Economic & Planning Systems

Public Finance
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FINAL REPORT

SACRAMENTO AREA FLOOD CONTROL AGENCY DEVELOPMENT FEE PROGRAM

Prepared for:

Sacramento Area Flood Control Agency (SAFCA)

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I. INTRODUCTION

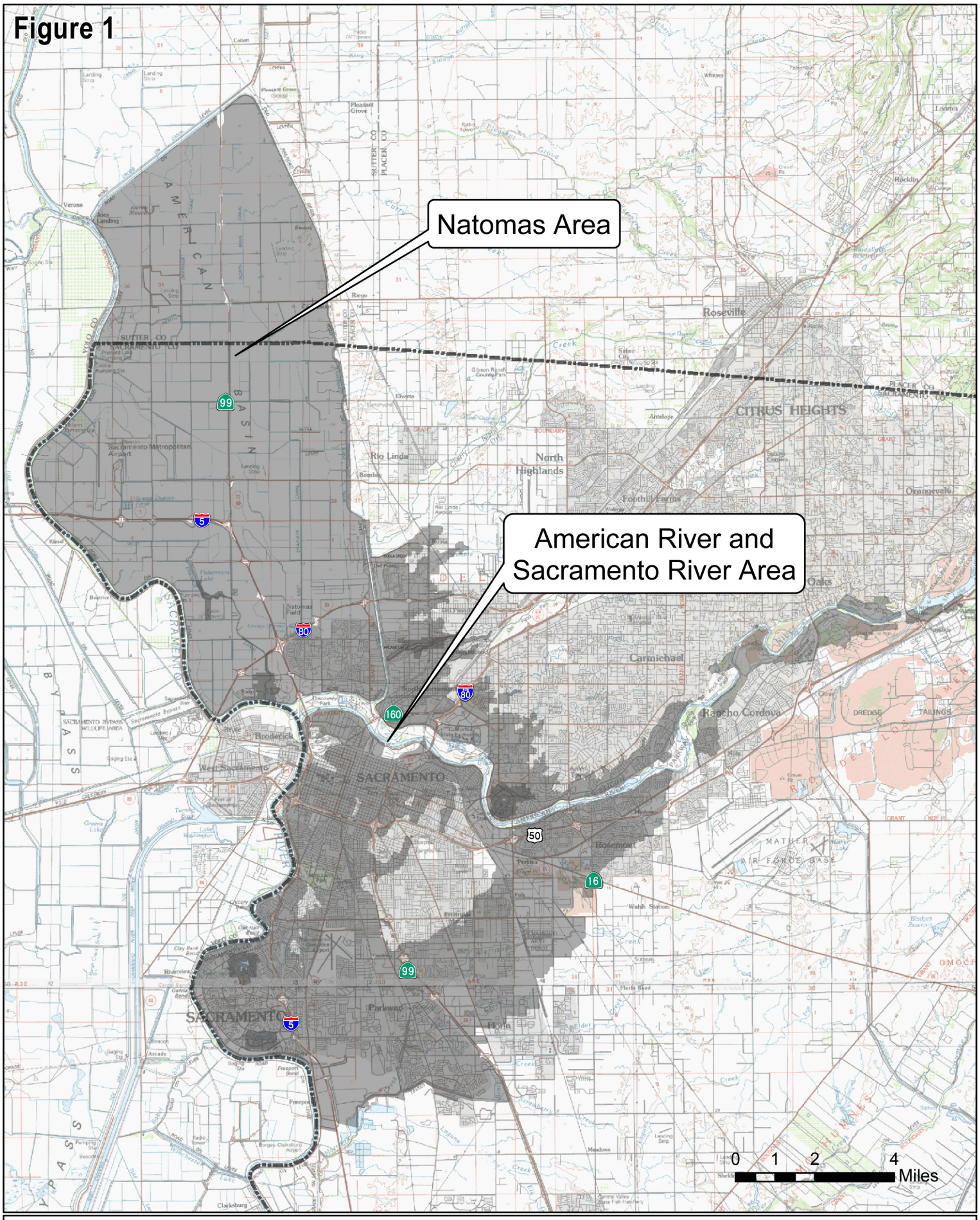
The Sacramento Area Flood Control Agency Act of 1990 (SAFCA Act) gives the SAFCA Board of Directors (Board) the authority to "prescribe, revise, and collect fees as a condition of development of land." As required by the SAFCA Act, the resolution adopting the Fee Program must describe (1) the specific flood control projects that are needed so that the areas proposed for development meet the flood protection standards determined by the Board; (2) the estimated cost of these projects; (3) a tentative time schedule for their implementation; and (4) the reasonable portion of the cost to be apportioned to new development. (Water Code App. § 130-150.)

Pursuant to this authority, the Board is considering implementation of a development fee program (Fee Program) that would ensure that new structures placed in the 200-year floodplain (Program Area) do not increase the expected damage of an uncontrolled flood. **Figure 1** delineates the Program Area. Persons wishing to build new structures in the Program Area would pay the development impact fee (DIF) to mitigate the increase in Expected Annual Damages (EAD) caused by adding damageable property to the floodplain. The fee would be a condition of obtaining a building permit or equivalent approval. Based on current growth projections over the next 11 years, meeting this standard will require implementation of a series of flood risk–reduction projects that augment the benefits of the projects funded by SAFCA's Consolidated Capital Assessment District (CCAD) and ensure that the areas subject to development have at least a 200-year level of flood protection. Over the succeeding 20 years, additional improvements, likely involving substantial modifications to the conveyance capacity of the Yolo and Sacramento Bypass systems, will be needed.

This Report provides the information necessary to support adoption of the Fee Program and implementation of the initial phase of the Program as follows:

- **Chapter II** provides an overview of the guiding policies and principles of the Fee Program including: the flood risk management context in which the Fee Program is being implemented; the use of expected annual damage (EAD) as a measure of flood risk; the basis (baseline conditions) for measuring potential increases in EAD over time; and the need to implement the Fee Program in phases to permit adjustment of the Program as long-term state and federal flood risk management priorities for the Central Valley take shape during the next decade.
- **Chapter III** provides future growth projections for the Program Area based on data obtained from the Sacramento Area Council of Governments (SACOG) and input from the City of Sacramento and Sacramento and Sutter Counties.
- **Chapter IV** describes the flood risk–reduction projects that would be funded by the Fee Program during its initial phase and provides the estimated cost and likely timeline for implementing these projects.

Figure 1



Fee Program Boundary

NOTE: Although a portion of the City of Rancho Cordova is within the fee program boundary, the fee will not be collected in this area.

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- **Chapter V** provides an analysis of the accomplishments of the initial phase of the Fee Program by comparing EAD under three scenarios: baseline conditions assuming no new development occurs in the Program Area during the 11-year period of analysis, and future conditions assuming that new development occurs in the Program Area during this period as projected by SACOG with and without the flood risk reduction improvements to be funded by the Fee Program.
- **Chapter VI** outlines the structure of the proposed Fee Program including the methodology used to apportion the identified project costs to the new development, the formula for calculating the fee, and the process for collecting the fee.
- **Chapter VII** outlines the procedures for implementing the Fee Program by agreement among SAFCA and the three jurisdictions with land use authority in the Program Area: the City of Sacramento, the County of Sacramento, and the County of Sutter.
- **Chapter VIII** describes how the Fee Program will be administered and adaptively managed over time to address changes in the conditions or assumptions under which the Program is being implemented.
- **Chapter IX** conceptually describes the projects that likely will be needed to achieve the objectives of the Fee Program following the initial phase of the Program.

II. OVERVIEW OF THE PROPOSED PROGRAM

FLOOD RISK MANAGEMENT CONTEXT

In February 2006, the SAFCA Board adopted a white paper entitled Legislative Framework for Flood Control and Flood Risk Management in the Sacramento Valley, which has provided policy guidance for SAFCA's ongoing effort to reduce the risk of flooding in the Sacramento Metropolitan Area (Sacramento). In summary, the white paper calls for the State of California (State) to prepare a State plan of flood protection for the Sacramento Valley that builds on the accomplishments of the Sacramento River Flood Control Project (SRFCP) and provides different standards of flood protection for urban areas, non-urban areas, and small communities based on their differing levels of development and expected damage in an uncontrolled flood.

- The flood protection standard for urban areas including Sacramento, West Sacramento, Woodland, Yuba City, and Marysville (along with Reclamation District 784) should be 200-year flood protection.
- Non-urban areas should be protected to a level consistent with the minimum design standards of the SRFCP (i.e., non-urban levees should meet the SRFCP's minimum freeboard requirements and should have adequate structural stability to contain the SRFCP's design flows with a reasonable degree of reliability appropriate for lightly populated agricultural areas).
- Small communities should be protected by compact perimeter levees that at least meet the minimum design standards of the National Flood Insurance Program (NFIP).

The goal of this system of flood protection should be to reduce the risk of flood damages over time by increasing the protective capacity of the flood control system and confining the extent of urban development. This approach was endorsed by the Legislature in the Central Valley Flood Protection Act of 2008. (See Water Code §§ 9601(a)-(g), 9602(i).)

Consistent with this framework, SAFCA adopted the following objectives to guide its flood protection efforts:

1. Provide at least a 100-year level of flood protection to the developed areas in Sacramento's major floodplains as quickly as possible.
2. Provide 200-year urban standard flood protection to these areas over time.
3. Ensure that new development in the protected areas does not substantially increase the expected damage of an uncontrolled flood.

In February 2007, SAFCA certified a Final Environmental Impact Report on Local Funding Mechanisms for Comprehensive Flood Control Improvements for the Sacramento Area (Local Funding EIR) identifying the structural and non-structural improvements necessary to achieve these objectives and evaluating the environmental effects of these improvements at a programmatic level. The Local Funding EIR anticipated that SAFCA would create two funding mechanisms to provide the local share of the cost of these improvements: the CCAD and the Fee Program. The CCAD was created in April 2007. Based on the SAFCA Board's consideration of this Report and the willingness of the City of Sacramento and the Counties of Sacramento and Sutter to enter into fee collection agreements with SAFCA, the Fee Program could be approved as early as May 2008. This Report describes the principles that will be used to apportion local costs between the CCAD and the Fee Program.

USING EAD AS A MEASURE OF FLOOD RISK

The risk of flooding has two aspects: the probability of flooding, and the consequences that would follow. An area could have a high probability of flooding but minimal consequences because it is forested and contains no infrastructure or people, so the risk because of flooding would be considered low. Conversely, a highly urbanized community that has a moderate or low probability of flooding would be considered high risk because the consequences of a flood in that location (i.e., loss of life, livelihood, property, health, and human suffering) would be considered very high.[1]

EAD is a statistical measure that integrates the probability of an uncontrolled flood and the resulting property damage. EAD is typically calculated by:

- Defining the floodplain area of concern;
- Identifying the relevant watershed hydrology and hydraulics from which appropriate water surface elevations (with associated probabilities) are calculated for a range of flood events in the channels surrounding the area;
- Evaluating the performance reliability of the area's flood control facilities at each of the key water surface elevations;
- Conducting an inventory of the damageable structures located in the area; and
- Developing appropriate damage curves for these structures and their contents at various depths of flooding, and correlating channel-water surface elevations and

[1] This explanation of the risk of flooding is set forth in the Executive Summary of "A California Challenge—Flooding in the Central Valley," a Report from an Independent Review Panel to the Department of Water Resources, State of California, October 15, 2007.

interior flood depths assuming failure of one or more of the area's flood control facilities.

From these calculations, (1) the annual probability of uncontrolled flooding can be linked to (2) various levels of resulting damage. These two variables can be integrated and expressed as a measure of flood risk in the form of EAD.

BACKGROUND OF FEDERAL AND STATE FLOOD RISK REDUCTION EFFORTS

As a rule, flood risk–reduction projects are considered cost-effective if their anticipated benefits, measured as a reduction in EAD, exceed their one-time capital and annual operation and maintenance costs. For the past two decades, this benefit-to-cost relationship has been the single most important determinant in planning and prioritizing federal and State flood risk–reduction efforts. A key problem for flood risk managers is how to account for changes over time in the flood risk equation because of development in protected floodplains. Such development is regulated by the Federal Emergency Management Agency (FEMA) under the provisions of the NFIP. The NFIP restricts development in floodplain areas where the annual probability of flooding exceeds 1/100. Flood control projects that would lower this probability to less than 1/100 have the potential to facilitate development and thus increase the damageable property at risk from flooding. This potential creates tension between reducing flood damages and promoting economic development, the two goals that have historically guided federal and State flood risk–management efforts.

This tension has produced conflicting federal/State policies, especially in floodplain areas, such as the Yuba Basin (Reclamation District 784/Plumas Lakes) in Yuba County and the Natomas Basin in Sacramento and Sutter Counties. These historically agricultural basins are in transition. They have relatively substantial urban populations in need of protection but they also have the potential for absorbing significant amounts of new development over time.

On the one hand, Congress has made it clear that the benefit base for determining the federal interest in flood control projects should not include "any new or substantially improved structure (other than a structure necessary for conducting a water-dependent activity) built in the 100-year flood plain with a first floor elevation less than the 100-year elevation after July 1, 1991 or any structure which becomes located in the 100-year flood plain with a first floor elevation less than the 100-year flood elevation or in the 10-year flood plain, as the case may be, by virtue of restrictions placed in the flood plain

after July 1, 1991."[2] More pointedly, Congress adopted legislation in 1992 admonishing the Secretary of the Army not to undertake levee improvements around the Natomas Basin that would have the effect of "encouraging development of deep floodplains."[3] (The legislation did not define "deep floodplains.") On the other hand, in the interest of national economic development, federal project feasibility studies have allocated "location benefits" to projects that would remove the regulatory barriers to such development.[4]

The tension between promoting economic development and reducing flood damages has grown in the aftermath of Hurricane Katrina as the economic consequences (including governmental costs) associated with flooding a major American city have become clear. Accordingly, federal flood risk–management policy has tilted toward reducing governmental exposure to such costs. A similar shift is occurring in California, spurred by a series of judicial decisions that have established the potential breadth of State liability in the event of flooding in areas of the Central Valley where the State has played an instrumental role in designing, funding, operating, and maintaining large integrated flood control systems. In addition to serving as an indicator of flood risk, EAD is also an indicator of potential governmental liability for flood response, and relief and recovery costs. Thus, the current emphasis of federal and State flood risk–management policy is on reducing EAD in the most cost-effective manner possible.

FEE PROGRAM CONSISTENCY WITH FEDERAL AND STATE RISK REDUCTION EFFORTS

The Fee Program would be consistent with the current federal-State emphasis on reducing EAD. As discussed below, the Program recognizes that the flood control projects funded by the CCAD for which there is authorized federal support will provide the Sacramento area with sufficient flood protection to meet the minimum standards of the NFIP thus accommodating new development in the Program Area in accordance with adopted local land-use plans and in a manner that is consistent with the region's "blueprint" for growth over the next several decades. Under applicable federal policies

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[2] Section 308(a)(1)(A), Water Resources Development Act of 1990 (PL 101-640).

[3] Section 9159(b)(1) of the Defense Appropriations Act of 1993 (PL 102-396).

[4] As defined in Economic and Environmental Principles for Water and Related Land Resources Implementation Studies issued by the U. S. Water Resources Council March 10, 1983, location benefits are a measure of the net income or market value of floodplain land with and without the flood protection project in place. In 1991, the USACE issued a feasibility study as part of the American River Watershed Investigation that allocated location benefits to alternatives that provided sufficient protection to remove the Natomas Basin from the FEMA 100-year floodplain and thus would increase the market value of land in the basin.

and guidelines, this development cannot contribute to the benefit base or the reduction in EAD justifying federal support for the CCAD funded projects. At the same time, planned development should not be allowed to compromise the benefits of these flood control projects by contributing to an increase in flood risk and associated governmental liability (as measured by EAD) over time. In short, planned, new development should be flood risk (or EAD) neutral.

In Sacramento, this flood-risk neutrality could be achieved in several ways. New structures could be raised or otherwise flood-proofed on a structure-by-structure or subdivision-by-subdivision basis to avoid an increase in flood risk (as measured by EAD). Alternatively, the new structures could generate funds through payment of fees to be used for improvements to the flood control system protecting the floodplains in which they are located, as proposed under the Fee Program.

Because of the depth of flooding likely to result from a failure of the levee system protecting Sacramento's major floodplains, the cost of raising or otherwise flood-proofing new structures on a structure-by-structure or subdivision-by-subdivision basis would be substantial, and the design of such structures/ subdivisions would create significantly uneven levels of protection throughout the floodplain. By comparison, because these floodplains are already extensively developed, investments in systemwide improvements, in the form of DIFs, would reduce flood risk, thereby generating reductions in EAD in a much more cost-effective manner than the structure-by-structure or subdivision-by-subdivision alternatives.

Under the systemwide approach, the investments of the existing and new development are intertwined. As a result there must be an accounting of the flood control projects and risk reduction accomplishments attributable to these separate investments. The following section describes how this accounting will be carried out in connection with the proposed Fee Program.

BASELINE CONDITIONS

To account for the investments of the Fee Program and the accomplishments of this Program with respect to avoiding an increase in EAD, it is necessary to identify baseline conditions that reflect the investments of existing development (through the CCAD). These investments are summarized in **Appendix A: Apportionment Considerations**, based on information provided in the Final Engineer's Report for the CCAD (April 19, 2007,) which is attached as **Appendix B**. SAFCA has determined that the baseline conditions should include these projects funded by the CCAD for which there is authorized federal or State support and sufficient local funding to accomplish the minimum objective of the CCAD, which is to provide at least a 100-year level of flood

protection to existing development in the major floodplains of Sacramento along the Lower American and Sacramento Rivers (AR/SR Areas):

- **Folsom Dam Modification Project**—This project involves construction of a new auxiliary spillway and related flood control facilities that will increase the dam's low level discharge and surcharge storage capacities to increase the reservoir storage space available for flood control. These improvements have been authorized at both the federal and State levels, and there is adequate funding through the CCAD to ensure their completion.
- **Folsom Dam Reoperation**—This project involves continuing the long-term variable storage space program that governs reservoir operations at Folsom Dam during the flood season based on the storage space available for flood control in three large non-federal reservoirs located in the upper reaches of the American River watershed. This program has been authorized at both the federal and State levels, and adequate local funding is available to ensure its implementation.
- **American River Common Features Project**—This project involves improvements to the levees along the AR/SR Areas including insertion of cut-off walls to protect against seepage through and under these levees, and raising of portions of the American River north and south levees to ensure at least 3 feet of freeboard above the level of a 160,000 cubic feet per second flow in the river channel. These improvements have been authorized at both the federal and State levels, and there is adequate funding through the CCAD to complete enough work to safely contain at least a 100-year flood along the AR/SR Areas.
- **Natomas Levee Improvement Project**—The early implementation phase of this project consists of improvements to the perimeter levee system around the Natomas Basin including raising and strengthening of the Natomas Cross Canal (NCC) south levee, raising and strengthening portions of the Sacramento River east levee, and strengthening the Pleasant Grove Creek Canal (PGCC) west levee. These improvements have been authorized at the State level, and there is adequate funding through Proposition 1E and the CCAD to complete enough work to safely contain at least a 100-year flood in the river and stream channels surrounding the Natomas Basin.

Taken together, these projects will provide existing development in the major floodplains of Sacramento with at least a 100-year level of flood protection. The reduction in EAD associated with these baseline conditions will be used to measure the accomplishments of the proposed Fee Program.

PROGRAM PHASING

The objective of the proposed Fee Program is to avoid any substantial increase in EAD as new development occurs in Sacramento's major floodplains. Because of uncertainties in the timing and volume of such development and in the direction and accomplishments of federal and State flood risk–management efforts over time, it is necessary to structure the Fee Program so that it can be adapted to meet its objective as future conditions change. Toward this end, SAFCA has determined that the Fee Program should be implemented in phases.

The first phase covers approximately 11 years and will be tied to completion of the projects necessary to provide a 200-year level of flood protection to the major floodplains in Sacramento along the AR/SR Areas. During this period, it is anticipated that important decisions will be made as to the federal level of funding for these 200-year projects and that a new State plan of flood protection for the Sacramento Valley will be developed for consideration by the State Legislature. These decision-making processes will heavily influence the subsequent phases of the Fee Program.

This Report focuses on the initial phase of the Fee Program. Growth projections have been developed for a longer (30-year) period of analysis based on current SACOG data; however, for purposes of estimating the benefits of the Fee Program in the near term, these projections were analyzed to separate out the new development likely to occur in the initial phase.

