to allocate benefit fairly between the land uses, an Equivalent Dwelling Unit (EDU) methodology was established that equated different residential and non-residential land uses to each other, thereby allowing a uniform method of assessment.

Therefore, the improvement benefit formula is summarized as:

$$(\text{EDU's}) \times (\text{Improvement Density Factor}) \times (\text{Risk Factor}) = \text{Improvement Benefit Units}$$

C. EQUIVALENT DWELLING UNITS

Land use as shown on the San Joaquin County Assessor's records is used to assign Equivalent Dwelling Units (EDU's) to each improved parcel based on the following methodology.

- **Single-family Residential** — Since the single-family residential (SFR) parcel is the most common land use and represents over 70 percent of the assessable parcels within the District, it is used as the standard and is assigned one (1) EDU. Other improved land uses are converted to EDU's by comparing them to the SFR. Included in the SFR category are condominiums, mobile homes not in mobile home parks and agricultural-residential parcels.
- **Multi-Family Residential** — Multi-family residential improved land uses are equated to the SFR land use based upon the number of dwelling units per parcel. Studies have consistently shown that the average apartment unit's relative size and population density compared to

the typical size and impacts of single-family units is approximately 80 percent as much as a single-family residence. By virtue of their reduced size, each multi-family residential unit receives a lesser benefit or enhancement per unit to property values and therefore benefits less per unit than a single-family residence. Also, a review of parcel data finds that flood protection benefits do not increase proportionately as the number of units increase on a Multi-Family Residential (MFR) parcel, due to the nature of the building layouts and the fact that the value per unit generally decreases as the number of unit's increases.

EDU's for Multi-Family Residential parcels are calculated based upon the actual number of dwelling units as shown below:

Number of Dwelling Units	Equivalent Dwelling Unit Formula
Four (4) Units or less	0.8 EDU/DU for the first 4 DU's
More than four (4) but less than or equal to twenty (20)	0.6 EDU/DU for each DU over 4 and up to 20
More than twenty (20)	0.4 EDU/DU for each DU over 20

- **Non-Residential** — All Non-Residential improved land uses are equated to the SFR based upon parcel size. A review of the County land use records showed that the average SFR parcel size in the City of Stockton is 1/6 acre. Therefore, the factor of 6 EDU's per acre is used as the basis of comparison, and each Non-Residential parcel will be assigned 6 EDU's per acre or fraction thereof.

To more accurately reflect the benefit that some parcels receive from the flood control improvements, an additional adjustment in the EDU's assigned to the parcel is required. The data used to develop the density factors for each land use indicated that, on the larger parcels of land, the average density of development was significantly lower than on parcels that were less than one (1) acre in size. Even if it is assumed that the owner of land will ultimately develop that land to receive the maximum economic return from the land based upon allowed intensities of development and other land use regulations, there are a number of factors that limit the density of development on larger parcels of land. These include requirements based upon the specific land use which may include the need to provide large areas for the storage of materials or goods, to provide internal circulation roadways, to provide open areas or extensive buffer zones, to provide increased areas for employee/customer parking and other similar requirements.

Therefore, based upon an analysis of data relating the development intensity and parcel size for different types of land uses the number of EDU's assigned to non-residential parcels is adjusted on parcels which are larger than one (1) acre as shown below:

Parcel Size	Equivalent Dwelling Unit Formula
One (1) Acre or less	6.0 EDU/Acre
More than one (1) acre but less than or equal to four (4) acres	1.5 EDU/Acre for each acre over one (1) acre up to four (4) acres
More than four (4) acres	0.5 EDU/Acre for each acre over four (4) acres

Parcel area for non-residential condominiums will be calculated based on the individual parcel size and a proportional share of the common area attributed to the condominium complex.

- **Vacant** — Vacant properties have no improvements constructed on them; therefore, vacant properties are assigned zero (0) Improvement Benefit Units per parcel.
- **Vacant-like Developed Property** — This includes those parcels with land uses that closely resemble vacant property in that they have large land areas comprised of mostly park-like open space or vacant land and only a few buildings. These properties have very low land utilization and almost no potential for additional development; therefore, these land uses are assigned 1.0 BU per parcel for the ancillary structures on the property. These land uses include radio and television transmission facilities or towers, mineral processing, parcels with only parking lots, airports, mobile home parks, cemeteries, golf courses and other miscellaneous recreational uses.