The Report identifies the projects to be funded by the Fee Program during this period and provides an analysis indicating that with these projects, the planned growth could occur without any substantial increase in EAD. Looking forward, the Report includes a discussion of the improvements that would be needed to avoid increasing EAD levels over the entire 30-year period covered by the SACOG growth projection; however because these improvements are likely to be significantly affected by the pending State plan of flood protection, they are presented for conceptual planning purposes only. The Report makes it clear that the specific elements of the Fee Program in its subsequent phases will need to be determined by the SAFCA Board as the flood risk–management environment in the Sacramento Valley evolves over time.

III. GROWTH PROJECTIONS

Economic & Planning Systems, Inc., (EPS) developed the growth projections for the Fee Program, which are described in detail in **Appendix C** and summarized in this chapter. These growth projections are based on data provided by SACOG detailing expected development over the next 30 years in each of the 27 floodplain storage basins used in the EAD analysis in **Chapter V**. (**Figure 2** compares the area covered by these storage basins to the Program Area.) EPS used this SACOG data to derive growth estimates for the Program Area measured by damageable square footage.[5] These estimates were developed for the following six land use categories:

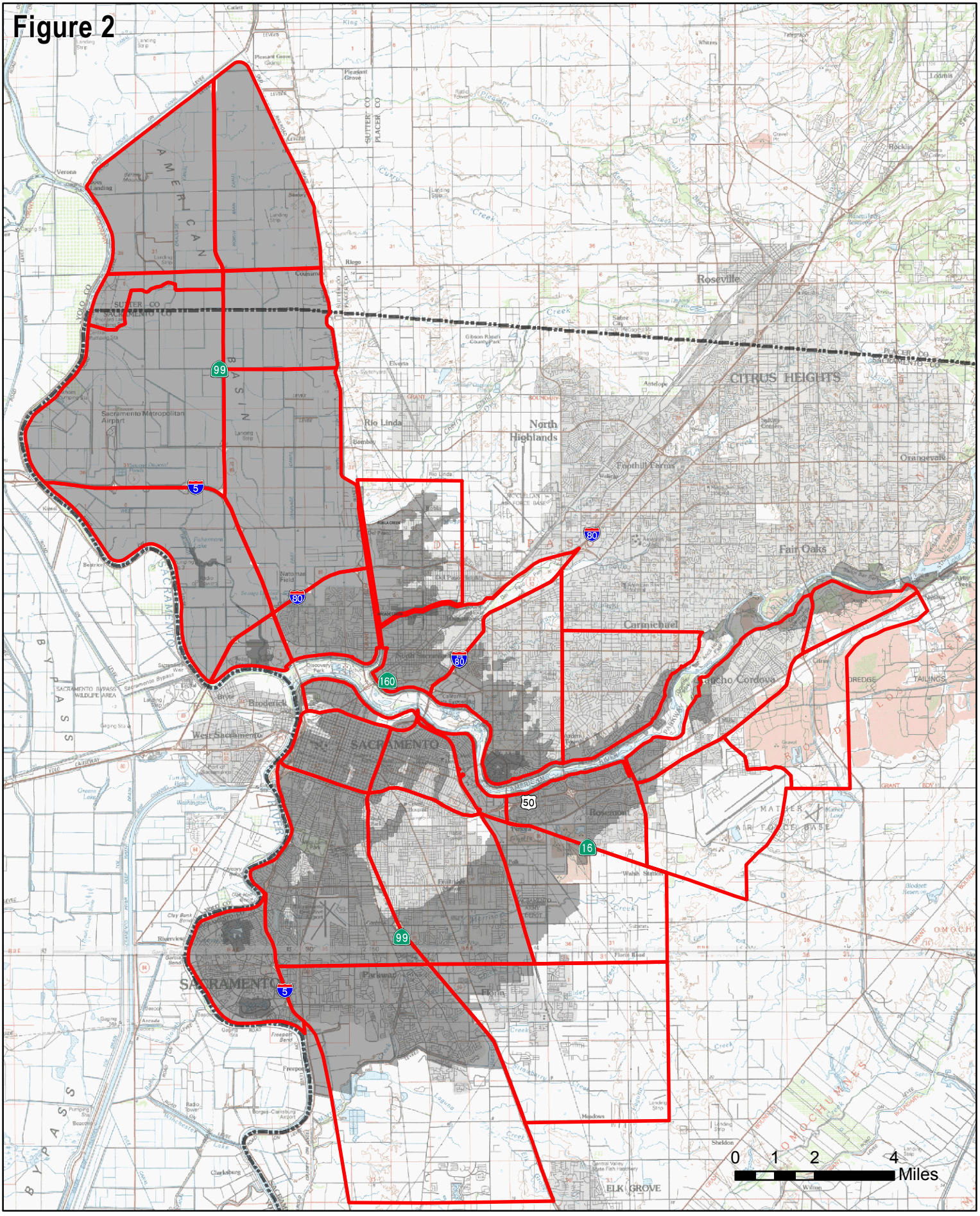
- Single-Family One-Story Residential;
- Multifamily One-Story Residential;
- Single-Family Two-Story Residential;
- Multifamily Two-Story Residential;
- Commercial; and
- Industrial.

These land use categories were selected to facilitate development of the Fee Program and preparation of the EAD analysis, which rely on flood depth–damage relationships that have been established for each of these categories. Because the SACOG projections cover a wider range of land use categories measured by acreage, EPS used SACOG's Blueprint Modeling Land Use Menu 1 (Blueprint Menu), dated August 1, 2003, to allocate the expected development projections into the selected land use categories and to translate acreage projections into estimates of damageable square footage (i.e., the portion of any residential or nonresidential structure that is subject to damage in the event of flood inundation). Damageable square footage consists of the first two floors of all residential structures and the first floor of all other types of development.

In most cases, SACOG's projections were not adjusted to account for any inconsistencies between SACOG projected growth and growth projections by the four land use jurisdictions in the project area. However, in some cases, such as the Sutter Point

[5] SACOG's development projections cover the area encompassed by the 27 floodplain storage basins used in connection with the EAD analysis. The boundaries of the Natomas Basin are coterminous with 9 of these storage basins and the projections for these basins were used to account for this portion of the Program Area. However, the remaining 18 storage basins cover an area that is considerably larger than the portion of the Program Area outside the Natomas Basin. To account for this geographical difference, EPS reduced the growth projected for these 18 storage basins by 72.7 percent and assigned the balance to this portion of the Program Area.

Figure 2



Impact Areas vs. Fee Program Boundary

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Specific Plan area in Sutter County and the Greenbriar Specific Plan area in Sacramento County, EPS modified the SACOG projected acreages to reflect more up-to-date information provided by local agency staff.

EPS converted the projected growth in each selected land use category from acreage to damageable square footage.

- For residential development, EPS identified the range of dwelling units per acre for each residential land use category. From this range, EPS established the average units per acre for each land use category and each floodplain storage area. Based on an assumed dwelling unit size and number of stories, EPS estimated the total residential damageable square footage per acre by residential land use category.
- For nonresidential structures, damageable square footage was estimated using the Blueprint Menu's average floor-area-ratio (FAR) ranges.

These factors were applied to the projected acreage by land use category to derive total damageable building square feet per land use and floodplain storage area. The resulting 30-year projections of damageable square footage were further divided to reflect the initial phase of the Fee Program and the remaining years of the period of analysis.

Using this damageable square footage data, EPS divided the projected growth into two categories:

- Total damageable square footage of development located in the Natomas Basin; and
- Total damageable square footage of development located in all other floodplain areas.

Table 1 summarizes the resulting total projected 11-year damageable square footage in the Program Area.

Table 1
Sacramento Area Flood Control Agency - Development Fee
Future Development Allocable Square Feet

Land Use	11 Year Projected Damageable Square Feet in Storage Areas [1]	Percent In Program Area [2]	Adjusted Damageable Square Feet in CCAD
Source	*Table C-7*		
Natomas Basin Development			
One-Story Residential			
Single-Family	4,630,645	100.0%	4,630,645
Multifamily	29,086	100.0%	29,086
Two-Story Residential			
Single-Family	16,795,948	100.0%	16,795,948
Multifamily	6,609,992	100.0%	6,609,992
Commercial	8,575,664	100.0%	8,575,664
Industrial	18,466,962	100.0%	18,466,962
Subtotal	**55,108,297**		**55,108,297**
All Other Development			
One-Story Residential			
Single-Family	5,287,981	37.3%	1,974,252
Multifamily	87,258	37.3%	32,577
Two-Story Residential			
Single-Family	19,100,629	37.3%	7,131,164
Multifamily	14,894,813	37.3%	5,560,935
Commercial	4,940,143	37.3%	1,844,388
Industrial	7,500,184	37.3%	2,800,172
Subtotal	**51,811,008**		**19,343,489**
Consolidated Land Use in Flood Plain			
One-Story Residential			
Single-Family	9,918,626		6,604,897
Multifamily	116,344		61,663
Two-Story Residential			
Single-Family	35,896,577		23,927,113
Multifamily	21,504,805		12,170,927
Commercial	13,515,806		10,420,052
Industrial	25,967,146		21,267,134
Subtotal	**106,919,305**		**74,451,786**

"base_lu"

Source: EPS

[1] Represents all Damageable Sq. Ft. in Storage Area boundaries as provided by David Ford.
[2] Represents the ratio between the area outside of Natomas in the CCAD (38,715 Acres) to the area in the David Ford Storage Areas outside of Natomas (98,733 Acres). It is assumed that the level of development in the area outside of Natomas in the David Ford Storage Areas is proportional to the level of development in the area outside of Natomas in the CCAD.

IV. IMPROVEMENTS FUNDED BY THE FEE PROGRAM

IMPROVEMENTS

To offset the potential increase in EAD that could otherwise result from the projected growth described above, during the initial phase of the Fee Program the fees generated by the Program would be used to fund the projects that are described below. These projects are shown in **Figure 3** and summarized in **Table 2**. Most of these projects have been approved by the State Legislature and are eligible for State cost-sharing under applicable provisions of the California Water Code. Accordingly, as a rule, the fees generated by the Fee Program along with CCAD assessments would be used to provide a 30 percent local match to secure State funding. In addition, to the extent that the performance of the funded projects could be compromised by ongoing erosion along the AR/SR Areas, it is assumed that the bank protection improvements necessary to control such erosion will be funded through the existing federal-State Sacramento River Bank Protection Program with local operation and maintenance funding provided through the additional CCAD assessment revenue that would be generated by the projected growth.

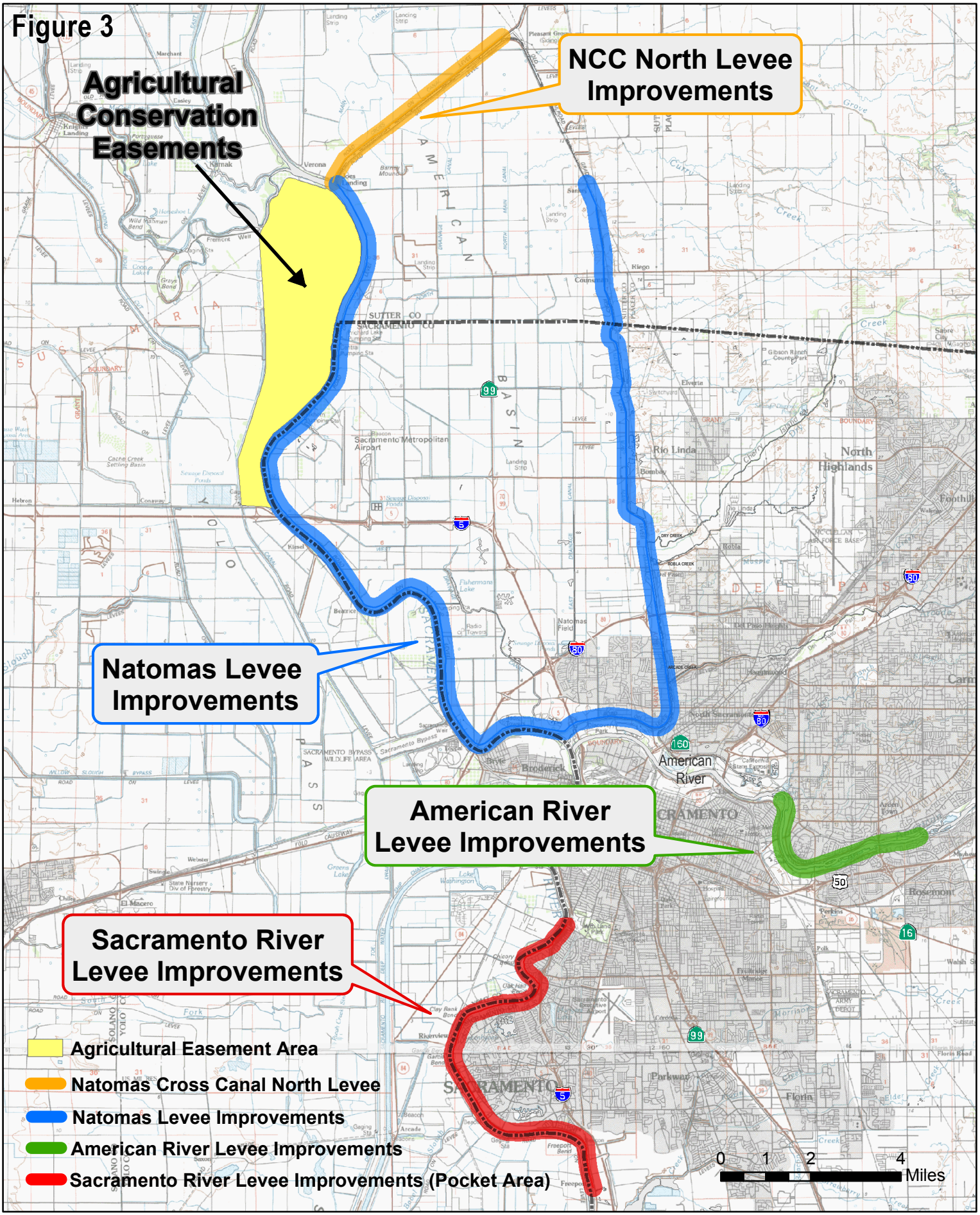
NATOMAS LEVEE IMPROVEMENTS

This project involves the improvements necessary to strengthen portions of the perimeter levee system around the Natomas Basin, including portions of the Sacramento River east levee, the American River north levee, and the Natomas East Main Drainage Canal (NEMDC) west levee to ensure that these levees meet the minimum structural requirements to safely contain a 200-year flood in the channels surrounding the Natomas Basin. These improvements would build on the accomplishments of the early implementation projects being carried out by SAFCA in the Natomas area along the Sacramento River east levee, the NCC south levee, and the PGCC west levee.

SACRAMENTO RIVER LEVEE IMPROVEMENTS (POCKET AREA)

This project involves improvements necessary to strengthen portions of the Sacramento River east levee in the Pocket Area to ensure that this levee can safely contain a 200-year flood in the Sacramento River channel. These improvements would build on the accomplishments of the American River Common Features Project that have enabled this levee to meet the minimum 100-year flood protection standards of the NFIP.

Figure 3



Projects Funded by the SAFCA Development Fee

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Table 2
Projects Funded by the Fee Program

Project	Description
Natomas Levee Improvements	This project would include improvements to address underseepage vulnerabilities in the event of a 200-year flood in the river and drainage channels surrounding the Natomas Basin. The improvements would consist of a combination of seepage cut-off walls, seepage berms and seepage remediation wells installed along portions of the Natomas East Main Drainage Canal (NEMDC) west levee, including the reach south of Sankey Road and north of the SAFCA's NEMDC pumping facility; the American River north levee extending from the NEMDC west levee to the Sacramento River east levee; and the Sacramento River east levee.
Sacramento River Levee Improvements (Pocket Area)	This project would include improvements to portions of the Sacramento River east levee between Freeport and Sutterville Road. The improvements would involve installation of seepage cut-off walls to address underseepage vulnerabilities in the event of a 200-year flood in the Sacramento River channel.
American River Levee Improvements	This project would include improvements to portions of the American River north and south levees primarily in the reach between Watt Avenue and H street. These improvements would consist of installing engineered rock on the waterside slope of these levees to provide erosion resistance to high velocity flows in the American River channel event of a 200-year flood in the American River watershed.
Folsom Reservoir Forecast-Based Operation	This project involves implementation of a reservoir operation plan for Folsom Dam and Reservoir that allows dam operators to use forecasts of inflow into the reservoir to make decisions on when and how much water should be released from the reservoir to maintain adequate space for flood control. This project would increase the empty space in the reservoir when it is needed to enhance the reservoir's flood control capacity, and to reduce this empty space when it is not needed for flood control to better balance the water, power, recreational, and environmental needs that are served by the reservoir.
Agricultural Conservation Easements	This project involves acquisition of agricultural conservation easements in the northern portion of the Elkhorn area in Yolo County—a sparsely populated agricultural area protected in part by a portion of the Sacramento River west levee directly across from the Natomas Basin.
NCC North Levee Improvements	This project involves improvements to the NCC north levee in Sutter County. These improvements would consist of raising the top of the levee to an equal height as the top of the NCC south levee, flattening the landside levee slope, and strengthening this slope to resist hydrostatic pressures and wind and wave erosion.

AMERICAN RIVER LEVEE IMPROVEMENTS

This project involves improvements to the waterside of the levees along the Lower American River to ensure that these levees are capable of safely containing sustained flows in the American River channel of up to 160,000 cubic feet per second. These improvements would build on the accomplishments of the Folsom Dam Modification Project and provide the levee performance reliability necessary to provide a 200-year level of flood protection to the properties in the floodplain along the Lower American River.

FOLSOM RESERVOIR FORECAST-BASED OPERATION

This project involves implementation of a reservoir operation plan for Folsom Dam and Reservoir that allows dam operators to use forecasts of inflow into the reservoir to make decisions on when and how much water should be released from the reservoir to maintain adequate space for flood control. The purpose of this project is to increase the empty space in the reservoir when it is needed to enhance the reservoir's flood control capacity, and to reduce this empty space when it is not needed for flood control to better balance the water, power, recreational, and environmental needs that are served by the reservoir. This project would build on the accomplishments of the long-term Folsom Dam Reoperation Project and increase the level of flood protection provided to properties along the AR/SR Areas, especially when creditable flood control space is available in the non-federal reservoirs upstream of Folsom Dam.

AGRICULTURAL CONSERVATION EASEMENTS

This project involves acquisition of agricultural conservation easements in the northern portion of the Elkhorn area in Yolo County—a sparsely populated agricultural area protected in part by a portion of the Sacramento River west levee directly across from the Natomas Basin. The purpose of this project is to preserve the agricultural character of this area.

NCC NORTH LEVEE IMPROVEMENTS

This project involves improvements to the NCC north levee in Sutter County. This levee is part of the perimeter levee system protecting Reclamation District 1001, an agricultural area located directly north of the Natomas Basin. In the event of a levee failure, this district would be deeply inundated creating pressure against the landside of the NCC north levee. Should this levee fail the NCC south levee protecting the Natomas Basin would be subject to significant wind and wave erosion. The objective of this

project is to raise and strengthen the NCC north levee so that it is high enough to maintain parity with the improved NCC south levee and strong enough to withstand the hydrostatic and wind and wave pressures likely to result from inundation of Reclamation District 1001.

PROJECT COSTS AND IMPLEMENTATION TIMELINE

Table 3 details the total estimated costs by funding source and implementation timeline of the projects described above. These estimates assume the State will fund a substantial share of these project costs based on existing State authorizations and funding authorities.