A list of Land Use Classifications used in this report, with the corresponding County Assessor's use codes, is provided in Appendix B.

D. LAND BENEFIT

In addition to benefits that improvements on a property will receive, parcels within the District are assigned Land Benefit Units in proportion to the benefits that they receive by virtue of:

- Having the ability to economically use or fully develop a property consistent with zoning and land use regulations.
- Not having to adhere to the "Flood Plain Management" requirements for building and design of new construction, as well as renovations and additions, required for parcels in Special Flood Hazard Areas; and
- Not having to disclose during the sale of a property that it is located in a Special Flood Hazard Area of the 100-year flood plain.

Based on the benefits previously described the benefit to the land is preserved whether it is improved or not, and the benefit to each parcel is directly related to the size of the land. In addition, if the land were to remain in the flood plain, the cost of elevating the building pad area by filling the land would be proportional to the size of the parcel and the intensity of development allowed upon it based upon current land use and development standards. Therefore, the benefit received by the parcel varies as land varies in size.

For the City of Stockton, the San Joaquin County Assessor's Roll indicates that over 70 percent of the parcels of land are single-family residences (SFR's) and that the average land value for an average SFR located on 1/6 acre is between 20 and 30 percent of the total value of property. Therefore, 0.25 BU is assigned to each single-family residential parcel of land. Since the development potential of a SFR parcel is restricted to one house, no matter how big the parcel, the Benefit Units assigned to the land will not vary as parcel size increases for single-family residential parcels of land.

Benefit Units for all other land uses are based upon the size of the parcel at the rate of 0.25 BU for each 1/6 acre (1.5 BU/acre) to estimate the benefit to the land, since the amount of development which could occur is directly related to the size of the parcel. Each parcel of land, both developed and undeveloped and having no development restrictions on it, will be assigned Benefit Units at the rate of 1.5 BU/Acre to reflect the benefit that the land receives. Since the level of development or the potential for development would be similar for developed parcels of a similar size, the BU's assigned to the land for parcels larger than one (1) acre in size will be reduced in the same manner as the EDU's are reduced for the improvements on developed non-residential parcels as shown below:

Parcel Size	Land Benefit Unit
One (1) Acre or less	1.5 per Acre
More than one (1) acre but less than or equal to four (4) acres	0.375 per Acre
More than four (4) acres	0.125 per Acre

Parcel area for non-residential condominiums will be calculated based on the individual parcel size and a proportional share of the common area attributed to the condominium complex.

E. EXEMPT

Several land uses have been determined to be exempt because they would not benefit from the proposed flood control facilities, or they have a supporting use to a land use already being charged. Examples of exempt land uses are as follows:

- Common areas associated with residential condominiums, open spaces and green belts.
- Parcels with total property values of less than one dollar per the San Joaquin County Assessor's Roll.
- Properties owned by public agencies, such as cities, the County, the State or the Federal government, are exempt except when such property is not devoted to a public use.
- Rights-of-way owned by utilities and railroads.
- Agricultural parcels under the Williamson Act or within a General Plan area designated, as "Agricultural" has no potential for immediate development. By contrast, the Williamson Act parcels remain agricultural to take advantage of special tax treatments. The Williamson Act agricultural parcels and the General Plan Agricultural parcels are not assigned any benefit. If these parcels develop in the future, then the appropriate benefit will be collected under the "Flood Control Facilities Fee" mechanism. (Agricultural parcels that are not within the

General Plan designated areas and which do not have Williamson Act contracts are assessed as Vacant.)

- Parcels which are designated as Special Flood Hazard Areas on the Preliminary Revised FIRM's, dated February 28, 1995, and which were previously designated as Special Flood Hazard Areas on the previous FIRM's; these parcels are considered to have no benefit and will not be assessed.

F. ASSESSMENT DISTRICT BOUNDARY FACTOR

Parcels that are bisected by the flood line, as delineated on the preliminary Revised FIRM's, would have the total BUs for the property reduced by the percentage of the parcel within the proposed flood plain since they would receive a reduced benefit. The BUs for the parcel are reduced based on the following:

- If a parcel has less than 1/3 its area in the flood plain, the BU's for that parcel would be multiplied by 0.17.
- If a parcel has more than 1/3 but less than 2/3 its area in the flood plain, the BU's for that parcel would be multiplied by 0.50.
- If a parcel has more than 2/3 its area in the flood plain, the BU's for that parcel would be multiplied by 83.

IV. DESCRIPTION OF WORKS OF IMPROVEMENTS

Section 10102 of the Act provides for the legislative body of any agency authorized under the Act to finance certain capital facilities and services. The following is a list of improvements as allowed under the Act to be constructed, installed, maintained, repaired or improved under the provisions of the Act. The facilities diagram, on file in the Office of the Secretary, shows the general location of the improvements. Copies are also on file at the Office of the Clerk of the Board of Supervisors of the County of San Joaquin and at the Office of the City Clerk of the City of Stockton.

The improvements consist of, but are not limited to:

- A. Flood protection improvements including the construction, strengthening and/or raising the height of levees, flood walls and wing levees; construction and/or improvements to detention basins and reservoirs; improvements to bridges, roadways and access ways; channel improvements; and related improvements along, but not limited to, the following waterways:
 - Bear Creek - confluence with Disappointment Slough to Tully Road.
 - Paddy Creek - confluence with Bear Creek to approximately Jack Tone Road.
 - Bear Creek - approximately 700 downstream of Interstate 5 to confluence with Paddy Creek.
 - Paddy Creek - confluence with Bear Creek to confluence with South Paddy Creek.
 - South Paddy Creek - confluence with Paddy Creek to approximately Jack Tone Road.

- Mosher Creek & Mosher Creek Diversion - confluence with Bear Creek to approximately 6300 feet upstream of Highway 88.
 - Mosher Slough - 2,000 feet upstream of Interstate 5 to approximately 150 feet upstream of Thornton Road.
 - Calaveras River - confluence with the San Joaquin River to approximately Solari Ranch Road.
 - Stockton Diverting Canal - confluence with the Calaveras River to Mormon Slough.
 - Mormon Slough - confluence Stockton Diverting Canal to approximately 500 upstream of confluence with Potter Creek.
 - Potter Creek A - confluence with Mormon Slough to approximately Jack Tone Road.
 - Potter Creek B - confluence with Mormon Slough to 1,500 feet east of Fine Avenue.
 - Mosher Slough Detention Basins No.1 & 2.
 - Little Bear Creek - confluence with Mosher Slough to Davis Road.
 - Pixley Slough - confluence with Bear Creek to Lower Sacramento Road.
 - Five Mile Slough – confluence with Fourteen Mile Slough to the north/south land levee at the east boundary line of Shima Tract.
- B. The acquisition of all interest in real property necessary or useful for the above described improvements or other improvements constructed by the District; and,
- C. The acquisition and/or construction of any other work, auxiliary to any of the above and necessary or useful to complete the same and to reduce the risk of flooding within the District.