Table 3
Sacramento Area Flood Control Agency - Development Fee
Development Impact Fee (DIF) - Project Costs & Implementation Timeline (Millions of 2008$)

Project	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Total Cost
Natomas Levee Improvements												
State Funding	-	-	-	$19.0	$19.0	$19.0	$20.0	-	-	-	-	$77.0
Development Impact Fee	-	-	-	$8.0	$8.0	$8.0	$9.0	-	-	-	-	$33.0
Subtotal	**$0.0**	**$0.0**	**$0.0**	**$27.0**	**$27.0**	**$27.0**	**$29.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$110.0**
Pocket Area Levee Improvements												
State Funding	-	-	-	$26.0	$26.0	$26.0	$26.0	$26.0	$26.0	$26.0	$28.0	$171.0
Development Impact Fee	-	-	-	$9.2	$9.2	$9.2	$9.2	$9.2	$9.2	$9.2	$9.2	$73.3
Subtotal	**$0.0**	**$0.0**	**$0.0**	**$30.5**	**$30.5**	**$30.5**	**$30.5**	**$30.5**	**$30.5**	**$30.5**	**$30.5**	**$244.3**
American River Levee Improvements												
State Funding	-	-	-	-	-	-	-	$7.0	$7.0	$7.0	-	$21.0
Development Impact Fee	-	-	-	-	-	-	-	$3.0	$3.0	$3.0	-	$9.0
Subtotal	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$10.0**	**$10.0**	**$10.0**	**$0.0**	**$30.0**
Folsom Reservoir Forecast-Based Operation												
State Funding	-	-	-	-	$2.0	$2.0	$3.0	-	-	-	-	$7.0
Development Impact Fee	-	-	-	-	$1.0	$1.0	$1.0	-	-	-	-	$3.0
Subtotal	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$3.0**	**$3.0**	**$4.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$10.0**
Agricultural Conservation Easements												
State Funding	-	-	-	-	-	-	-	-	-	-	-	$0.0
Development Impact Fee	-	$3.0	$3.0	-	-	-	-	-	-	-	-	$6.0
Subtotal	**$0.0**	**$3.0**	**$3.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$6.0**
NCC North Levee Improvements												
State Funding	-	-	-	$7.0	$7.0	$7.0	-	-	-	-	-	$21.0
Development Impact Fee	-	-	-	$2.6	$2.6	$2.5	-	-	-	-	-	$7.7
Subtotal	**$0.0**	**$0.0**	**$0.0**	**$9.6**	**$9.6**	**$9.5**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$28.7**
Total Funding												
Subtotal State	-	-	-	$52.0	$54.0	$54.0	$49.0	$33.0	$33.0	$33.0	$28.0	$297.0
Subtotal DIF	-	$3.0	$3.0	$19.8	$20.8	$20.7	$19.2	$12.2	$12.2	$12.2	$9.2	$132.0
Total	**$0.0**	**$3.0**	**$3.0**	**$67.1**	**$70.1**	**$70.0**	**$63.5**	**$40.5**	**$40.5**	**$40.5**	**$30.5**	**$429.0**

"dif"

Source: Sacramento Area Flood Control Agency.

V. COMPARATIVE EAD ANALYSIS

This chapter summarizes the results of a comparative EAD analysis performed by David Ford Consulting Engineers.[6] This analysis focuses on the benefits of the projects that would be funded by the Fee Program in terms of the value of the flood damages that would be prevented by these projects. These benefits are measured by comparing the incremental increase in (1) the total structure and content damage that could occur in the Program Area if the new residential, commercial, industrial, and public facilities included in the growth projections discussed in Chapter III are approved **without** the funded projects to (2) the total structure and content damage that could occur if these new facilities are approved **with** the funded projects. Because the random nature of flooding makes it impossible to predict the damages prevented in any particular year, EAD (the statistical average damage value) is used as the measure of the comparative benefits of the Fee Program.

OVERVIEW OF EAD ANALYSIS

For purposes of the EAD analysis, the baseline conditions include the aggregate of all damageable building square footage in the Program Area as of 2007, the year in which the CCAD was established. The future condition includes the aggregate of all damageable building square footage that is expected to be added to the Program Area during the initial phase of the Fee Program (2008–2019).

EAD was calculated for the baseline conditions and future conditions with and without the projects funded by the Fee Program using the statistical sampling procedure developed by the USACE (1996). This is commonly known as the risk and uncertainty analysis procedure, or R&U. This procedure is included in the USACE computer program HEC-FDA. To compute EAD with HEC-FDA, the following information is required:

- Index points and impact areas—These analysis locations are used for aggregating and representing the system performance. Index points are selected locations used to represent hydrologic, hydraulic, and geotechnical characteristics for a reach of a stream. Impact areas are areas of the floodplain with similar flooding depths.
- Stage (elevation)-frequency function for each index point—This describes the annual probability or frequency of channel water surface in the river (exterior channel) reaching or exceeding a specified elevation.

[6] The report titled "Development Fee Program: Comparative risk Analysis," dated January 2008 prepared by David For Consulting Engineers, Inc. for SAFCA can be found on SAFCA's website at http://www.safca.org/assessments/fees.html.

- Elevation-damage function for each impact area—This function relates economic damage in the floodplain to water surface elevation in the interior floodplain (the area protected by the levee).
- Exterior elevation-interior elevation function for each impact area—This function relates the water surface elevation in the channel (exterior) at the index point to the elevation of flooding in the floodplain adjacent to the channel (interior).

Each of these data sets is described below.

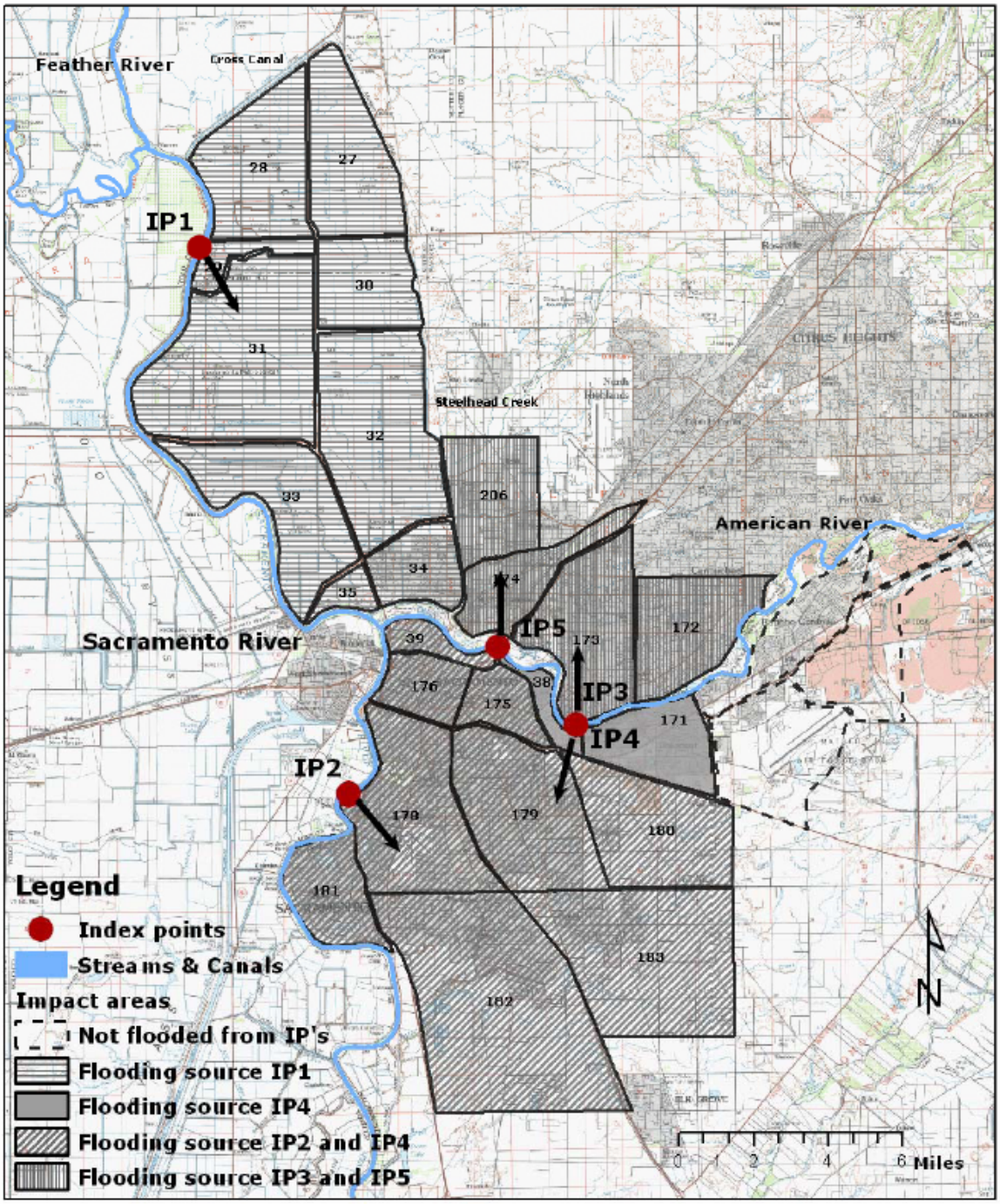
INDEX POINTS AND IMPACT AREAS

For the EAD analysis, the following representative index points were established in the Program Area to represent the hydrologic, hydraulic, and geotechnical conditions for a given reach of stream.

1. Sacramento River, river mile 76.25, left bank. This index point represents the hydrologic, hydraulic, and geotechnical conditions along the NCC and the Sacramento River. It is used to represent flood risk in the Natomas basin.
2. Sacramento River, river mile 55.0, left bank. This index point represents the hydrologic, hydraulic, and geotechnical conditions along the Sacramento River. It is used to represent flood risk of the Pocket area and downtown Sacramento.
3. American River, river mile 7.75, right bank. This index point represents the hydrologic, hydraulic, and geotechnical conditions along the American River. It is used to represent flood risk to the Arden-Arcade and Cal Expo area.
4. American River, river mile 7.75, left bank. This index point represents the hydrologic, hydraulic, and geotechnical conditions along the American River. It is used to represent flood risk to the greater portion of Sacramento including downtown.
5. American River, river mile 3.75, right bank. This index point represents the hydrologic, hydraulic, and geotechnical conditions along the American River. It is used to represent flood risk to areas near Arcade Creek and Dry Creek.

For interior flooding, the analysis was based on 27 floodplain storage areas developed by the USACE as part of the Sacramento-San Joaquin River Basins Comprehensive Study (USACE 2002) (Comprehensive Study). Each of these areas is associated with one or more of the selected index points for the purposes of establishing the relation between exterior (river) stage and interior flooding (see **Figure 4**).

Figure 4
Index Points and Impact Areas



STAGE-FREQUENCY FUNCTION

The stage-frequency function defines the probability that water surface elevation at a given index point will equal or exceed a specified magnitude. In a simple river system, this function may be developed by fitting a probability model (a probability density function) to a sample of stages by fitting a probability model to a sample of discharges, or by using the so-called design-storm assumption, in which runoff from precipitation events of specified probability is computed with a rainfall-runoff model and assigned a probability consistent with that of the precipitation.

For the Sacramento River and American River basins, development of the stage-frequency function is complicated by the hydraulic interconnectivity of the system and the nature of overflow and storage of water in the upper reaches of the system. The stage at a downstream index point for any flood depends on what happens to levees upstream. If levees in the system perform as designed, water stays in the channels up to a design limit and moves downstream. The water surface elevation in downstream reaches is as great as the volume entering those reaches. However, if an upstream levee fails, water is diverted from the channel and stored in the floodplain. Less water will move downstream, and the resulting stage downstream will be less than that associated with the non-failure condition.

For the EAD analysis, stage-frequency functions were developed using the USACE UNET unsteady open-channel flow model considering likely upstream conditions. The stage-frequency functions were provided by MBK Engineers.

INTERIOR ELEVATION-DAMAGE FUNCTIONS

The elevation-damage function relates inundation damage to water surface elevation in an impact area. This damage relationship is developed from information about location and value of property in the floodplain. For this analysis, damage relationships for both current and future conditions were needed. The damages for the study area were divided by structure type into damage categories. The damage categories used in the EAD analysis are summarized in **Table 4**.

Table 4
Damage Categories Used in the EAD Analysis

Category (1)	Description (2)
Single-family residence (SFR), 1 story	One-story single-family residential structures
Single-family residence (SFR), 2 stories	Two-story single-family residential structures
Multifamily residence (MFR), 1 story	One-story multifamily residential structures
Multifamily residence (MFR), 2 stories	Two-story multifamily residential structures
Commercial	Offices, retail facilities, hotels and motels, public buildings
Industrial	Manufacturing plants, oil refineries, meat packing plants, canneries, and similar facilities, farm buildings

For residential structures, the generic structure and content depth-damage functions developed by the USACE and published in EGM 04-01 (October 2003) were used. These depth damage functions were also applied in the USACE American River ERR (USACE 2007).

For nonresidential structures, the depth-damage functions published in the American River Watershed Investigation (ARWI) (USACE 1991) were used. This is consistent with the Final Engineer's Report for the CCAD (SAFCA 2007). For nonresidential contents, the USACE American River ERR functions were used (USACE 2007). These functions were developed specifically for the Sacramento area.

In the economic appendix of the ARWI, the USACE noted, "Because of the greater duration in flooding and the deeper depths of flooding in the Natomas area as compared to the rest of the floodplain, all structures and content curves were set at 100-percent depths greater than 13 ft." This procedure for depths greater than 13 ft was followed in the Natomas basin. This adjustment was not applied to any other structures outside the Natomas basin.

EXTERIOR-INTERIOR AND LEVEE PERFORMANCE RELATIONSHIPS

When water overflows the channel in a small watershed, the water surface elevation in an impact area adjacent to the stream may rise to the water surface elevation in the channel if the flood causing the overflow has sufficient volume to fill the impact area.

However, in systems such as the Sacramento and American Rivers, with thousands of acres of floodplain, this is not typically the case. The volume is not sufficient to fill most impact areas. Near the channel, the water surface elevation in the floodplain may equal that in the channel. However, farther away, the elevation may be more or less, depending on the terrain and the conditions of the overflow into the impact area. The exterior-interior relationship represents this, defining the interior flood elevation for damage computation as a function of the elevation of water in the channel.

Levees that protect the floodplains in the Program Area further complicate this. If a levee protecting an impact area fails, water will flow through the breach and into the impact area. The elevation in the floodplain may rise to that in the channel, or it may be less, depending on the volume of water in the channel, the characteristics of the opening, and the floodplain terrain. The exterior-interior relationship describes this.

For the EAD analysis, MBK Engineers developed exterior-interior relationships using hydraulic models of the channels and floodplains. The greatest source of uncertainty in the exterior-interior relationship is how the system levees will perform. A levee will prevent flow of water from the exterior channel into the interior area until the design capacity of the levee is exceeded or until the levee fails. Without overtopping or failure, the interior stage is zero, regardless of the exterior stage. But the analysis must account for the probability that the levee will fail before overtopping. Of course, the likelihood that a levee designed for the p=0.01 (100-year) event will fail during a p=0.10 (10-year) event is small, but the analysis procedure should account for this.

HEC-FDA includes a model of levee performance uncertainty, which was used for the analysis. This relationship, referred to as the levee fragility curve, defines the probability of failure of the levee, given exterior stage. Kleinfelder provided the fragility curves for this analysis.

EAD COMPUTATIONS

For the EAD and performance statistic computations, a version 1.2.1 of the USACE computer program HEC-FDA was used. As noted above, this program requires specification of stage-frequency, stage-damage, and exterior-interior stage functions, along with models of the uncertainty in each.

The HEC-FDA program computed damage because of these factors:

- Structure damage; and
- Content damage.

For some of the impact areas, flood damages could be attributed to more than one index point. However, for any one impact area there is only one EAD. If there was more than one index point contributing to damages for a particular impact area, the EAD was weighted by the risk of levee failure. These weighting calculations are further defined in the comparative EAD analysis.

RESULTS OF EAD ANALYSIS

Table 5 illustrates the results of the EAD analysis for the 11-year period of analysis corresponding to the initial phase of the Fee Program. These results indicate that if the projected development occurs in the Program Area during this period without the projects that would be funded by the Fee Program, there will be a substantial increase in exposure to economic losses by comparison to baseline conditions as measured by EAD. If this development occurs with the funded projects, however, this increased risk will be avoided.

Table 5
Sacramento Area Flood Control Agency - Development Fee
Results of Comparative EAD Analysis

Condition	Replacement Value of All Structures and Contents	Expected Loss In Single Flood	Annual Risk of Flooding	Expected Annual Damage (EAD)	Difference from Baseline
Baseline Condition [1]	$49,700,000,000	$11,723,500,000	1.0%	$117,235,000	**$0**
Without Project Condition (No DIF Program) [1]	$67,100,000,000	$18,237,400,000	1.0%	$182,374,000	**$65,139,000**
With Project Condition (No DIF Program) [2]	$67,100,000,000	$18,237,400,000	0.5%	$93,111,000	**($24,124,000)**

"ead2"

Source: David Ford Consulting Engineers and SAFCA.

[1] Assumes approximately 100-year flood protection.
[2] Assumes approximately 200-year flood protection.

VI. IMPROVEMENT COST ALLOCATION AND FEE CALCULATION

Chapter IV details the costs of the improvements to be funded during the first phase of the Fee Program. This chapter describes the methodology used to apportion this cost to the new development expected to occur during the first phase period based on the growth projections discussed in **Chapter III** and the EAD analysis discussed in **Chapter V**, and computes the DIF.

APPORTIONMENT CONSIDERATIONS

The Fee Program must demonstrate a reasonable apportionment of the costs of the Fee Program between land use types. The apportionment must also be reasonable between the areas protected by the funded projects and between existing and new development in these areas. These relationships are complicated by the SAFCA Board's adoption of a financing plan for the CCAD that calls for early implementation of levee improvements around the Natomas Basin to ensure that this area will have at least a 100-year level of flood protection by 2010.

The improvements necessary to achieve 100-year level of flood protection in the Natomas Basin are outside the currently authorized scope of the Common Features Project. As a result, there will be no federal appropriations to support this effort. Instead, the SAFCA financing plan assumes that the cost of the early implementation project will be funded entirely by SAFCA and the State.

Before initiating the early implementation project, however, the State will obtain a determination by the USACE that the non-federal project expenditures are eligible for credit in the event Congress subsequently broadens the scope of the Common Features Project and authorizes the constructed improvements. This authorization is expected to occur in 2010 when the USACE presents a General Re-Evaluation Report to Congress identifying the levee improvements necessary to provide at least a 200-year level of flood protection to the Natomas area and the areas outside Natomas along the AR/SR areas. If Congress approves the increased scope of the Common Features project, SAFCA will reevaluate the structure of the Fee Program.

Pending this authorization, the Fee Program assumes that the State will fund 70 percent of the cost of these 200-year improvements based on the Legislature's approval of SB 276 during the 2007 legislative session and SAFCA will fund 30 percent of the cost through a combination of the CCAD assessments and the DIF.

In Natomas, where new development will comprise almost half the damageable square footage by the end of the initial phase of the Fee Program, the remaining 30 percent local share of the cost of the 200-year improvements will be funded exclusively by development fees. In the AR/SR areas, where new development will comprise a much smaller percentage of the damageable square footage, development fees will cover about 10 percent of the cost of the 200-year improvements.

To clarify how these fees will be apportioned as between the Natomas area and the AR/SR areas and as between existing and new development in these areas, it is necessary to understand the manner in which the early implementation project is being designed and financed. The following factors were considered in developing the apportionment methodology:

- First, although the immediate objective of the project is provide the Natomas area with at least a 100-year level of flood protection, wherever levee improvement work is needed to achieve this objective, the improvements are being designed to provide at least a 200-year level of flood protection. This approach will streamline the project construction process and avoid the cost of subsequently reconstructing the completed improvements to achieve the longer term 200-year flood protection objective. It is estimated that inclusion of 200-year components in the early implementation project accounts for about 25 percent of the total cost of the project.

- Second, to fund the local share of the cost of the early implementation project, SAFCA intends to take advantage of federal and State credits accumulated in connection with the North Area Local Project. These credits have a value of approximately $24.5 million of which $19.0 million is allocable to Natomas. Congress has determined that these credits may be used to reduce SAFCA's contribution to any of the currently authorized federal projects along the Lower American River, including the Folsom Dam Modification Project and the Common Features Project. These credits will therefore be deployed by reducing the CCAD assessments that would otherwise be allocated to these capital projects.

- Third, the Final Engineer's Report assumed that the early implementation project could be constructed for approximately $260 million and that the follow-on project to achieve at least a 200-year level of flood protection for the Natomas area, could be constructed for approximately $140 million for a total of $400 million. SAFCA's current estimate of the capital cost of the early implementation project is $430 million while the cost of the 200-year follow-on project is $146 million for a total of $576 million. These adjusted cost estimates reflect a fundamental change in the design of the early implementation project.

The Engineer's Report assumed that identified underseepage problems along the Sacramento River east levee could be addressed through raising and strengthening this levee in place. The issuance of new federal guidelines on levee encroachments, however, made this design assumption untenable. As a result, SAFCA redesigned the project to construct an adjacent levee. The redesign has increased the total capital cost of the early implementation project. In addition, the extensive landscape elements included in the project has significantly increased long-term operation and maintenance expenses.

- Fourth, as reflected in the Final Engineer's Report, the financing plan for the early implementation project assumed that approximately $35 million of SAFCA's share of the cost would be provided by assessments from outside the Natomas area and that this advance of funds would be covered by the federal credits generated by the project when Congress broadens the scope of the Common Features Project as discussed above. Because of the increased cost of the early implementation project, this advance has risen to $53.3 million. These advances will be reimbursed by using $53.3 million in fee revenues generated in the Natomas area.