Appendix A — SAMPLE BENEFIT UNIT CALCULATIONS

Land – Use	Land Benefit	Improvement Benefit (EDU) x (Imp. Density Factor) x (Risk Factor)	Total MBU's
Single-family Res. ftprint < 1000sf	All parcels = .25 BU	$(1\text{DU} \times 1\text{EDU/DU}) \times .8 \times 1 = 0.8 \text{ BU}$	1.05
Single-family Res. 1000 > ftprint > 2000	All parcels = .25 BU	$(1\text{DU} \times 1\text{EDU/DU}) \times 1 \times 1 = 1.0 \text{ BU}$	1.25
Single-family Res. ftprint > 2000 sf	All parcels = .25 BU	$(1\text{DU} \times 1\text{EDU/DU}) \times 1.2 \times 1 = 1.2 \text{ BU}$	1.45
Agricultural Res.	All parcels = .25 BU	$(1\text{DU} \times 1\text{EDU/DU}) \times 1 \times 1 = 1.0 \text{ BU}$	1.25
3-Unit Apartment 1/2 acre parcel	.5ac x 1.5BU/ac = .75 BU	$(3\text{DU} \times .8\text{EDU/DU}) \times 1 \times .9 = 2.16 \text{ BU}$	2.91
11 Unit Apt. 3/4 acre parcel	.75ac x 1.5BU/ac = 1.125BU	$[(4\text{DU} \times .8\text{EDU/DU}) + (7\text{DU} \times .6\text{EDU/DU})] \times 1 \times .9 = 6.66 \text{ BU}$	7.785
41 Unit Apt. 3 acre parcel	3ac x 1.5BU/ac = 4.5 BU	$[(4\text{DU} \times .8\text{EDU/DU}) + (16\text{DU} \times .6\text{EDU/DU}) + (21\text{DU} \times .4\text{EDU/DU})] \times 1 \times .9 = 19.8 \text{ BU}$	23.58
Grocery Store 1 acre parcel	1ac x 1.5BU/ac = 1.5 BU	$(1\text{ac} \times 6\text{EDU/ac}) \times 2 \times .9 = 10.8 \text{ BU}$	12.3
Regional Shopping 5 acre parcel	1ac x 1.5BU/ac + 3ac x .375BU/ac + 1ac x .125BU/ac = 2.75BU	$[(1\text{ac} \times 6\text{EDU/ac}) + (3\text{ac} \times 1.5\text{EDU/ac}) + (1\text{ac} \times 0.5\text{EDU/ac})] \times 2 \times .9 = 19.8 \text{ BU}$	22.55
Service Station 1/4 acre parcel	.25ac x 1.5BU/ac = .375BU	$(1/4\text{ac} \times 6\text{EDU/ac}) \times 2 \times .9 = 2.7 \text{ BU}$	3.075
Office Building 2 acre parcel	1ac x 1.5BU/ac + 1ac x .375BU/ac = 1.875BU	$[(1\text{ac} \times 6\text{EDU/ac}) + (1\text{ac} \times 1.5\text{EDU/ac})] \times 2 \times 1.1 = 16.5 \text{ BU}$	18.375
Church 2 acre parcel	1ac x 1.5BU/ac + 1ac x .375BU/ac = 1.875BU	$[(1\text{ac} \times 6\text{EDU/ac}) + (1\text{ac} \times 1.5\text{EDU/ac})] \times 1.5 \times 1.1 = 12.375\text{BU}$	14.25
Industrial Building 10 acre parcel	1ac x 1.5BU/ac + 3ac x .375BU/ac + 6ac x .125BU/ac = 3.375BU	$[(1\text{ac} \times 6\text{EDU/ac}) + (3\text{ac} \times 1.5\text{EDU/ac}) + (6\text{ac} \times 0.5\text{EDU/ac})] \times 2 \times .7 = 18.9 \text{ BU}$	22.275
Vacant SFR	All parcels = .25 BU	No imp. benefit = 0 BU	0.25
Vacant 1 acre parcel	1ac x 1.5BU/ac = 1.5 BU	No imp. benefit = 0 BU	1.5
Mobile Home Park 2 acre parcel	1ac x 1.5BU/ac + 1ac x .375BU/ac = 1.875BU	All parcels = 1 BU	2.875
Golf Course 20 acre parcel	1ac x 1.5BU/ac + 3ac x .375BU/ac + 16ac x .125BU/ac = 4.625 BU	All parcels = 1 BU	5.625
Vacant 40 acre parcel	1ac x 1.5BU/ac + 3ac x .375BU/ac + 36ac x .125BU/ac = 7.125 BU	No imp. benefit = 0 BU	7.125
Agricultural (Williamson Act or General Plan)	Not assessed	Not assessed	0.0

Note: For those properties that are bisected by the flood line, the Total BU's are multiplied by the appropriate Boundary Factor.