APPORTIONMENT PRINCIPLES

Based on the above considerations, the principles that will guide the apportionment of project costs to newly developing properties are as follows:

- The apportionment should support SAFCA's overarching flood risk management objectives:
    - Early implementation of the improvements are needed to provide at least a 100-year level of flood protection to the Natomas area;
    - Achievement of a 200-year level of flood protection for all areas in the protected flood plain; and
    - Avoidance of any substantial increase in EAD as new development occurs in these protected floodplains.
- Project costs should be apportioned to the areas that directly benefit from the funded projects.
- The fee burden imposed on new development projects contributing to an increase in EAD in the Program Area should be proportionate to the value of the damageable property the development adds to the floodplain. The resulting DIF should be consistent for all development projects in the floodplain.

Appendix A provides details as to how the apportionment of Fee Program project costs and revenues would be consistent with the above principles, including examples of how the absence of the Fee Program would undermine these principles.

ALLOCATION METHODOLOGY AND FEE DERIVATION

The methodology used to apportion the project costs involved the following steps:

1. Determine the total cost of the improvements to be funded by the Fee Program during by the first phase of the Program taking the following into consideration - the area of benefit of project improvements, available offsetting revenue sources, operations and maintenance requirements of the capital improvements, and the objective of establishing a fee for all new development that is proportionate to the value of damageable property added to the flood plain. **Table 6** summarizes the total improvement costs to be funded by the Fee Program during the initial phase.
2. Determine the total damageable square footage by land use category that will be newly introduced into the Program Area during this phase from the growth projections for the first phase of the Fee Program.
3. Determine the relative benefit factors attributable to each of the selected land use categories based on their increase in EAD in the absence of the program improvements from the EAD analysis. **Table 7** provides additional detail regarding the calculation of the relative benefit factors attributable to each land use category.
4. Allocate the total costs of the improvements to each land use category by applying the relative benefit factors determined in Step 2 to the total projected damageable square footage per land use category.
5. Divide the total cost per land use category by the projected damageable square footage for that category to compute the total estimated cost per square foot by land use shown in **Table 8**.
6. Verify that the apportionment of Fee Program revenues is equitable between areas of benefit and existing and future land uses, taking into consideration available offsetting revenue sources and operations and maintenance requirements of the project improvements.

Table 6
Sacramento Area Flood Control Agency - Development Fee
Improvement Program (2008$)

Item	Cost
Project Component	
Natomas Levee Improvements	$33,000,000
Pocket Area Levee Improvements	$73,300,000
American River Levee Improvements	$9,000,000
Folsom Reservoir Forecast-Based Operations	$3,000,000
Agricultural Conservation Easements	$6,000,000
NCC North Levee Improvements	$7,700,000
Subtotal Project Costs	**$132,000,000**
Non-Local Funding Offsets [1]	
State Funding	TBD
Federal Funding	TBD
Net Locally Funded Project Costs	**$132,000,000**

"cip"

Source: SAFCA

[1] Potential offsets to locally funded projects may include funding from Sacramento International Airport.

Table 7
Sacramento Area Flood Control Agency - Development Fee
Relative Benefit Factors

Land Use	Percentage Damaged [1]	Increase in Total Damage Without Program [2] [3]	Damaged Square Feet [3]	Total Damage per Damaged Square Foot ($/Sq. Ft.)	Relative Benefit Factor
Source		*Appendix C*	*Table C-7*		
Formula		*a*	*b*	*c = a/b*	*b = a/$0.63*
One-Story Residential					
Single-Family	9.6%	$6,249,000	9,918,626	$0.63	1.00
Multifamily	0.1%	$41,000	116,344	$0.35	0.56
			0		
Two-Story Residential					
Single-Family	33.3%	$21,679,000	35,896,577	$0.60	0.96
Multifamily	12.4%	$8,052,000	21,504,805	$0.37	0.59
Commercial	19.7%	$12,800,000	13,515,806	$0.95	1.50
Industrial	25.1%	$16,319,000	25,967,146	$0.63	1.00
Total	**100.0%**	**$65,139,000**	**106,919,305**		

"land_value"

Source: David Ford Consulting Engineers.

[1] Percentage damaged determined by David Ford Consulting Engineers.
[2] Increase in total damage determined by David Ford Consulting Engineers. Reflects the increase in expected annual damage in the absence of the flood protection improvements proposed in the fee program over the initial period.
[3] The relative relation between the varying land uses for purposes of this fee is assumed to be the same as the relative relation in total damaged per square foot.

Table 8
Sacramento Area Flood Control Agency - Development Fee
Cost Allocation by Land Use Type (2008$)

Land Use	Projected Future Damageable Square Feet	Relative Benefit Factor	Adjusted Damage Units [1]	Percent of Total	Allocated Cost	Cost per Damageable Square Foot [2]
Source	*Table 1*	*Table 7 [2]*			*Table 6*	
Formula	*A*	*B*	*C = A * B*	*D = C / 73,685,601*	*E = D * $132,000,000*	*F = D / A*
One-Story Residential						
Single-Family	6,604,897	1.00	6,604,897	8.96%	$11,831,978	$1.79
Multifamily	61,663	0.56	34,491	0.05%	$61,787	$1.00
Subtotal One-Story Residential	**6,666,561**		**6,639,389**	**9.01%**	**$11,893,766**	
Two-Story Residential						
Single-Family	23,927,113	0.96	22,935,990	31.13%	$41,087,413	$1.72
Multifamily	12,170,927	0.59	7,233,241	9.82%	$12,957,590	$1.06
Subtotal Two-Story Residential	**36,098,040**		**30,169,231**	**40.94%**	**$54,045,002**	
Nonresidential						
Commercial	10,420,052	1.50	15,663,142	21.26%	$28,058,870	$2.69
Industrial	21,267,134	1.00	21,213,840	28.79%	$38,002,362	$1.79
Subtotal Nonresidential	**31,687,186**		**36,876,981**	**50.05%**	**$66,061,232**	
Total All Land Uses	**74,451,786**		**73,685,601**	**100.00%**	**$132,000,000**	

"allocation"

Source: EPS

[1] Adjusted Damage Units are reflective damageable sq. ft adjusted for relative benefit.
[2] The cost per damageable square foot will be adjusted annually for inflation.

ADMINISTRATION COSTS

Costs of administration for the development fee have been included in the local costs of the improvement program shown on **Table 6**. These administrative costs will cover the following:

- All collection and accounting costs associated with the Fee Program;
- Annual review of the Fee Program costs, fees, and policies;
- Annual reporting requirements associated with the fee program; and
- Any other ongoing and recurring administrative procedures associated with the program.

With respect to the collection of the fee by the local agencies, SAFCA will compensate the City and Counties per the terms of fee collection agreements that will be negotiated with SAFCA.

GENERAL CALCULATION

The agencies responsible for calculating the development fee will vary by jurisdiction.

- The City of Sacramento Neighborhoods, Planning and Development Services Department will obtain the required information from the project applicant, complete the DIF Worksheet (see **Appendix D**), and collect the development fee.
- The County of Sacramento Building Inspection Division will obtain the required information from the project applicant, complete the DIF Worksheet, and collect the development fee.
- The Sutter County Community Services Department will obtain the required information from the project applicant, complete only Part 1 of the DIF Worksheet, and forward the Worksheet to SAFCA for determining the fee. SAFCA will then return the Worksheet to Sutter County for development fee collection.

The City and the two Counties may, by agreement with SAFCA, modify their responsibilities as prescribed under these Procedures.

INFORMATION REQUIRED

To calculate the DIF the following information is required:

- Location of parcel;
- Land use category of new development;
- Existing land use category if building is an expansion of the existing structure; and
- Damageable Square Footage (structure square footage of the first two floors of residential development or the first floor of all other type of development).

The following provides detailed information on each requirement.

LOCATION OF PARCEL

The location of the parcel where the project is being constructed is needed to determine the applicability of the DIF. The City and Counties will use **Figure 1** to determine if the location of the parcel is within the Program Area. In the event the parcel cannot be determined using **Figure 1,** the City, Counties, and SAFCA will use their best efforts and all available information to determine the applicability of the DIF.

NEW LAND USE CATEGORY

The City and Counties will determine the correct DIF rate by classifying the structure into the correct DIF land use category using the following information:

- The Sacramento County Assessor's land use code that would apply to the parcel after the development of the proposed structure triggering collection of the DIF; and
- The descriptions of the six land use categories in this report.

Table D-1 in **Appendix D** contains a matrix with detailed information for classifying the development triggering collection of the DIF based on assessor's land use codes and property descriptions into on of the following six DIF categories:

- Single-Family One-Story Residential;
- Multifamily One-Story Residential;
- Single-Family Two-Story Residential;
- Multifamily Two-Story Residential;
- Commercial; and
- Industrial.

EXISTING LAND USE CATEGORY

The DIF will be adjusted based on the existing land use category if a project involves use of a parcel which either has an existing structure or had a structure within two years of the date of the DIF calculation. In these instances, the developer will receive a credit against the DIF for new development as determined by applying the DIF amount for the existing land use to the pre-existing building footprint. In the event that these credits exceed the fee revenue generated by the proposed new development, the net fee shall not be less than zero.

DAMAGEABLE SQUARE FOOTAGE

The DIF is based on damageable square footage which is the structure square footage of the first two floors of residential development or the first floor of all other type of development. For purposes of calculating the DIF, damageable square footage should only include the habitable square footage of the new structure. Habitable square footage can be generally classified as all square footage that contains conditioned air. This would include all new square footage constructed except garages, porches, decks, entryways, awnings, carports, driveways, breezeways and the like.

If the improvement subject to the fee replaces or improves a pre-existing structure, then only the footprint of the new construction in excess of the pre-existing structure is to be included in the calculation of the DIF. In cases where the new building footprint is unknown, the fee will be calculated using the maximum potential footprint based on development standards contained in the jurisdiction's zoning standards.

CALCULATION STEPS

The following steps are required to calculate the development fee.

Step 1: Verify that the parcel where the project is located is within the Program Area. If the parcel is outside the Program Area, no DIF will be collected.

Step 2: If the proposed project is exempt based on the criteria contained in **Table 9**, no DIF will be collected.

Step 3: Determine the land use category using **Table D-1** in **Appendix D** based on the descriptions of the project and the land use categories and the County of Sacramento Assessor's codes.

Step 4: Using the rates by land use category for the DIF in **Table 8** and the damageable square footage of the structure, calculate the DIF by multiplying the cost per damageable square foot by the number of damageable square feet for the project.

Step 5: Reduce the DIF payment by applying applicable credits against the DIF as detailed in **Table** 9. *In the event the credits exceed the costs of the DIF, the DIF will be reduced to $0.*

Example DIF calculations are presented in **Appendix D**.

VII. FEE PROGRAM IMPLEMENTATION

The fee calculations presented in this report are based on the best improvement cost estimates, administrative cost estimates and land use information available at this time. If costs change significantly, if the type or amount of new projected development changes, or if other assumptions significantly change, the Fee Program will be updated accordingly.

The cost estimates presented in this report are in constant 2008 dollars. Each year, SAFCA will automatically adjust the costs and fees for inflation, as described in this report.

IMPLEMENTING RESOLUTION

Pursuant to the authority granted to SAFCA under the SAFCA Act, the SAFCA Board will adopt a resolution establishing the Fee Program and authorizing collection of the fees. The implementing resolution will specify the date upon which fee collection will commence. Once adopted, the Fee Program may be updated at any time by resolution of the SAFCA Board.

FEE PROGRAM BOUNDARY

The boundary of the Fee Program will be the same as the boundary of the CCAD as illustrated in **Figure 1**.

The Fee Program Boundary encompasses those land areas in Sacramento County and Sutter County within SAFCA's jurisdictional boundary that will receive flood control benefits from the improvements outlined in this report.

JURISDICTIONAL CONSIDERATIONS

SAFCA will enter into fee collection agreements with each of the three land use jurisdictions (Responsible Agency, or collectively Responsible Agencies) located within the boundary of the Fee Program. These agreements will be administered by the following departments in these jurisdictions:

- The Neighborhoods, Planning and Development Services Department of the City of Sacramento;

- The Building Inspection Division of the County of Sacramento; and
- The Sutter County Community Services Department.

FEE COLLECTION PROCEDURES

In general, to obtain a building permit for a development project in the City or the Counties that is determined to be within the Fee Program Boundary, the Responsible Agencies will collect the DIF from the project applicants before the issuance of building permits. On receipt of an application for a building permit, the Responsible Agency will make an initial determination of the applicability of the Fee Program based on the location of the proposed development project and the exemption criteria outlined below, and will compute the fee.

The DIF also will be collected, to the extent permitted by law, on any development that does not require a building permit from the City or Counties (such as a hospital, which receives its permits from the State). When such development is required to apply to the Responsible Agencies for a permit other than a building permit (for example, a certificate of occupancy), the development fee will be payable before issuance of such permit or approval.

SAFCA retains the right of final determination as to whether the proposed development project lies within the defined Fee Program Boundary, and whether issuance of a particular permit triggers the requirement to pay the DIF. SAFCA will also allow for variations in the method of fee payment as described below.

FEE DEFERRAL

Payment of the fee may be deferred in certain instances at the discretion of SAFCA and the Responsible Agencies and according to the existing policies of the Responsible Agency. Fee Deferral will be allowed only if the Responsible Agency collecting the fee permits such fee deferrals.

COLLECTION BY SAFCA

SAFCA retains the right to collect the development fee or the portion thereof pertaining to development projects that are inadvertently not collected or under-collected. Notices of payment due will be sent directly to the applicant for the fee owed.

VARIATIONS IN METHOD

SAFCA will allow for variations in the method of fee payment, including these:

- Use of any lawfully created Assessment District or Community Facilities District (CFD) to finance development fee payment; and
- Voluntary accelerated payment of the DIF at the time of filing of any application for a tentative subdivision map, parcel map or an earlier land use application, at the then-applicable rate.

The use of these alternative payment mechanisms and the collection of the DIF may vary among the jurisdictions, as described below.

CFD

The City of Sacramento has a Development Fee Financing (DFF) Program that allows a landowner to pay development fees over time. The DFF Program uses a Mello-Roos CFD to finance fees, which total more than $50,000, through the issuance of tax exempt municipal bonds. To participate in the program, the development property must be formally annexed to the CFD. At the time of building permit issuance, the landowner may prepay the fees or provide a letter of credit to the City as security. The City then issues Mello-Roos bonds. The bond proceeds are used to pay the fees or to reimburse landowners who have prepaid. The bond debt is repaid by the landowner over a period of time not to exceed 10 years from the date of bond issuance.

The other jurisdictions may provide similar mechanisms.

ACCELERATED FEE PAYMENT

If a property owner desires to pay the DIF at an earlier stage of land use approval, such as tentative subdivision map or parcel map, then the fee will be calculated using the following assumptions:

- The land use category will be identified based on information provided in the land use application. If it is unclear whether the property will be developed as commercial/office use or some other land use, the commercial/office category will be used for fee calculation purposes; and
- The building square footage, if not explicitly defined in the land use application, will be assumed using the maximum permitted footprint allowed in the applicable zoning district by the governing jurisdiction.

Fees calculated and paid for by the project applicant at this earlier stage of land use application will be reviewed at the time of application for a building permit. The DIF will be recalculated, at the rates that were applicable at the time of initial payment, using the final land use and building footprint information contained in the building permit application. Any changes in the fee amount from what was previously paid will be adjusted (either as additional fee to be paid or as a refund amount) as a condition of issuance of the building permit. This process will be followed in all four jurisdictions.

EXEMPTIONS, CREDITS AND SPECIAL CIRCUMSTANCES

Certain development projects will be exempt from the DIF, will be permitted to apply a credit against the DIF, or the DIF will be calculated in a special manner. Refer to **Table 9** for a detailed list of all exemptions, allowable credits, and special circumstances.

The SAFCA Board retains the authority to waive the fee payment at its discretion.

REFUNDS AND APPEALS PROCESS

An applicant who has paid the DIF may request that such fee be refunded at any time, although to do so would terminate any approved application or permit. Refunds will be made according to the procedures of the City and Counties, as applicable, and may reflect deductions to compensate for handling and administrative costs incurred by SAFCA or the Responsible Agencies in processing the fee calculation, collection, and refund request.

Appeals regarding the determination of the applicability and amount of the development fee are to be made in writing to the Executive Director, SAFCA, 1007 7th Street, 5th Floor, Sacramento, CA 95814. The Executive Director shall respond to the appeal request in writing within 30 days. The Executive Director's determination may be appealed to the SAFCA Board.

Table 9
Sacramento Area Flood Control Agency - Development Fee
DIF Exemptions & Credits Against Fee Payment

Project	Credit/Exemption/ Special Circumstance	Qualification Criteria
Agricultural Exemption	Exempt	Construction of structures on parcels zoned for agricultural use are exempt from payment.
Pre-Existing Structures	Credit	If a project involves use of a parcel which either has an existing structure or had a structure within two years of the date of the DIF calculation, the developer will receive a credit against the DIF for the new development. Credit will be determined by applying the DIF rate for the existing land use designation to the existing or pre-existing building footprint. In the event that these credits exceed the fee revenue generated by the proposed new development, the fee shall not be less than zero.
Addition/Replacement Due To Damage	Exempt	If the proposed project is an addition to an existing single family residential dwelling unit, a replacement in kind because of fire damage or other natural disaster, or located on land owned by a government agency and is to be used solely for public use, the project will be exempt from payment.
Addition to Single-Family Dwelling Units	Exempt	If the addition to the single-family dwelling is 300 sq.ft. or less, then the fee is not sufficient to justify the administrative costs. In such cases, the project will be exempt from payment.
Structure raised above the 200-Year Floodplain Elevation	Exempt	Structures raised above the elevation of the 200-year flood as determined by SAFCA or to structures removed from the 200-year floodplain by flood control improvements that meet the design standards applicable to the federal-state flood control system as determined by SAFCA, shall be exempt from payment.
Located in Old Sacramento	Exempt	If the project is located in "Old Sacramento" as defined by Sacramento City Code §17.15.010, which is the national historical park located in the Sacramento central city roughly bounded by the Sacramento River on the west, Capitol Mall on the south, the Interstate 5 freeway on the east, and I Street and the I Street Bridge on the north, then the project shall be exempt from payment.
Vacant Site within Redevelopment Area	Credit	If a project involves use of a parcel in a Redevelopment Project Area which had a structure that existed after January 1, 1998, the project will receive a credit against the DIF for the new development. The credit will be determined by applying the DIF rate for the pre-existing land designation to the pre-existing building footprint. In the event that these credits exceed the DIF for the proposed new development, the fee shall not be less than zero.
Public Subsidy for Redevelopment Project	Special Circumstance	If a project involves use of a parcel in a Redevelopment Project Area and is a mixed use development project with ground floor commercial use and multi-family residential uses on additional floors and the project has been granted public subsidy by a Redevelopment Agency, then the project land use will considered a multifamily two story residential land use for purposes of calculating the DIF. The DIF will be calculated by multiplying the damageable square footage of the first two floors of the structure by the corresponding DIF rate for the multifamily two-story residential land use.

"fee_exemps2"

Source: SAFCA.

VIII. FEE PROGRAM ADMINISTRATION

The DIF will be collected at building permit for all residential and nonresidential development within the Fee Program Boundary.

DEPOSIT OF FUNDS

Fees collected by the Responsible Agencies shall be deposited in an interest-bearing account and transferred to SAFCA for deposit in the DIF Fund account established with the County of Sacramento Auditor/Controller's Office. SAFCA shall reimburse the City of Sacramento, the County of Sacramento, and the County of Sutter, at a mutually agreed-on rate, for handling and administrative costs incurred in collecting the DIF.

FEE REVENUE ACCOUNTING

The revenues raised by payment of the DIF shall be placed in a separate fund established by the County (DIF Fund). Separate and special accounts may be established in the DIF Fund and used to account for collected revenues, along with any interest earnings on each account. Except for temporary borrowing from one SAFCA fund to another, the revenue (and interest) shall be used only for the purposes for which the DIF was collected.

PERIODIC REVIEW AND COST ADJUSTMENT

SAFCA will periodically review actual project costs and DIF collections to determine if any updates to the Fee Program are warranted by the jurisdictions. The periodic review will occur no less than every 5 years. During these reviews, the following aspects will be analyzed:

a. Changes to the Improvements to be funded by the Fee Program;
b. Changes in the cost to update or administer the Fee Program;
c. Changes in annual financing costs;
d. Changes in assumed land uses; and
e. Changes in other funding sources.

Any changes to the Fee Program based on the periodic update will be presented to the SAFCA Board for approval before an increase of the development fee will take effect.

ANNUAL INFLATION ADJUSTMENT

The development fee will be adjusted by the jurisdictions annually to account for the inflation of construction, right-of-way acquisition, and environmental or design costs.

The development fee shall be adjusted each succeeding July 1st, commencing July 1, 2009, to reflect inflationary costs. The development fee shall be increased by the ratio which the Engineering News Record's Construction Cost Index (ENR, twenty cities) for the most recent April bears to the April 2009 index.

IX. FUTURE PHASES OF THE FEE PROGRAM

As demonstrated by the EAD analysis, the improvements comprising the initial phase of the Fee Program will accommodate the growth projected to occur in Sacramento's major floodplains during this period without any substantial increase in exposure to flood damages as measured by EAD. To maintain this level of exposure during the two decades following this initial phase, when growth in the floodplain is expected to continue at a comparable rate, the SAFCA Board will need to adopt a new set of projects and extend the Fee Program as necessary to provide the local share of the cost of these projects.

Because the flood risk reduction environment in the Sacramento Valley is in flux as flood managers update the SRFCP in accordance with the policies recently enacted by the State Legislature, the specific features, likely costs, and probable implementation timelines for such projects cannot be identified at a level of detail sufficient to meet the requirements of the SAFCA Act. Nevertheless, it appears that an expansion of the agricultural easement program described in **Chapter IV** combined with a series of improvements to the conveyance channels along the Sacramento and Yolo Bypass channels could significantly reduce the probability of flooding along the Sacramento River channel. Moreover, improving the levees along the Lower American River to resist failure because of overtopping would significantly reduce the damages associated with a flood exceeding the flood control capacity of Folsom Dam. Taken together, these improvements would likely be sufficient to offset the increase in EAD because of growth that is projected occur in the Program Area from 2019 to 2038. If extended at the rates described in **Chapter VI**, the Fee Program could be an important contributor to the cost of these improvements.

APPENDICES

APPENDIX A: APPORTIONMENT CONSIDERATIONS

APPENDIX B: EXCERPT FROM FINAL ENGINEER'S REPORT—SACRAMENTO AREA FLOOD CONTROL AGENCY CONSOLIDATED CAPITAL ASSESSMENT DISTRICT

APPENDIX C: GROWTH PROJECTIONS

APPENDIX D: SAFCA FLOOD CONTROL DEVELOPMENT IMPACT FEE WORKSHEET AND EXAMPLE CALCULATIONS

APPENDIX A

APPORTIONMENT CONSIDERATIONS

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APPENDIX A: APPORTIONMENT CONSIDERATIONS

The Fee Program must demonstrate a reasonable apportionment of the costs between land use types. The apportionment must also be reasonable between the areas protected by the funded projects and between existing and new development within these areas. These relationships are complicated by the SAFCA Board's adoption of a financing plan for the CCAD that calls for early implementation of levee improvements around the Natomas Basin to ensure that this area will have at least a 100-year level of flood protection by 2010.

The improvements necessary to achieve 100-year level of flood protection in the Natomas Basin are outside the currently authorized scope of the Common Features Project. As a result, there will be no federal appropriations to support this effort. Instead, the SAFCA financing plan assumes that the cost of the early implementation project will be funded entirely by SAFCA and the State.

Before initiating the early implementation project, however, the State will obtain a determination by the USACE that the non-federal project expenditures are eligible for credit in the event Congress subsequently broadens the scope of the Common Features Project and authorizes the constructed improvements. This authorization is expected to occur in 2010 when the USACE presents a General Re-Evaluation Report to Congress identifying the levee improvements necessary to provide at least a 200-year level of flood protection to the Natomas area and the areas outside Natomas along the Lower American and Sacramento Rivers (AR/SR areas). If Congress approves the increased scope of the Common Features project, SAFCA will reevaluate the structure of the Fee Program.

Pending this authorization, the Fee Program assumes that the State will fund 70 percent of the cost of these 200-year improvements based on the Legislature's approval of SB 276 during the 2007 legislative session and SAFCA will fund 30 percent of the cost through a combination of the CCAD assessments and the development impact fee.

In Natomas, where new development will comprise almost half the damageable square footage by the end of the initial phase of the Fee Program, the remaining 30 percent local share of the cost of the 200-year improvements will be funded exclusively by development fees. In the AR/SR areas where new development will comprise a much smaller percentage of the damageable square footage, development fees will cover about 10 percent of the cost of the 200-year improvements.

To clarify how these fees will be apportioned between the Natomas area and the AR/SR areas and between existing and new development within these areas, it is necessary to understand the manner in which the early implementation project is being designed and

financed. The following factors were considered in developing the apportionment methodology:

- First, although the immediate objective of the project is to provide the Natomas area with at least a 100-year level of flood protection, wherever levee improvement work is needed to achieve this objective, the improvements are being designed to provide at least a 200-year level of flood protection. This approach will streamline the project construction process and avoid the cost of subsequently reconstructing the completed improvements to achieve the longer term 200-year flood protection objective. It is estimated that inclusion of 200-year components in the early implementation project accounts for about 25 percent of the total cost of the project.
- Second, to fund the local share of the cost of the early implementation project, SAFCA intends to take advantage of federal and state credits accumulated in connection with the North Area Local Project. These credits have a value of approximately $24.5 million of which $19.0 million is allocable to Natomas. Congress has determined that these credits may be used to reduce SAFCA's contribution to any of the currently authorized federal projects along the Lower American River, including the Folsom Dam Modification Project and the Common Features Project. These credits will therefore be deployed by reducing the CCAD assessments that would otherwise be allocated to these capital projects.
- Third, the Final Engineer's Report assumed that the early implementation project could be constructed for approximately $260 million and that the follow-on project to achieve at least a 200-year level of flood protection for the Natomas area could be constructed for approximately $140 million for a total of $400 million. SAFCA's current estimate of the capital cost of the early implementation project is $430 million while the cost of the 200-year follow-on project is $146 million for a total of $576 million. These adjusted cost estimates reflect a fundamental change in the design of the early implementation project.

  The Engineer's Report assumed that identified underseepage problems along the Sacramento River east levee could be addressed through raising and strengthening this levee in place. The issuance of new federal guidelines on levee encroachments, however, made this design assumption untenable. As a result, SAFCA redesigned the project to construct an adjacent levee. The redesign has increased the total capital cost of the early implementation project. In addition, the extensive landscape elements included in the project has significantly increased long-term operation and maintenance expenses.
- Fourth, as reflected in the Final Engineer's Report, the financing plan for the early implementation project assumed that approximately $35 million of

SAFCA's share of the cost would be provided by assessments from outside the Natomas area and that this advance of funds would be covered by the federal credits generated by the project when Congress broadens the scope of the Common Features Project as discussed above. Because of the increased cost of the early implementation project, this advance has risen to $53.3 million. These advances will be reimbursed by using $53.3 million in fee revenues generated in the Natomas area.

APPORTIONMENT PRINCIPLES

Based on the above considerations, the principles that will guide the apportionment of project costs to newly developing properties are as follows:

- The apportionment should support SAFCA's overarching flood risk management objectives:
    - Early implementation of the improvements are needed to provide at least a 100-year level of flood protection to the Natomas area;
    - Achievement of a 200-year level of flood protection for all areas in the protected flood plain; and
    - Avoidance of any substantial increase in EAD as new development occurs in these protected floodplains.
- Project costs should be apportioned to the areas that directly benefit from the funded projects.
- The fee burden imposed on new development projects contributing to an increase in EAD within the 200-year floodplain should be proportionate to the value of the damageable property the development adds to the floodplain. The resulting development impact fee should be consistent for all development projects within the floodplain.

The following tables and discussion provide details as to how the apportionment of Fee Program project costs and revenues is consistent with the above principles, including examples of how the absence of the Fee Program would undermine these principles.

APPORTIONMENT BETWEEN NATOMAS BASIN AND AR/SR AREAS

Tables A-1 and **A-2** display the apportionment of Fee Program costs and revenues between the Natomas area and the AR/SR areas. These figures assume that the total cost

of the projects to be funded by the Fee Program will be $132.0 million as indicated in **Table 3** of **Chapter IV**. Fee Program revenues are derived from the growth projections and apportionment calculations presented in **Chapter III**.

Table A-1 identifies the total fee program revenue generated by the Natomas area and the AR/SR areas. **Table A-2** identifies the project costs by area of benefit, and identifies a $53.3 million difference between project costs and fee revenues allocable to the Natomas and AR/SR areas. As shown in **Table A-2**, this difference reflects the reimbursement of funds advanced from the AR/SR benefit zones to Natomas discussed above. This advance will facilitate completion of the early implementation project and restore at least a 100-year level of flood protection to the Natomas area.

Tables A-3 and **A-4** detail the revenue sources funding the estimated capital cost of improvements needed to provide at least a 200-year level of flood protection to the Natomas and AR/SR areas respectively. The total required funding shown includes all of the improvements included in the baseline conditions in these areas and all of the improvements that would be funded by the Fee Program. These improvements include: Folsom Dam Modifications, Folsom Bridge Construction, and improvements to the levees around Natomas and along the Lower American and Sacramento Rivers.

Table A-5 compares the local revenue sources contributed by each benefit area to the total project costs benefiting each area. As shown, through development impact fee revenue, CCAD assessments and the application of federal credits, Natomas Basin development funds approximately $175.0 million in baseline and 200-year flood improvements, corresponding with $175.0 million in improvement costs required for the Natomas Basin area. Similarly, the AR/SR area contributes local funding of $244.6 million through fee revenue and CCAD assessments to fund the total AR/SR improvement costs of $244.6 million.

APPORTIONMENT BETWEEN EXISTING AND FUTURE DEVELOPMENT

APPORTIONMENT OF PROJECT IMPROVEMENT COSTS WITHOUT DIF PROGRAM

Natomas Basin

As identified in **Table A-3**, SAFCA estimates the total local share of the capital improvement costs for the baseline improvements in Natomas will be $129.0 million. Improving Natomas Basin flood protection to 200-year levels will require an additional $46.7 million capital

investment. SAFCA estimates that $37.3 million for operations and maintenance funding will be required for the baseline and 200-year projects in Natomas.

Table A-6 displays the contributions that would be available to provide the local share of the cost of constructing and maintaining the projects included in the baseline conditions in the Natomas area assuming the Fee Program is not adopted.

Existing Natomas development would contribute $71.2 million through CCAD assessments ($52.2 million) and federal and state credits ($19.0 million). Over the 11-year period of analysis, new development would contribute new CCAD assessments with an estimated present value of $41.8 million. These existing and new CCAD revenues would be used to cover a portion of the capital costs of the early implementation project ($14.8 million) plus operation and maintenance of the completed project, including levees, drainage canals, grasslands, woodlands and marsh habitats ($27.0 million).

An advance of $53.3 million from other benefit zones in the CCAD would be needed to allow early implementation of the baseline improvements so as to eliminate restrictions on new development. Of the estimated $41.8 million in new development CCAD assessment revenue, however, only $10.3 million would be available to reimburse the advance from other benefit zones, leaving an outstanding balance of $43.0 million. Consequently, advancing these funds would be infeasible as it would violate the direct benefit requirement of the CCAD.

Moreover, Natomas would not achieve a 200-year level of flood protection. Total new and existing development would contribute a total of $113 million toward capital improvements and operations and maintenance costs in Natomas. Because the total capital and operations and maintenance costs for 200-year improvements total an estimated $213 million for the Natomas Basin, a shortfall of approximately $100 million would exist within Natomas.

As a result, there would be an unmitigated increase in EAD associated with the new development, and the expectations of the CCAD would not be realized with respect to the benefits and burdens accruing to existing property owners.

AR/SR Areas

As identified in **Table A-4,** SAFCA estimates that the local share of funding will be approximately $159.3 million for the baseline project in the AR/ SR area, and $85.3 million for 200-year protection. The estimated operations and maintenance requirement is $21.1 million.

Table A-7 displays the contributions that would be available to provide the local share of the cost of constructing and maintaining the baseline projects protecting the AR/SR areas assuming the Fee Program is not adopted.

Existing development would contribute $221.1 million through CCAD assessments. Over the next 11 years, new development would contribute new CCAD assessments with an estimated present value of $12.6 million.

Of the $233.7 million in total existing and new CCAD revenues, $215.2 million would be used to provide the local share of the capital cost of constructing the baseline and 200-year projects (Folsom Dam Modifications, Folsom Bridge, and Common Features Levee Improvements along the Lower American and Sacramento Rivers). $18.5 million would be allocated to operation and maintenance of the baseline projects.

As identified in **Table A-7**, however, sufficient revenues to fund the local share of 200-year improvements would not be available. In absence of the fee program revenues, and shortfall of $32.0 million would exist and the areas outside Natomas would not achieve a 200-year level of flood protection. An unmitigated increase in EAD associated with the new development would result, and the expectations of the CCAD would not be realized with respect to the benefits and burdens accruing to existing property owners.

APPORTIONMENT OF PROJECT IMPROVEMENT COSTS WITH DIF PROGRAM

Natomas Basin

Table A-8 summarizes the contributions of existing and future development assuming the Fee Program is adopted and 200-year flood protection is provided to the Natomas area. As identified previously, SAFCA estimates the local share of the total capital costs required to provide 200-year flood protection will be $175.7 million.

Existing development would contribute $71.2 million from CCAD assessments ($52.2 million) and federal and state credits ($19.0 million).

New development would contribute $41.8 million in CCAD assessments and $100.0 million in development fees (which includes $53.3 million to repay the CCAD advance from other benefit zones). This revenue would support early implementation of the baseline improvements in Natomas and lay the groundwork for completing the 200-year improvements over time. An estimated $37.3 million in CCAD revenue will be available to fund the substantial ongoing operations and maintenance requirement.

Table A-9 provides additional detail regarding the distribution of project costs and revenue sources between the baseline and 200-year improvements.

By providing the local share of the cost of achieving at least a 200-year level of flood protection for Natomas, the revenue generated by new development would ensure that the resulting increases in damageable property placed in the floodplain would not result in any increase in EAD. These objectives would be accomplished without substantially altering the basic structure of the CCAD that was approved by existing property owners. In addition, by fully covering the $53.3 million advance from other benefit zones conflict with the direct benefit principle is avoided.

AR/SR Areas

Table A-10 assumes that the Fee Program is adopted and 200-year flood protection is provided to the AR/SR areas outside Natomas and summarizes the estimated contributions from existing and future development. Existing development would contribute $221.1 million in CCAD assessments, a portion of which ($53.3 million) would be advanced to Natomas to support the early implementation project and subsequently reimbursed from development fees collected in Natomas.

New development would contribute $12.6 million in CCAD assessments and $32.0 million in development fees. **Table A-11** provides additional detail regarding the distribution of project costs and revenue sources between the baseline and 200-year improvements.

By providing the local share of the cost of achieving at least a 200-year level of flood protection for the AR/SR area, the revenue generated by new development would ensure that the resulting increase in damageable property placed in the floodplain would not result in any increase in EAD. This objective would be accomplished without substantially altering the basic structure of the CCAD that was approved by existing property owners.

North Sacramento Area

The Fee Program Area includes the floodplain east of Natomas, north of Arcade Creek and south of Dry/Robla Creek. As indicated in the Final Engineer's Report for the CCAD, this area is subject to flooding from the creeks comprising the North Sacramento Streams Group and requires its own set of levee improvements to achieve at least a 200-year level of flood protection. It is anticipated that the local share of the cost of these improvements will include the balance of the federal and state credits for the NALP that are not allocable to Natomas ($5.35 million). This sum will cover the share of these credits that are allocable to the North Sacramento Area ($2.44 million) and any DIF revenue that may be generated in this area during the initial phase of the Fee Program if the fee revenue is used to assist construction of flood control improvements in other areas.

APPORTIONMENT CONCLUSIONS

The above discussion shows that new development will cover the local share of the cost of achieving 200-year flood protection in Natomas and in the AR/SR areas. This increase in flood protection would mitigate any increase in EAD that would otherwise occur as a result of the new development. This mitigation will provide incidental benefits to existing property owners in the form of increased flood protection. However, based on the economics of flood risk reduction in Sacramento, it is more cost-effective for new development to mitigate EAD by contributing to improving the existing flood protection system than by raising or otherwise flood-proofing individual structures or groups of structures.

Table A-1
Sacramento Area Flood Control Agency - Development Fee
Estimated Development Impact Fee Revenue

Land Use	Damageable Sq. Ft.	Allocated Cost per Damageable Sq. Ft.	Total Cost by Land Use	Percentage of Total
Natomas Basin Development				
One-Story Residential				
Single-Family	4,630,645	$1.79	$8,295,313	6.3%
Multifamily	29,086	$1.00	$29,144	0.0%
Two-Story Residential				0.0%
Single-Family	16,795,948	$1.72	$28,841,845	21.8%
Multifamily	6,609,992	$1.06	$7,037,226	
Commercial	8,575,664	$2.69	$23,092,345	17.5%
Industrial	18,466,962	$1.79	$32,998,719	25.0%
Subtotal Natomas Basin Development	**55,108,297**		**$100,294,592**	**76.0%**
All Other Development				
One-Story Residential				
Single-Family	1,974,252	$1.79	$3,536,666	2.7%
Multifamily	32,577	$1.00	$32,643	0.0%
Two-Story Residential				
Single-Family	7,131,164	$1.72	$12,245,568	9.3%
Multifamily	5,560,935	$1.06	$5,920,364	4.5%
Commercial	1,844,388	$2.69	$4,966,524	3.8%
Industrial	2,800,172	$1.79	$5,003,643	3.8%
Subtotal All Other Development	**19,343,489**		**$31,705,408**	**24.0%**
Total All Development	**74,451,786**		**$132,000,000**	**100.0%**

"alloc%"

Table A-2
Sacramento Area Flood Control Agency - Development Fee
SAFCA DIF Project Costs by Area of Benefit

SAFCA DIF Improvement	DIF-Funded Project Costs by Area of Benefit		
	Natomas Basin	AR/SR	Total
Levee Improvements			
Natomas Levee Improvements	$33,000,000	$0	$33,000,000
NCC North Levee Improvements	$7,700,000	$0	$7,700,000
Pocket Area Levee Improvements	$0	$73,300,000	$73,300,000
American River Levee Improvements	$0	$9,000,000	$9,000,000
Subtotal Levee Improvements	**$40,700,000**	**$82,300,000**	**$123,000,000**
Folsom Reservoir Forecast-Based Operations	$0	$3,000,000	$3,000,000
Agricultural Conservation Easements	$6,000,000	$0	$6,000,000
Total SAFCA DIF Improvements	**$46,700,000**	**$85,300,000**	**$132,000,000**
Adjustment for Assessment District Advance [1]	$53,300,000	($53,300,000)	$0
Adjusted Total	**$100,000,000**	**$32,000,000**	**$132,000,000**
Percentage of Adjusted Total	**75.8%**	**24.2%**	**100.0%**

"dif_imp_ben"

Source: SAFCA.

[1] CCAD Assessment Revenue from outside Natomas was advanced to fund improvements in Natomas. This adjustment reflects repayment of the assessment district advance to areas outside of Natomas to fund the cost of improvements that would otherwise have been funded with CCAD revenue generated by those areas.

Table A-3
Sacramento Area Flood Control Agency - Development Fee
Natomas Area Early Implementation and 200-Year Improvement Cost Estimates and Revenue Sources

Natomas Basin Improvements

Item	Natomas Early Implementation Improvements				
	Baseline Improvements	200-Year	**Total**	CCAD Reimbursement	**Adjusted Total**
State, Federal, and Other Funding	$301,000,000	$99,300,000	$400,300,000	-	$400,300,000
Local Funding	$129,000,000	$46,700,000	$175,700,000	-	$175,700,000
Total Funding [1]	**$430,000,000**	**$146,000,000**	**$576,000,000**	**$0**	**$576,000,000**
Local Funding Breakdown					
SAFCA DIF	**$0**	**$46,700,000**	**$46,700,000**	**$53,300,000**	**$100,000,000**
Other Local Funding					
CCAD Assessments from Natomas					
Existing Natomas Development [2]	$52,200,000	$0	$52,200,000		
Future Natomas Development	$4,500,000	$0	$4,500,000		
Subtotal CCAD Assessments from Natomas	**$56,700,000**	**$0**	**$56,700,000**	**-**	**$56,700,000**
Federal and State Credits	$19,000,000	$0	$19,000,000	-	$19,000,000
Advance from Other CCAD Benefit Zones	$53,300,000	$0	$53,300,000	($53,300,000)	$0
Subtotal Other Local Funding	**$129,000,000**	**$0**	**$129,000,000**	**($53,300,000)**	**$75,700,000**
Total Local Funding	**$129,000,000**	**$46,700,000**	**$175,700,000**	**$0**	**$175,700,000**

"natomas_imps"

Source: SAFCA.