Appendix B — LAND USE CLASSIFICATIONS

Assessor's Use Codes	San Joaquin County Assessor's Use Descriptions
10-17, 51, 56, 94, 96, 401, 421, 451, 461, 463, 471, 481, 501, 511, 521	Single-Family Residential SFR, condominium, Agricultural Residential, Mobile home not in mobile home park
21, 22, 31-32, 34-35, 41-48, 52	Multi-Family Residential Duplex, triplex, four-plex Apartments
110-114, 120-121, 130-132, 140-144, 150-155, 201-203, 210-214, 250-252, 255-256, 260-263, 270-272, 280-285, 290-291, 771	Retail and Service Commercial Stores & store combos, Department stores & super markets, Community & regional shopping centers, Restaurants, Service shops & service stations, Equipment sales and service, Misc. commercial
170-173, 190-197, 240	Office/Professional Professional & office buildings, Medical and dental offices, Banks, savings and loans
55, 59-65, 68, 70-71, 78, 180-184, 189, 204, 230, 231, 610-615, 620, 630-632, 640, 650, 651, 740-742, 750-752, 760	Care/ Personal Recreational Hospitals & nursing homes, Rooming houses, Homes for the aged, Day care facility, Hotels/motels, Theaters & bowling alleys & skating rinks, Clubs, lodge halls
253-254, 310-314, 320-324, 330-332, 340-342, 350-355, 360-363, 370-371, 381-382, 391, 392, 811, 812	Manufacturing/Industrial Manufacturing outlets, Misc. industrial, Warehousing, Distribution and Storage, Lumber yards, Truck Terminal, Bulk Plants, Winery
710-711, 720-722, 730	Institutional Institutional & Churches, Private schools & colleges
90-93, 380, 393, 660-664, 670, 681, 690, 691, 772, 810, 813, 814, 820, 830, 890-892	Vacant-Like Developed Golf Courses & Driving Ranges, Parking Lots, Drive-in Theaters, Swimming Pools, Airports, Mineral Processing, Mobile Home Park, Cemeteries, Radio/TV Transmission Sites, Privately Owned Race Track, Privately Own Camps
1-7, 20, 30, 40, 50, 53-54	Vacant Residential Vacant Residential Lots
100-102, 107, 300-302, 307	Vacant Vacant Lots
80-82, 95, 156, 200, 390, 400, 420, 450, 460, 462, 470, 480, 490, 500, 510, 520, 530, 550, 551, 590, 591, 770, 780, 815, 821-824, 840-841, 850-851, 860-862, 900-951	Exempt Common Areas, Right of Ways, Agricultural Parcels, Public Agency Properties

Appendix C – DIAGRAM OF ASSESSMENT DISTRICT

Full-sized copies of the Assessment Diagram are on file in the Office of the Secretary, of the San Joaquin Area Flood Control Agency. Copies are also on file at the Office of the Clerk of the Board of Supervisors of the County of San Joaquin and at the Office of the City Clerk of the City of Stockton.

As required by the Act, the Assessment Diagram shows the exterior boundaries of the Assessment District and the assessment number assigned to each parcel of land corresponding to its number as it appears in the Assessment Roll contained in Appendix D. (The assessment number for each parcel is the San Joaquin County Assessor's Parcel Number.)

The lines and dimensions of each lot or parcel within the Assessment District are those lines and dimensions shown on the maps of the Assessor of the County of San Joaquin for the year in when this Report is prepared. The Assessor's maps and records are incorporated by reference herein and made part of this report.

Appendix D — 2025/2026 COLLECTION ROLL

Parcel identification, for each lot or parcel within the District, shall be the parcel as shown on the San Joaquin County Assessor's map for the year in which this Report is prepared.

The Assessments have been levied in proportion to the estimated benefit that each parcel receives from the improvements in accordance with the method and formula of assessment as presented and approved upon formation of the District.

A listing of parcels of land, and the proposed assessment amount to each parcel for the Operation and Maintenance of the improvements is provided under a separate cover and by reference is made part of this report. For current ownership of each parcel of land, reference is made to the most recent equalized tax roll for the County of San Joaquin, which is by reference also made part of this report. The assessment amount for each parcel pursuant to approval of this report shall be submitted to the San Joaquin County Tax Collector for collection on the property tax bill for Fiscal Year 2025/2026.