[1] Improvement cost estimates provided by SAFCA.
[2] Assumes operations and maintenance amount available from existing CCAD development, as detailed in the CCAD Engineers Report, is leveraged to fund capital improvements.

Table A-4
Sacramento Area Flood Control Agency - Development Fee
AR/SR Baseline and 200-Year Improvement Cost Estimates and Revenue Sources

AR/SR Improvements

Item	AR/SR Improvements 100-Year	200-Year	**Total**	CCAD Reimbursement	**Adjusted Total**
State, Federal, and Other Funding	$1,362,700,000	$199,000,000	$1,561,700,000	-	$1,561,700,000
Local Funding	$159,300,000	$85,300,000	$244,600,000	-	$244,600,000
Total Funding [1]	**$1,522,000,000**	**$284,300,000**	**$1,806,300,000**	**$0**	**$1,806,300,000**
Local Funding Breakdown					
SAFCA DIF	-	$32,000,000	$32,000,000	-	$32,000,000
Other Local Funding					
CCAD Assessments					
Existing Development	$149,861,793	$53,300,000	$203,161,793	-	$203,161,793
Future Development	$9,438,207	-	$9,438,207	-	$9,438,207
Subtotal CCAD Assessments	**$159,300,000**	**$53,300,000**	**$212,600,000**	-	**$212,600,000**
Federal and State Credits	-	-	-	-	
Advance from Other CCAD Benefit Zones	-	-	-	-	
Subtotal Other Local Funding	**$159,300,000**	**$53,300,000**	**$212,600,000**	**$0**	**$212,600,000**
Total Local Funding	**$159,300,000**	**$85,300,000**	**$244,600,000**	**$0**	**$244,600,000**

"arsr"

Source: SAFCA.

Table A-5
Sacramento Area Flood Control Agency - Development Fee
Flood Improvement Revenues by Source

Revenue Source	Local Revenue Source by Area of Benefit		
	Natomas Basin	AR/SR	Total
Fee Program Revenue	$100,000,000	$32,000,000	$132,000,000
Natomas CCAD Benefit Zone	$56,700,000	$0	$56,700,000
AR/SR/Other CCAD Benefit Zones	$0	$212,600,000	$212,600,000
Federal and State Credits	$19,000,000	$0	$19,000,000
Total Local Funding	**$175,700,000**	**$244,600,000**	**$420,300,000**
Percentage of Total	**42%**	**58%**	**100%**
Local Funding Available	$175,700,000	$244,600,000	$420,300,000
Local Funding Required	$175,700,000	$244,600,000	$420,300,000
Surplus/(Shortfall)	**$0**	**$0**	**$0**

"rev_area"

Source: SAFCA.

Natomas Basin - Without Fee Program

Table A-6
Sacramento Area Flood Control Agency - Development Fee
Funding Sources - Natomas Basin Baseline Improvements Without Fee Program

Item	Sources of Revenues		
	Total	CCAD	Credits
Existing Development			
Capital Improvements	$71,200,000	$52,200,000	$19,000,000
Operations and Maintenance	$0	$0	$0
Total Existing Development	**$71,200,000**	**$52,200,000**	**$19,000,000**
Future Development			
Capital Improvements	$14,800,000	$14,800,000	$0
Operations and Maintenance	$27,000,000	$27,000,000	$0
Total Future Development	**$41,800,000**	**$41,800,000**	**$0**
Total Existing and Future Development			
Capital Improvements	$86,000,000	$67,000,000	$19,000,000
Operations and Maintenance	$27,000,000	$27,000,000	$0
Total Existing and Future Development	**$113,000,000**	**$94,000,000**	**$19,000,000**
Total Capital and Operations and Maintenance Costs (200-Year Protection)	**$213,000,000**		
Surplus/(Shortfall)	**($100,000,000)**		

"natomaswofee"

AR/SR Development - Without Fee Program

Table A-7
Sacramento Area Flood Control Agency - Development Fee
Funding Sources - AR/SR Baseline Flood Improvements Without Fee Program

Item	Sources of Revenues		
	Total	CCAD	Other
Existing Development			
Capital Improvements	$215,200,000	$215,200,000	$0
Operations and Maintenance	$5,900,000	$5,900,000	$0
Contribution to Natomas	$0	$0	
Total Existing Development	**$221,100,000**	**$221,100,000**	**$0**
Future Development			
Capital Improvements	$0	$0	$0
Operations and Maintenance	$12,600,000	$12,600,000	$0
Total Future Development	**$12,600,000**	**$12,600,000**	**$0**
Total Existing and Future Development			
Capital Improvements	$215,200,000	$215,200,000	$0
Operations and Maintenance	$18,500,000	$18,500,000	$0
Total Existing and Future Development	**$233,700,000**	**$233,700,000**	**$0**
Total Capital and Operations and Maintenance Costs (200-Year Protection)	**$265,700,000**		
Surplus/(Shortfall)	**($32,000,000)**		

"arsrwofee"

Table A-8
Sacramento Area Flood Control Agency - Development Fee
Summary of Funding Sources - Natomas Basin Flood Improvements

Natomas Basin

Item	Baseline and 200-Year Improvements			
		Sources of Revenues		
	Total Revenues	CCAD	DIF	Credits
Existing Development				
Capital Improvements	$71,200,000	$52,200,000	$0	$19,000,000
Operations and Maintenance	$0	$0	$0	$0
Total Existing Development	**$71,200,000**	**$52,200,000**	**$0**	**$19,000,000**
Future Development				
Capital Improvements	$104,500,000	$4,500,000	$100,000,000	$0
Operations and Maintenance	$37,300,000	$37,300,000	$0	$0
Total Future Development	**$141,800,000**	**$41,800,000**	**$100,000,000**	**$0**
Total Existing and Future Development				
Capital Improvements	$175,700,000	$56,700,000	$100,000,000	$19,000,000
Operations and Maintenance	$37,300,000	$37,300,000	$0	$0
Total Existing and Future Development	**$213,000,000**	**$94,000,000**	**$100,000,000**	**$19,000,000**

"3"

Table A-9
Sacramento Area Flood Control Agency - Development Fee
Funding Sources - Natomas Basin 100-Year and 200-Year Flood Improvements

Natomas Basin

Item	Baseline Improvements				200-Year Improvements			
	Sources of Revenues				Sources of Revenues			
	Total Revenues	CCAD	DIF	Credits	**Total Revenues**	CCAD	DIF	Credits
Existing Development								
Capital Improvements	$71,200,000	$52,200,000	$0	$19,000,000	$0	$0	$0	$0
Operations and Maintenance	$0	$0	$0	$0	$0	$0	$0	$0
Total Existing Development	**$71,200,000**	**$52,200,000**	**$0**	**$19,000,000**	**$0**	**$0**	**$0**	**$0**
Future Development								
Capital Improvements	$57,800,000	$4,500,000	$53,300,000	$0	$46,700,000	$0	$46,700,000	$0
Operations and Maintenance	$0	$0	$0	$0	$37,300,000	$37,300,000	$0	$0
Total Future Development	**$57,800,000**	**$4,500,000**	**$53,300,000**	**$0**	**$84,000,000**	**$37,300,000**	**$46,700,000**	**$0**
Total Existing and Future Development								
Capital Improvements	$129,000,000	$56,700,000	$53,300,000	$19,000,000	$46,700,000	$0	$46,700,000	$0
Operations and Maintenance	$0	$0	$0	$0	$37,300,000	$37,300,000	$0	$0
Total Existing and Future Development	**$129,000,000**	**$56,700,000**	**$53,300,000**	**$19,000,000**	**$84,000,000**	**$37,300,000**	**$46,700,000**	**$0**

"1"

Table A-10
Sacramento Area Flood Control Agency - Development Fee
Summary of Funding Sources - All Other Areas Flood Improvements

AR/SR Development

Item	Baseline and 200-Year Improvements			
		Sources of Revenues		
	Total Revenues	CCAD	DIF	Credits
Existing Development				
Capital Improvements	$203,161,793	$203,161,793	$0	$0
Operations and Maintenance	$17,938,207	$17,938,207	$0	$0
Total Existing Development	**$221,100,000**	**$221,100,000**	**$0**	**$0**
Future Development				
Capital Improvements	$41,438,207	$9,438,207	$32,000,000	$0
Operations and Maintenance	$3,161,793	$3,161,793	$0	$0
Total Future Development	**$44,600,000**	**$12,600,000**	**$32,000,000**	**$0**
Total Existing and Future Development				
Capital Improvements	$244,600,000	$212,600,000	$32,000,000	$0
Operations and Maintenance	$21,100,000	$21,100,000	$0	$0
Total Existing and Future Development	**$265,700,000**	**$233,700,000**	**$32,000,000**	**$0**

"4"

Table A-11
Sacramento Area Flood Control Agency - Development Fee
Funding Sources - AR/SR Development 100-Year and 200-Year Flood Improvements

AR/SR Development

Item	Baseline Improvements				200-Year Improvements			
	Sources of Revenues				Sources of Revenues			
	Total Revenues	CCAD	DIF	Other	**Total Revenues**	CCAD	DIF	Credits
Existing Development								
Capital Improvements	$149,861,793	$149,861,793	$0	$0	$53,300,000	$53,300,000	$0	$0
Operations and Maintenance	$17,938,207	$17,938,207	$0	$0	$0	$0	$0	$0
Total Existing Development	**$167,800,000**	**$167,800,000**	**$0**	**$0**	**$53,300,000**	**$53,300,000**	**$0**	**$0**
Future Development								
Capital Improvements	$9,438,207	$9,438,207	$0	$0	$32,000,000	$0	$32,000,000	$0
Operations and Maintenance	$3,161,793	$3,161,793	$0	$0	$0	$0	$0	$0
Total Future Development	**$12,600,000**	**$12,600,000**	**$0**	**$0**	**$32,000,000**	**$0**	**$32,000,000**	**$0**
Total Existing and Future Development								
Capital Improvements	$159,300,000	$159,300,000	$0	$0	$85,300,000	$53,300,000	$32,000,000	$0
Operations and Maintenance	$21,100,000	$21,100,000	$0	$0	$0	$0	$0	
Total Existing and Future Development	**$180,400,000**	**$180,400,000**	**$0**	**$0**	**$85,300,000**	**$53,300,000**	**$32,000,000**	**$0**

"2"

Table A-12
Sacramento Area Flood Control Agency - Development Fee
Summary of Estimated Present Value of Assessment Revenue

Development Area	Estimated Present Value of Annual Assessment		
	Existing Development (Rounded)	Future Development (Rounded)	**Total**
	[1]		
Natomas Basin	$52,200,000	$41,800,000	**$94,000,000**
Percentage of Total	56%	44%	**100%**
AR/SR/Other Areas	$221,100,000	$12,600,000	**$233,700,000**
Percentage of Total	95%	5%	**100%**

"proceeds_sum"

[1] Estimated based on amounts reported in CCAD Engineers Report.

Table A-13
Sacramento Area Flood Control Agency - Development Fee
Estimated Present Value of Annual CCAD Revenue - Natomas Basin Development

Natomas Basin Development

Land Use	Average Annual Assessment	Future Development: Total Damageable Sq. Ft.	Future Development: Annual CCAD Revenue	Est. Present Value of Annual Revenue
				[1]
Formula	*a*	*e*	*f = a * e*	*g = f * 13.5*
Residential	**$0.04**	**28,100,000**	**$1,124,000**	**$15,174,000**
Nonresidential				
Commercial	$0.10	8,600,000	$860,000	**$11,610,000**
Industrial	$0.06	18,500,000	$1,110,000	**$14,985,000**
Subtotal Nonresidential		**27,100,000**	**$1,970,000**	**$26,595,000**
Total All Land Uses		**55,200,000**	**$3,094,000**	**$41,769,000**
Rounded				**$41,800,000**

"Natomas"

Source: SAFCA Consolidated Capital Assessment District Engineers Report.

[1] Calculation of estimated present value of CCAD revenue discounted to reflect total revenue anticipated from future development.

Table A-14
Sacramento Area Flood Control Agency - Development Fee
Estimated Present Value of Future CCAD Revenue - AR/SR Development

AR/SR Development

Land Use	Average Annual Assessment	Future Development: Total Damageable Sq. Ft.	Future Development: Annual CCAD Revenue	Est. Present Value of Annual Revenue
				[1]
Formula	*a*	*e*	*f = a * e*	*g = f * 13.5*
Residential	**$0.04**	**14,700,000**	**$588,000**	**$7,938,000**
Nonresidential				
Commercial	$0.10	1,800,000	$180,000	**$2,430,000**
Industrial	$0.06	2,800,000	$168,000	**$2,268,000**
Subtotal Nonresidential		**4,600,000**	**$348,000**	**$4,698,000**
Total All Land Uses		**19,300,000**	**$936,000**	**$12,636,000**
Rounded				**$12,600,000**

"all_other"

Source: SAFCA.

[1] Calculation of estimated present value of CCAD revenue discounted to reflect total revenue anticipated from future development.

APPENDIX B

EXCERPT FROM FINAL ENGINEER'S REPORT— SACRAMENTO AREA FLOOD CONTROL AGENCY CONSOLIDATED CAPITAL ASSESSMENT DISTRICT

This appendix only includes Chapters 1-4 of the Final Engineer's Report—Sacramento Area Flood Control Agency Consolidated Capital Assessment District. The complete report can be viewed here:
http://www.safca.org/ADF/documents/FinalEngineersReport_PROTECTED_000.pdf

FINAL ENGINEER'S REPORT

SACRAMENTO AREA FLOOD CONTROL AGENCY
CONSOLIDATED CAPITAL ASSESSMENT DISTRICT

Prepared for:
Sacramento Area Flood Control Agency

Prepared by:
PB

April 19, 2007

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1.0 INTRODUCTION

1.1 BACKGROUND

The Sacramento Area Flood Control Agency (SAFCA) was created in 1989 through a Joint Exercise of Powers Agreement by the City of Sacramento, the County of Sacramento, the County of Sutter, the American River Flood Control District (ARFCD), and Reclamation District 1000 (RD 1000) to reduce the Sacramento area's vulnerability to catastrophic flooding. In 1990, the California Legislature enacted the Sacramento Area Flood Control Agency Act giving SAFCA broad authority to finance flood control projects and directing SAFCA to carry out its flood control responsibilities in ways that provide optimum protection to the natural environment and public recreation.

SAFCA's flood risk reduction program focuses on the major floodplains in the Sacramento area along the lower American and Sacramento Rivers and their tributaries. The goals of this program are to:

- Provide at least a 100-year level of flood protection as quickly as possible.
- Work toward achieving urban-standard ("200-year") flood protection over time.
- Ensure the structural integrity of the levee system.

Over the past eighteen years, SAFCA has pursued these goals on a step-by-step basis in coordination with the U.S. Army Corps of Engineers (USACE), the U.S. Department of the Interior, Bureau of Reclamation (Reclamation), the California Reclamation Board (The Reclamation Board), and the California Department of Water Resources (DWR). This coordinated effort has produced a combination of levee improvements and modifications to the flood control operation at Folsom Dam that has made it possible to achieve the 100-year flood protection objective for most of the properties in the area's major floodplains.

However, because of recent changes in federal levee design criteria, a substantial number of parcels in the Natomas basin that were thought to have achieved 100-year flood protection nearly a decade ago are likely to be mapped back into the federally regulated 100-year floodplain in 2007. In addition, a small number of parcels remain in the federally regulated 100-year floodplain along the American River upstream of the Mayhew Drain, and along Morrison Creek and its tributaries in south Sacramento. SAFCA's objective is to provide at least a 100-year level of flood protection to these areas over the next three to five years while working to provide a "200-year" level of flood protection to all of Sacramento's major floodplains within the next decade.

1.2 PURPOSE OF ENGINEER'S REPORT

The purpose of this Engineer's Report is to support the creation of a new special benefit assessment district to provide the local share of the cost of constructing and maintaining the improvements that, based on current engineering and information, are needed to achieve SAFCA's 100-year and "200-year" flood protection goals. This new special benefit assessment district, which would be known as the Consolidated Capital Assessment District (the "Consolidated District"), would replace SAFCA's two existing capital assessment districts: North Area Local Project Capital Assessment District No. 2 and American River/South

Sacramento Streams Group Capital Assessment District No. 3. The Consolidated District would cover the properties located in these two existing districts and in the "200-year" floodplain area covered by SAFCA's Operations and Maintenance Assessment District No.1.

This Engineer's Report proposes a financial structure for the Consolidated District. Section 2 of the report identifies the improvements that would be funded; Section 3 provides an estimate of the total cost of these improvements and the share of this cost that is allocable to SAFCA; Section 4 describes a financing plan for providing this cost share; and Section 5 describes the assessment methodology, including the boundaries of the Consolidated District, the flood damage reduction benefits and project special benefit zones that are used to proportionally spread the assessments among the properties in the Consolidated District, the assessment equations that guide this spread, and sample calculations.

A Revised Assessment Roll (Appendix E) has been prepared that identifies the proposed initial annual assessments for each individual parcel within the Consolidated District.

2.0 DESCRIPTION OF FUNDED PROJECTS AND ACTIVITIES

2.1 GENERAL

The Consolidated District would provide the local share of the cost of completing the projects necessary to provide 100-year flood protection for developed areas in Sacramento's major floodplains as quickly as possible and "200-year" urban standard flood protection for these areas over time, based on current information and engineering. These projects are described below. The descriptions are intended to be general enough to authorize any necessary or appropriate additional elements that may be required to accomplish the flood control objectives of the projects. Detailed descriptions of the proposed projects are provided in Section 3.4 of the Draft Environmental Impact Report on Local Funding Mechanisms for Comprehensive Flood Control Improvements for the Sacramento Area, as amended by the Final Environmental Impact Report Responses to Comments and Revisions to the Draft EIR (State Clearinghouse No. 2006072098) (together, the "EIR"). The Consolidated District would also provide funding for the local share of several environmental enhancement projects that are linked to these flood control projects, for operating and maintaining the completed projects, and for refinancing the outstanding principal balance of bonds issued in connection with the North Area Local Project (or NALP). These funded projects and activities are also briefly described below.

2.2 FOLSOM DAM MODIFICATIONS PROJECT

The Folsom Dam Modifications Project consists of physical and operational modifications to Folsom Dam and Reservoir that would improve the efficiency and effectiveness of the dam's flood control operations. When combined with improvements to the downstream levee system, these modifications would enable the flood control system to safely contain a "200-year" flood along the lower American and Sacramento Rivers.

The physical modifications to Folsom Dam that would be funded by the Consolidated District include:

- constructing a new gated auxiliary spillway
- replacing or modifying the existing three emergency spillway gates
- constructing a 3.5-foot concrete parapet wall along the top of the dam's earthen dikes and wing dams

The auxiliary spillway would be constructed on a natural ridge in the area east of the concrete dam (see Figure 2-1) at an elevation that would substantially increase the dam's low-level discharge capacity. This new facility would include a concrete-lined approach channel and discharge chute in the left abutment below the left wing dam leading down to Folsom Dam's existing stilling basin, which would be enlarged to handle the increased discharges through the spillway. These discharges would be controlled through the installation of six submerged tainter gates (23 feet wide by 33 feet high) that would be operated conjunctively during flood events with Folsom Dam's five existing main spillway gates.

Construction of a 3.5-foot concrete parapet wall along the top of Folsom's earthen dikes and wing dams would allow dam operators to add approximately 50,000 acre-feet of additional surcharge storage capacity to the flood control operation. Modification or replacement of Folsom Dam's three existing emergency spillway gates would allow this space to be used

FIGURE 2-1: FOLSOM DAM AUXILIARY SPILLWAY

without overtopping and possibly damaging these gates or causing them to fail.

These physical improvements would allow the federal government to continue the current variable storage space operation at Folsom Dam, also known as "Folsom Reoperation", but with a reduced demand for empty flood control space. This operation accounts for the flood control storage space available behind the three largest non-Federal dams in the American River watershed upstream of Folsom Dam. These higher dams capture the run-off produced by spring snow melt along the western face of the Sierras in order to generate hydropower to meet summer and fall energy demands. This seasonally driven operation allows reservoir storage space to be available for flood control during the winter. Under the variable storage space plan, Folsom Dam operators adjust the reservoir capacity allocated to flood control based on the availability of this upstream storage space. By increasing the efficiency of the flood control operation, the new auxiliary spillway would reduce the maximum amount of reservoir capacity that would be needed for flood control at Folsom Dam by about 10 percent.

Moreover, the physical improvements to Folsom Dam could allow dam operators to further refine the variable storage operation by using forecasts of inflow into the reservoir to make decisions on when and how much water to release from the reservoir for flood control. The objective of this forecast-based operation is to increase the empty space in the reservoir when it is immediately needed to enhance the reservoir's flood control capacity, and to reduce this empty space when it is not immediately needed for flood control so as to better balance the water, power, recreational, and environmental needs that are served by the reservoir.

2.3 FOLSOM BRIDGE CONSTRUCTION

The Folsom Bridge Project would involve constructing a permanent bridge and roadway across the American River downstream of Folsom Dam. This bridge would replace public use of the roadway across Folsom Dam, which was designed and built to service the dam. The Folsom Bridge Project was authorized by Congress because of the long-term disruption to traffic that would result from the prolonged construction associated with dam modifications. Despite the subsequent closure of Folsom Dam Road for security and public safety reasons, the bridge remains an integral part of the Folsom Dam modification effort, with flood control contributing about one-third of the total cost of the project. The new bridge is planned for construction just below the dam between the intersections of Folsom Dam Road with East Natoma Street on the east and Folsom-Auburn Road on the west.

2.4 AMERICAN RIVER LEVEE IMPROVEMENTS

Although work to improve the levees along the lower American River has been ongoing for nearly a decade, additional improvements are needed to ensure that these levees can safely contain the sustained high velocity releases from Folsom Dam that will become a part of the "200-year" flood protection plan for the American River when the improvements to the dam's outlet works are completed. Accordingly, the Consolidated District would be used to fund the following improvements along the lower American River levee system:

- raising approximately 12,500 feet of the north levee of the American River from Watt Avenue to the Cal Expo area west of H Street approximately 1 foot to ensure that there is three feet of freeboard above the 160,000-cfs flow;

- reconstructing 4,300 feet of the non-federal levee along the south bank of the American River upstream of the Mayhew Drain;
- constructing a closure structure with flap gates across the Mayhew Drain to prevent backup of floodwater on Folsom Boulevard during high-flow events in the American River and installing cutoff walls in the east and west levees of the Mayhew Drain to prevent underseepage;
- constructing approximately 2 miles of cutoff walls along the north levee of the American River and installing cutoff wall closure structures at several roadway and utility crossings along the north and south levees of the American River to control underseepage; and
- armoring portions of the north and south levees of the American River and their adjacent banks to address the potential for erosion during sustained high-flow events.

2.5 SACRAMENTO RIVER LEVEE IMPROVEMENTS

The east levee of the Sacramento River downstream of the mouth of the American River has been the focus of a substantial erosion control and seepage remediation effort over the past three years. This effort strengthened this levee to withstand a 100-year flood event in the Sacramento River watershed. However, it is likely that additional work will be needed to provide safe containment of a "200-year" flood once a thorough evaluation of the levee is completed. This work could include:

- raising portions of the levee in the Pocket area and in the vicinity of the town of Freeport to provide adequate freeboard above the "200-year" design water surface; and
- constructing a combination of cutoff walls and relief wells in the vicinity of the Pocket area to control underseepage.

2.6 NATOMAS LEVEE IMPROVEMENT PROGRAM

Completion of SAFCA's North Area Local Project has substantially reduced the risk of flooding in the Natomas basin from the American River and its tributaries east of the basin. However, recently completed levee evaluations have indicated that the risk of flooding due to high flows in the Sacramento River and its tributary streams is greater than previously believed. The Natomas Levee Improvement Program would address this risk and provide the Natomas basin with a "200-year" level of flood protection by raising and strengthening the perimeter levee system around the basin. This program includes the following elements:

- freeboard increases along portions of the Sacramento River east levee and the Natomas Cross Canal (NCC) south levee, the Pleasant Grove Creek Canal (PGCC) west levee and portions of the Natomas East Main Drainage Canal (NEMDC) west levee;
- erosion treatments on the Sacramento River east levee, the NCC south levee, and possibly the PGCC and NEMDC west levee; and
- seepage remediation on the NCC south levee, the Sacramento River east levee, the American River north levee, and the PGCC and NEMDC west levee.

The proposed freeboard increases would provide a minimum of 3 feet of freeboard above the "200-year" water surface elevation in the Sacramento River, NCC, NEMDC and PGCC, except at the intersection of the PGCC and Sankey Road where the "gap" in the PGCC levee would

remain to allow Sankey Road to pass through the levee at ground elevation. As part of this program, SAFCA would contribute to the cost of implementing federally authorized freeboard increases along the north levee of the NCC by purchasing borrow material for Natomas levee raising activities from Reclamation District 1001, the local sponsor of the NCC north levee improvement project. The proposed erosion treatments would involve the placement of rock revetment at several locations along the waterside slope of the levee located along the east bank of the Sacramento River. Some of this erosion control work could be avoided by setting back a portion of the east levee of the Sacramento River downstream of the mouth of the NCC. This option would require federal and/or State support to cover its added costs.

2.7 SOUTH SACRAMENTO STREAMS GROUP PROJECT

Improvements to the major levees included in the South Sacramento Streams Group (SSSG) Project have been underway for several years in order to provide increased flood protection to the southern portions of the City of Sacramento. The Consolidated District would provide funding to pursue the following uncompleted elements:

- excavating selected reaches of Morrison Creek, Elder Creek, Florin Creek, and Unionhouse Creek and constructing floodwalls to increase the channel capacity and ensure safe containment design flood flows;
- retrofitting stream passage facilities beneath several local bridge crossings to ensure efficient passage of flood flows;
- realigning portions of existing levees;
- installing box culverts at several Florin Creek crossings to increase the effective flow area and reduce the head loss; and
- providing flood insurance or flood proofing for residential structures in the Beach Lake floodplain downstream of the project.

These measures, when combined, would increase the capacity of these streams to safely contain a 100-year flood event in the SSSG watershed.

2.8 NORTH SACRAMENTO STREAMS FLOOD CONTROL IMPROVEMENTS

The North Sacramento area east of Natomas contains several urbanized floodplains that are threatened by peak flood flows in the streams that run through the area, including Dry Creek, Robla Creek, Arcade Creek, and Magpie Creek (the “North Sacramento Streams”). These streams are hydraulically connected to the lower American River through the NEMDC (Steelhead Creek), which forms the eastern boundary of the Natomas area and carries flows from these streams to the lower American River in flood conditions. While substantial improvements to the levees along these streams have been completed as part of SAFCA’s North Area Local Project, recent changes in USACE levee design requirements and guidance documents warrant additional investigation of seepage and underseepage conditions affecting the improved levee system. Depending on the outcome of this investigation and analysis, design and construction of additional improvements to the Dry Creek north levee, the Dry/Robla Creek south levee, the Arcade Creek north and south levees and the Magpie Creek Diversion Channel (MCDC) west levee may be required to provide “200-year” urban-standard flood protection to the urban areas protected by these levees. These improvements could include:

- subsurface investigations and geotechnical analyses of the NEMDC east levee, Dry Creek north levee, the Dry/Robla Creek south levee, and the Arcade Creek north and south levees to evaluate their ability to ensure safe containment of design flood flows;
- retrofitting the levees and appurtenant drainage features to resist stability, through-seepage, and underseepage issues identified by the above investigations and analyses;
- rehabilitation of the MCDC west levee in the vicinity of Raley Boulevard to prevent or reduce overflow into the old Magpie Creek floodplain; and
- right-of-way acquisition to allow maintenance of the flood control facilities.

2.9 ENVIRONMENTAL ENHANCEMENTS

The Consolidated District would also provide funding for environmental enhancements along the American River Parkway and at Folsom Dam. These project components were authorized by Congress to complement the effort to increase the flood control storage capacity of the dam. They reflect SAFCA's statutory mandate to carry out the Agency's flood control responsibilities in a manner that provides optimum protection to the environment, and, based on existing State law and SAFCA's accumulated experience in implementing large scale flood control improvement programs, these environmental enhancement activities are likely to reduce the local cost of the overall improvement program and expedite its completion.

In the Parkway, the environmental enhancements would include grading and excavating soils on the floodplain and creating side channels off the main American River channel to provide hydrology supportive of wetlands and riparian habitat in the Woodlake and Bushy Lake areas on the north side of the river where nonnative vegetation would be removed and replaced with native trees and shrubs suited to riparian woodland, wetlands, and oak woodland/savannah landscapes.

At Folsom Dam the environmental enhancements would involve improving the temperature control shutters that are used to manage the temperature of water entering the dam's power-generating turbines and being discharged to the lower American River. The current manual operation of these facilities is labor intensive, time-consuming, and, therefore, less frequent than desirable for maintaining optimal temperature conditions in the river during the summer and fall seasons for protected anadromous fish while managing the size of the reservoir to be optimally responsive to potential flooding conditions on short notice. The Consolidated District would provide a share of the funding needed to redesign and mechanize the shutter system in order to increase operational efficiency of the dam and improve downstream fish habitat conditions.

2.10 SYSTEM OPERATION AND MAINTENANCE

The system operation and maintenance component of the Consolidated District would be used to fund the incremental increase in operation and maintenance costs attributable to the funded improvements and the aging of the flood control system over time. These activities would consist of regular urban levee maintenance; a variety of waterside and landside levee strengthening efforts, including bank protection, encroachment management, vegetation management, improved system access, levee monitoring and flood fight operations during a flood event; and repairs to damaged infrastructure. The new district would also fund any operation and maintenance responsibilities imposed on SAFCA in connection with the Folsom Dam Modification Project.

2.11 NALP DEBT SERVICE

The Consolidated District would provide funding to refinance the outstanding principal balance of bonds issued in connection with the North Area Local Project that were used to finance a portion of the cost of raising and strengthening the levees along the southeastern perimeter of the Natomas basin and the major creeks and streams in the North Sacramento area east of the basin.

3.0 ESTIMATED COST OF FUNDED PROJECTS AND ACTIVITIES

3.1 GENERAL

This section discusses the estimated cost of the projects and activities that would be funded by the Consolidated District and the assumptions underlying SAFCA's determination of the local share of this cost. SAFCA anticipates that virtually all of the funded capital improvement projects will be federally authorized and will be subject to cost sharing by the federal government and the State of California under established cost sharing guidelines. As a general rule, the cost share to be provided by the federal government for projects authorized prior to 1999 is 75 percent. For projects authorized in 1999 or after, this share is assumed to be 65 percent. Under applicable State law, local sponsors must provide at least 30 percent of the remaining non-federal share while the State provides a maximum of 70 percent. In practice, this means that for projects authorized prior to 1999, SAFCA's share of the total project cost is generally 7.5 percent; while for projects authorized in 1999 or later, this share is assumed to be 10.5 percent. The federal government will also provide 65 percent of the total cost of federally authorized environmental enhancement projects, with the State and local interests providing equal shares of the remaining 35 percent.

3.2 FOLSOM DAM MODIFICATIONS

The Folsom Dam Modifications Project was authorized by Congress in 1999. The project is intended to increase the dam's low level discharge and surcharge storage capacities in order to increase the reservoir storage space available for flood control. The initial design of the improvements needed to accomplish these objectives is being revised pursuant to a Post-Authorization Change Report which the USACE is preparing in cooperation with Reclamation for Congressional authorization in 2007. SAFCA anticipates that the redesigned project, which includes a new gated auxiliary spillway, replacement or modification of the dam's existing three emergency spillway gates, and a new 3.5-foot concrete parapet wall along the top of the dam's earthen dikes and wing dams, will be constructed for a total cost of $1.5 billion. SAFCA anticipates that 15 percent of this cost ($225 million) will be allocated to dam safety with the remaining 85 percent ($1.275 billion) being allocated to flood control. SAFCA's share of this flood control total will be 10.5 percent or $133.8 million, with the State providing 24.5 percent, or $312.4 million, and the federal government providing 65 percent or $828.8 million.

3.3 FOLSOM BRIDGE CONSTRUCTION

The Folsom Bridge Project was authorized by Congress in 2003. This authorization allocates a portion of the total cost of the project to flood control in order to mitigate for the required closure of Folsom Dam Road due to the modification of Folsom Dam. SAFCA anticipates that the total project cost will be $125 million. Of this total, $45 million will be allocated to flood control. SAFCA's share of this cost will be 10.5 percent or $4.7 million. The balance of the cost of the project will be provided by the federal government, the State, and the City of Folsom which is serving as the non-federal sponsor of the project.

3.4 AMERICAN RIVER LEVEE IMPROVEMENTS

Improvements to the levees along the American River downstream of Folsom Dam were initially authorized by Congress in 1996 as part of the American River Common Features Project. The

authorized improvements consist primarily of seepage control measures, including cutoff walls and closure structures along extensive reaches of the levee system. In 1999, Congress broadened the scope of the authorized project to include raising portions of the north and south levees of the American River and construction of a closure structure across the Mayhew Drain. While much of this work has been completed at a cost of approximately $140 million, SAFCA anticipates that an additional $100 million will be needed to complete the authorized improvements. Because the project was initially authorized in 1996, SAFCA's share of this cost is 7.5 percent or $7.5 million, the State's share is 17.5 percent or $17.5 million, and the federal government's share is 75 percent or $75 million.

SAFCA anticipates that additional improvements to the American River levee system will be needed to accommodate the more efficient operation of Folsom Dam that will be possible once the Folsom Dam Modifications Project is completed. These additional improvements will consist primarily of erosion control measures to ensure that the levee system can safely contain sustained flows up to 160,000 cubic feet per second in the event of an extreme flood in the American River watershed. The cost of these additional improvements is estimated to be $60 million. SAFCA anticipates that Congress will authorize these improvements as part of an expanded American River Common Features Project once the design and operational requirements of the Folsom Dam Modifications Project are settled and the USACE has completed a General Re-Evaluation Report on these project elements. SAFCA's share of this cost will be 10.5 percent or $6.3 million, the State's share will be 24.5 percent or $14.7 million, and the federal government's share will be 65 percent or $39 million.

3.5 SACRAMENTO RIVER LEVEE IMPROVEMENTS

Improvements to the east levee of the Sacramento River downstream of the mouth of the American River are likely to be needed to ensure that this levee can safely contain a 200-year flood in the Sacramento River watershed. Although no detailed evaluation of the necessary improvements has been completed, SAFCA anticipates that underseepage control measures, including deep cutoff walls, will be needed along much of this 12 mile reach of the levee system. Some levee raising through the installation of flood walls along the top of the levee may also be required. SAFCA anticipates that Congress will authorize these improvements as part of an expanded American River Common Features Project once the detailed levee evaluations are completed and the USACE has completed a General Re-Evaluation Report on these project elements. The estimated total cost of these improvements is $340 million. SAFCA's share of this cost will be 10.5 percent or $35.7 million, the State's share will be 24.5 percent or $83.3 million, and the federal government's share will be 65 percent or $221 million.

3.6 NATOMAS LEVEE IMPROVEMENT PROGRAM

Improvements to the levees protecting the Natomas basin were initially authorized in 1993 as a separate element of the ongoing American River Watershed Investigation. These improvements consisted primarily of raising levees along the streams and canal system bordering the southeastern flank of the basin and extending eastward into the North Sacramento and Rio Linda areas of the City and County of Sacramento. These improvements were designed to safely contain extreme floods in the American River watershed and the watersheds contributing run-off to the tributary streams. SAFCA constructed these improvements as part of the North Area Local Project.

In 1996, Congress authorized improvements to the east levee of the Sacramento River downstream of the Natomas Cross Canal (NCC) to control high flows in the Sacramento River watershed. These improvements were included as the Natomas Elements of the American River Common Features Project. In 1999, Congress broadened this authorization to include levee raising along the south levee of the NCC. In the course of designing these improvements, the USACE determined that the objective of providing at least a 200-year level of flood protection to the Natomas basin could not be achieved without broadening the scope of the project to include potentially extensive measures to control levee underseepage. Subsequent levee evaluations by the USACE and SAFCA confirmed this determination. As a result, SAFCA developed a program of improvements for the levees protecting the Natomas basin including underseepage control measures, levee raising, and erosion control measures. The total cost of this program is estimated to be $414 million. SAFCA anticipates that these improvements will be authorized by Congress once the USACE completes a General Re-Evaluation Report on the Natomas Elements of the American River Common Features Project. SAFCA's share of the cost of these improvements will be 10.5 percent or $43.5 million, the State's share will be 24.5 percent or $101.4 million, and the federal government's share will be $269.1 million.

3.7 SOUTH SACRAMENTO STREAMS GROUP PROJECT

The South Sacramento Streams Group Project consists of improvements to the levees and channels along Morrison Creek and its tributaries in South Sacramento, raising the Beach Lake Levee which extends eastward from the Sacramento River to Morrison Creek, and constructing a ring levee around the Sacramento County Wastewater Treatment Plant Facility (Treatment Facility). These improvements were authorized by Congress in 1999. The improvements to the Beach Lake Levee and the ring levee around the Treatment Facility have been completed at a cost of approximately $30 million. SAFCA estimates that the work remaining along Morrison Creek and its tributaries will cost an additional $85 million. SAFCA's share of this cost is 10.5 percent, the State's share is 24.5 percent and the federal government's share is 65 percent. However, because the ring levee was completed entirely at local expense, and because SAFCA has advanced significant funding for project planning and design, SAFCA has accumulated credits sufficient to reduce its future contribution to the project to $3 million, of which $2 million will be spent to cover flood insurance, flood proofing for structures, or other projects that reduce flood damages in the Beach Lake floodplain downstream of the project, which were mitigation measures required of the original project. The remaining State share is $20.3 million, and the federal government's share is $61.7 million.

3.8 NORTH SACRAMENTO STREAMS FLOOD CONTROL IMPROVEMENTS

Substantial improvements to the levees along the canal system and tributary streams east of the Natomas basin have been completed as part of the North Area Local Project. These improvements include construction of a new levee along the north side of Dry Creek, and levee raising and strengthening along the east side of the Natomas East Main Drainage Canal (Steelhead Creek), the south side of Dry/Robla Creek and the north and south sides of Arcade Creek. New federal levee design guidelines could require additional work affecting portions of these improved levees. In addition, SAFCA has long planned to cooperate with the USACE and the State to improve the left bank levee of the Magpie Creek Diversion Channel in the vicinity of Raley Boulevard. SAFCA estimates that the total cost of these improvements is $16.7 million. Because federal cost sharing is assured only for the Magpie Creek element of this program,

SAFCA's share of the total cost is $5 million, the State's share is $7.3 million, and the Federal share is $4.4 million.

3.9 ENVIRONMENTAL ENHANCEMENTS

As part of the authorization of the Folsom Dam Mini-Raise Project in 2003, Congress also authorized a series of environmental enhancement projects under the USACE's ecosystem restoration authority. These projects include improvements to the temperature control facilities that govern the inflow of reservoir water to Folsom Dam's hydropower penstocks, and enhancements to upland and floodplain habitats in the Woodlake and Cal Expo areas of the American River Parkway. SAFCA estimates that the total cost of these improvements will be $40 million. Under applicable federal guidelines, the federal government's share of this cost is 65 percent or $26 million. The State Legislature has authorized the State to provide 50 percent of the remaining non-federal share or $7 million. SAFCA's contribution will therefore also be $7 million.

These project components have been included in the program of improvements covered by the Consolidated District in order to address the requirements of Water Code § 12585.7(d) (part of AB 1147, adopted in 2000). This statute calls for the State to pay 50 percent rather than 70 percent of the non-Federal share of all flood control projects authorized by the Legislature on or after January 1, 2002, unless such projects make a significant contribution to a series of objectives specified in the statute, including environmental enhancement. The American River Parkway enhancements and Folsom Dam temperature control improvements would significantly contribute to the environmental enhancement objective and would therefore provide greater assurance that the State will contribute 70 percent of the non-federal share of the cost of the Folsom Dam Modifications Project. Thus, for a local cost of $7 million in environmental enhancements, property owners in the American River floodplain would avoid as much as a $90 million increase in their contribution to the cost of improving Folsom Dam.

3.10 SYSTEM OPERATION AND MAINTENANCE

As a condition of securing federal and State cost sharing for all of the above projects, SAFCA must provide assurances that the constructed improvements are maintained in accordance with adopted federal and State standards. These projects principally involve improvements to the existing levee system in the Sacramento area. SAFCA has consulted with its member agencies responsible for maintaining the affected levees to develop an appropriate cost estimate for following through on the required assurances. The agencies have agreed on a cost formula that they believe will allow them to carry out the required maintenance effort. This formula is based on an estimate of the extent of the levee improvements within each local maintenance district and an estimate of the cost per mile that is needed to cover the maintenance effort. As set forth in Table 3-1, this formula assumes a total of 72 miles of improved levee multiplied by $25,000 per mile to generate an annual total of $1.8 million. This sum is subject to adjustment based on the actual needs of the maintaining agencies.

In addition, SAFCA has assumed that $1 million per year may be needed to offset any reservoir operation or dam maintenance obligations that may be imposed on the Agency in connection with the Folsom Dam Modifications Project. Since these obligations will not mature for at least 7 to 10 years, SAFCA anticipates that in the intervening years, this sum could be devoted to

TABLE 3-1: SYSTEM OPERATION AND MAINTENANCE COSTS

Project Feature	Length of Levees to Maintain	Annual Levee Maintenance Cost ($25,000/mi)	Folsom Dam and Levee Encroachments Annual Maintenance Cost	Total Annual Maintenance Cost
Folsom Dam			$1,000,0000	**$1,000,000**
American River Levees	20 miles	$500,000		**$500,000**
Sacramento River Levees	12 miles	$300,000		**$300,000**
Natomas Levees	24 miles	$600,000		**$600,000**
South Sacramento Streams Group Levees and Floodwalls	12 miles	$300,000		**$300,000**
North Sacramento Streams Levees	4 miles	$100,000		**$100,000**
TOTAL	72 miles	$1,800,000	$1,000,000	**$2,800,000**

addressing levee and floodway encroachments that hinder operation and maintenance of portions of the lower American River and lower Sacramento River levee systems. Finally, SAFCA anticipates that as growth occurs in the Consolidated District over time, and the funded improvements age, the increase in annual assessments will be devoted as necessary to these operation and maintenance efforts.

3.11 NALP DEBT SERVICE

SAFCA financed much of the cost of the North Area Local Project through the issuance of bonds in 1995 and 1996. These bonds, which have an outstanding principal balance of $34.5 million, were refinanced in 2005 to take advantage of reduced interest rates. The annual debt service on the new bonds is $2.8 million in order that the bonds will be fully paid in 2025. In connection with formation of the Consolidated District, SAFCA is proposing to refinance these bonds in order to extend the repayment period so that it is consistent with the life of the Consolidated District, thereby further reducing the annual amount of the debt service to $2.2 million per year. This cost will remain on the properties currently bearing it; it will not be shifted to other properties not already paying for the bonds.

3.12 SUMMARY

Table 3-2 presents a summary of the total cost of the projects to be funded by the Consolidated District and the cost shares allocable to the participating agencies. Excluded from Table 3-2 are annual costs for System Operations and Maintenance and NALP Debt Service which are entirely

locally funded by the Consolidated District. These annual costs are reflected in the cash flow analysis, Table 4-1.

TABLE 3-2: PROJECT COSTS[1] AND COST-SHARES

Project Feature	Project Cost	Federal Share	State Share	SAFCA Share	City of Folsom Share
Folsom Dam Improvements	$1,500.0.0	$1,053.8	$312.4	**$133.8**	
Folsom Bridge	$125.0	$66.8	$9.0	**$4.7**	$44.5
American River Levee Improvements	$160.0	$114.0	$32.2	**$13.8**	
Sacramento River Levee Improvements	$340.0	$221.0	$83.3	**$35.7**	
Natomas Levees	$414.0	$269.0	$101.5	**$43.5**	
South Sacramento Streams Group	$85.0	$61.7	$20.3	**$3.0**	
North Sacramento Streams	$16.7	$4.4	$7.3	**$5.0**	
Environmental Enhancements	$40.0	$26.0	$7.0	**$7.0**	
TOTAL	**$2,680.7**	**$1,816.7**	**$573.0**	**$246.5**	**$44.5**

[1] In millions of dollars. Excludes annual cost of System Operation and Maintenance and NALP Debt Service which are entirely SAFCA funded by Consolidated District

4.0 FINANCING PLAN

4.1 GENERAL

In order to determine the annual financing requirements necessary to fund SAFCA's share of the total cost of the projects and activities covered by the Consolidated District, SAFCA created a cash flow analysis and financing plan representing the likely timing for carrying out these projects and activities and the resulting funding demands on the Agency. The key assumptions supporting this analysis are outlined below.

4.2 KEY ASSUMPTIONS

The most important assumption in the cash flow analysis is that virtually all of the funded improvements will be subject to federal cost sharing. Many of these improvements are currently authorized, and all of them are logical extensions of existing authorized projects for which it has been determined that a broadening of the project scope and cost ceiling is required in order to secure the underlying Federal interest in the project. Such extensions are the predictable outcome of changing circumstances, new engineering insights, and the application of appropriate adaptive management strategies. The federal process anticipates these developments and provides the USACE with the necessary managerial tools.

The cash flow analysis also assumes that there will be State cost sharing for all of the funded improvements. In most cases, it is assumed that this share will amount to 70 percent of the non-Federal cost of the improvements. This assumption is uncertain, however, because the State Department of Water Resources has not yet adopted regulations implementing Water Code Section 12585.7(d) (AB 1147, adopted in 2000). While all of the improvements that would be covered by the Consolidated District were either authorized prior to the effective date of AB1147 or would become part of projects authorized prior to this date, and thus should not be subject to any reduction in the State's cost share, this conclusion is uncertain. Therefore, in order to increase the certainty that the State share will remain 70 percent rather than 50 percent of the non-federal share of the cost of the Folsom Dam Modifications Project, the improvement program covered by the Consolidated District includes environmental enhancements that would contribute significantly to the objectives specified in Water Code Section 12585.7(d)(1).

The cash flow analysis assumes that SAFCA and the State will take advantage of federal crediting mechanisms to advance the completion date of some of the improvements that would be covered by the Consolidated District. Specifically, the analysis assumes that the State will use its Proposition 1E bond funds and SAFCA will use the bonding capacity of the Consolidated District to construct substantial portions of the Natomas Levee Improvement Program prior to the USACE's completion of its General Re-Evaluation Report on the Natomas Elements of the American River Common Features Project. Prior to initiating construction of this work, the State and SAFCA will seek assurances from the USACE pursuant to Section 104 of the Water Resources Development Act of 1986, that: (1) this work is consistent with the objectives of the Natomas Element of the authorized American River Common Features Project; (2) there is likely a federal interest in broadening the scope of the Common Features Project to include this work; and (3) upon Congress' authorization of this work, the State and SAFCA will receive credit to

reduce the non-federal share of the cost of the remaining elements of the American River Common Features Project.

4.3 CASH FLOW ANALYSIS

Table 4-1 presents the cash flow analysis for years 2006-07 through 2026-27. It assumes an initial annual assessment of $18.1 million. This assessment is expected to grow by about $200,000 per year as new development occurs in the protected 200-year floodplain. This incremental increase in assessments is allocated to system operation and maintenance activities. In order to fund SAFCA's share of the total cost of the projects covered by the Consolidated District, the cash flow analysis assumes that SAFCA will issue three bonds: (1) one in 2007 in the amount of $113 million which will be used to repay the $10 million in loans that SAFCA obtained from the City and the County of Sacramento in 2006 to support formation of the Consolidated District and cover project costs through 2010; (2) a second bond in 2011 in the amount of $40 million to cover project costs through 2013; and (3) a third bond in 2014 in the amount of $44 million to cover project costs through 2018 when it is assumed that all capital improvement work will be completed. These bonds will be structured to provide repayment by the end of the authorized assessment period for the Consolidated District in 2037. Table 4-1 does not show the last 10 years of the Consolidated District. For those years, the cash flow is assumed to be similar to year 2026-27.

The cash flow analysis reflects the following assumptions regarding federal crediting for State and SAFCA advance funding of the Natomas Levee Improvements:

- SAFCA's share of the Natomas project is $43.5 million (Table 3-2). SAFCA, using the bonding capacity of the Consolidated District, will advance $34.5 million towards the early completion of the Natomas Levee Improvements for a total contribution of $78.0 million (Table 4-1). SAFCA's share of the American River and Sacramento River Levee Improvements is reduced by an equivalent amount of $5.2 million and $29.3 million, respectively.
- The State's share of the Natomas project is $101.5 million (Table 3-2). The State will advance $80.5 million from Proposition 1E bond funds towards the early completion of the Natomas Levee Improvements for a total contribution of $182.0 million (Table 4-1). The State's share of the American River and Sacramento River Levee Improvements is reduced by an equivalent amount of $12.1 million and $68.4 million, respectively.
- The federal share of the Natomas project is $269.0 million (Table 3-2). This share will be reduced by $115.0 million, the amount of the federal contribution that is advanced by SAFCA and the State together, for a total remaining federal contribution of $154.0 million (Table 4-1). The federal share of the American River and Sacramento River Levee Improvements is increased by an equivalent amount of $17.3 million and $97.7 million, respectively.

TABLE 4-1: CASH FLOW ANALYSIS

Project	Agency	Total Cost	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Folsom Dam	Federal (Dam Safety)	225.0	5.0	10.0	10.0	20.0	45.0	45.0	45.0
Modifications	Federal	828.8	4.3	7.6	77.0	97.0	108.2	108.2	68.2
	State	312.4	1.6	2.9	26.8	35.1	40.6	40.6	25.7
	SAFCA	133.8	0.7	1.2	11.9	16.7	17.7	17.7	11.2
	Total	1,500.0	11.6	21.7	125.7	168.8	211.5	211.5	150.1
Folsom Bridge	Federal	66.8	9.0	29.4	28.4				
	State	9.0		4.5	4.5				
	SAFCA	4.7		2.4	2.3				
	Folsom	44.5	2.0	19.2	23.3				
	Total	125.0	11.0	55.5	58.5				
American River	Federal	131.3	6.8	13.6	13.6	13.6	13.6	13.8	5.0
Levee	State	20.1	5.1	3.3	3.1	3.2	1.4	1.4	1.8
Improvements	SAFCA	8.6	2.3	1.4	1.4	1.4	0.5	0.5	0.8
	Total	160.0	14.2	18.3	18.1	18.2	15.5	15.7	7.6
Sacramento River	Federal	318.7							28.0
Levee	State	14.9							10.3
Improvements	SAFCA	6.4							4.5
	Total	340.0							42.8
Natomas	Federal	154.0	2.6	2.6	2.6	2.6	2.5	70.6	70.5
Levees	State	182.0	3.4	24.0	51.6	51.5	51.5		
	SAFCA	78.0	7.1	10.1	20.3	20.3	20.2		
	Total	414.0	13.1	36.7	74.5	74.4	74.2	70.6	70.5
South Sacramento	Federal	61.7	10.7	10.0	10.5	7.7	7.6	7.6	7.6
Streams Group	State	20.3	3.6	3.3	3.4	2.5	2.5	2.5	2.5
	SAFCA	3.0	0.7	0.3	2.0				
	Total	85.0	15.0	13.6	15.9	10.2	10.1	10.1	10.1
North	Federal	4.4			4.4				
Sacramento	State	7.3			1.7		2.8	2.8	
Streams	SAFCA	5.0		0.3	1.7	0.6	1.2	1.2	
	Total	16.7		0.3	7.8	0.6	4.0	4.0	
Environmental	Federal	26.0			14.8				
Enhancements	State	7.0			4.0				
	SAFCA	7.0			4.0				
	Total	40.0			22.8				
Total Capital	Federal (Dam Safety)	225.0	5.0	10.0	10.0	20.0	45.0	45.0	45.0
Projects	Federal	1,591.7	33.4	63.2	151.3	120.9	131.9	200.2	179.3
	State	573.0	13.7	38.0	95.1	92.3	98.8	47.3	40.3
	SAFCA	246.5	10.8	15.7	43.6	39.0	39.6	19.4	16.5
	Folsom	44.5	2.0	19.2	23.3				
	Total	2,680.6	64.9	146.1	323.3	272.2	315.3	311.9	281.1
SAFCA Financing	2007 Bond	113.0		7.1	7.1	7.1	7.1	7.1	7.1
Annual Debt Service	2011 Bond	40.0						2.8	2.8
	2014 Bond	44.0							
System O&M	SAFCA			2.8	3.0	3.2	3.4	3.6	3.8
NALP Debt Service	SAFCA			2.2	2.2	2.2	2.2	2.2	2.2
	Total	197.0		12.1	12.3	12.5	12.7	15.7	15.9
SAFCA Annual	Assessments		3.7	18.1	18.3	18.5	18.7	18.9	19.1
Revenue	Bonds			113.0				40.0	
	Prior Yr Balance		0.0	(7.1)	96.2	62.9	32.7	0.5	24.3
	Total		3.7	124.0	114.5	81.4	51.4	59.4	43.4
SAFCA Annual	Expenditures		10.8	27.8	55.9	51.5	52.3	35.1	32.4
Balance	Balance		(7.1)	96.2	58.6	29.9	(1.0)	24.3	11.0
	Interest			0.0	4.3	2.8	1.5	0.0	1.1
	Yr End Balance		(7.1)	96.2	62.9	32.7	0.5	24.3	12.1

TABLE 4-1: CASH FLOW ANALYSIS (CONTINUED)

Project	Agency	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Folsom Dam	Federal (Dam Safety)	45.0							
Modifications	Federal	68.2	58.1	58.0	58.0	58.0	58.0		
	State	25.7	22.7	22.7	22.7	22.7	22.6		
	SAFCA	11.2	9.0	9.5	9.0	9.0	9.0		
	Total	150.1	89.8	90.2	89.7	89.7	89.6		
Folsom Bridge	Federal								
	State								
	SAFCA								
	Folsom								
	Total								
American River	Federal	6.3	9.0	9.0	9.0	9.0	9.0		
Levee	State	0.8							
Improvements	SAFCA	0.3							
	Total	7.4	9.0	9.0	9.0	9.0	9.0		
Sacramento River	Federal	37.7	51.0	51.0	51.0	51.0	49.0		
Levee	State	4.6							
Improvements	SAFCA	1.9							
	Total	44.2	51.0	51.0	51.0	51.0	49.0		
Natomas	Federal								
Levees	State								
	SAFCA								
	Total								
South Sacramento	Federal								
Streams Group	State								
	SAFCA								
	Total								
North	Federal								
Sacramento	State								
Streams	SAFCA								
	Total								
Environmental	Federal	8.6	2.6						
Enhancements	State	2.0	1.0						
	SAFCA	2.0	1.0						
	Total	12.6	4.6						
Total Capital	Federal (Dam Safety)	45.0							
Projects	Federal	120.8	120.7	118.0	118.0	118.0	116.0		
	State	33.1	23.7	22.7	22.7	22.7	22.6		
	SAFCA	15.4	10.0	9.5	9.0	9.0	9.0		
	Folsom								
	Total	214.3	154.4	150.2	149.7	149.7	147.6		
SAFCA Financing	2007 Bond	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
Annual Debt Service	2011 Bond	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
	2014 Bond		3.3	3.3	3.3	3.3	3.3	3.3	3.3
System O&M	SAFCA	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4
NALP Debt Service	SAFCA	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	Total	16.1	19.7	19.9	20.1	20.3	20.5	20.7	20.9
SAFCA Annual	Assessments	19.3	19.5	19.7	19.9	20.1	20.3	20.5	20.7
Revenue	Bonds		44.0						
	Prior Yr Balance	12.1	0.4	34.2	26.1	18.1	9.8	1.1	0.9
	Total	31.4	63.9	53.9	46.0	38.2	30.1	21.6	21.6
SAFCA Annual	Expenditures	31.5	29.7	29.4	29.1	29.3	29.5	20.7	20.9
Balance	Balance	(0.1)	34.2	24.6	17.0	9.0	0.6	0.9	0.8
	Interest	0.5	0.0	1.5	1.2	0.8	0.4	0.0	0.0
	Yr End Balance	0.4	34.2	26.1	18.1	9.8	1.1	0.9	0.8

TABLE 4-1: CASH FLOW ANALYSIS (CONTINUED)

Project	Agency	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Folsom Dam	Federal (Dam Safety)						
Modifications	Federal						
	State						
	SAFCA						
	Total						
Folsom Bridge	Federal						
	State						
	SAFCA						
	Folsom						
	Total						
American River	Federal						
Levee	State						
Improvements	SAFCA						
	Total						
Sacramento River	Federal						
Levee	State						
Improvements	SAFCA						
	Total						
Natomas	Federal						
Levees	State						
	SAFCA						
	Total						
South Sacramento	Federal						
Streams Group	State						
	SAFCA						
	Total						
North	Federal						
Sacramento	State						
Streams	SAFCA						
	Total						
Environmental	Federal						
Enhancements	State						
	SAFCA						
	Total						
Total Capital	Federal (Dam Safety)						
Projects	Federal						
	State						
	SAFCA						
	Folsom						
	Total						
SAFCA Financing	2007 Bond	7.1	7.1	7.1	7.1	7.1	7.1
Annual Debt Service	2011 Bond	2.8	2.8	2.8	2.8	2.8	2.8
	2014 Bond	3.3	3.3	3.3	3.3	3.3	3.3
System O&M	SAFCA	5.6	5.8	6.0	6.2	6.4	6.6
NALP Debt Service	SAFCA	2.2	2.2	2.2	2.2	2.2	2.2
	Total	21.1	21.3	21.5	21.7	21.9	22.1
SAFCA Annual	Assessments	20.9	21.1	21.3	21.5	21.7	21.9
Revenue	Bonds						
	Prior Yr Balance	0.8	0.7	0.6	0.4	0.3	0.1
	Total	21.7	21.8	21.9	21.9	22.0	22.0
SAFCA Annual	Expenditures	21.1	21.3	21.5	21.7	21.9	22.1
Balance	Balance	0.7	0.5	0.4	0.3	0.1	(0.0)
	Interest	0.0	0.0	0.0	0.0	0.0	0.0
	Yr End Balance	0.7	0.6	0.4	0.3	0.1	(0.0)

Economic & Planning Systems

Public Finance
Real Estate Economics
Regional Economics
Land Use Policy

APPENDIX C

GROWTH PROJECTIONS

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APPENDIX C: GROWTH PROJECTIONS

This appendix details EPS's projected estimated damageable square feet for the 11-year period analyzed. The underlying development projections are based on Sacramento Area Council of Government's (SACOG's) 30-year development projections used for the Blueprint & Metropolitan Transportation Planning Purposes. The overall 30-year development projections from SACOG, when analyzed in detail by EPS, showed relatively straight-line development. Therefore, the 11-year period used in the DIF analysis was taken proportionately from the 30-year SACOG projections.

The six land use categories requested by SAFCA are as follows:

- Single-family one-story;
- Multifamily one-story;
- Single-family two-story;
- Multifamily two-story;
- Commercial; and
- Industrial.

SACOG was able to provide data about expected development in Sacramento and Sutter Counties over the next 30 years, although its land use categories do not match those requested by SAFCA. Using SACOG's Blueprint Modeling Land Use Menu 1 (Blueprint Menu), dated August 1, 2003, EPS was able to find some assumptions that could be applied to SACOG's projected development. Using these assumptions, EPS condensed the SACOG data into SAFCA's six land use categories.

PROJECTION OF DAMAGEABLE SQUARE FEET

The tables in this appendix calculate projected damageable square feet for all land uses for which the development fee would apply. The calculation is as listed below.

Table C-1 shows the range of dwelling units per acre that SACOG estimates for each of its land use categories, based on its Blueprint Menu. It also shows an estimated dwelling unit size (if applicable) and assumed number of stories for each SACOG land use, both of which EPS has estimated.

Table C-2 uses averages of the Blueprint Menu's units per acre and floor-area-ratio (FAR) ranges to estimate an assumed units per acre for residential and an assumed FAR for nonresidential development.

Next, EPS was able to project growth in residential and nonresidential acres for the six SAFCA land use categories, by each Impact Zone. The growth areas were divided into two subtotals: development located in the Natomas Basin and development located in other areas (**Table C-3**).[1]

Table C-4 summarizes the total projected residential units, for the Natomas Basin and development in other areas, by Impact Zone. **Table C-5** summarizes projected residential and nonresidential square feet by these same areas. **Table C-6** summarizes projected damageable square feet for these areas.

Table C-7 shows the calculation of the 11-Year portion of the 30-Year SACOG development projections.

Table C-8 (for each impact zone) shows how the projected acres, units, square feet, and damageable square feet shown in the summary **Tables C-4** through **C-6** were derived. It is assumed that damageable square feet will not reach beyond two stories. Therefore, if a building is taller than two stories, only the square footage of the first two stories is assumed to be damageable. **Table C-8** also represents the projections of damageable square feet for the entire SACOG growth area. **Tables C-8a** through **C-8ab** show these same projections for each individual SACOG growth area.

DETERMINATION OF LAND USES

SACOG was able to provide data about expected development in the region over the next 30 years, although its land use categories did not match SAFCA's. SACOG provided data in the form of 27 separate Impact Zones, located throughout Sacramento and Sutter Counties.

EPS condensed the SACOG data into SAFCA's six land use categories as shown in this appendix. Each SACOG land use has been assigned to one of SAFCA's six broader land use categories. This was done for each of the 27 separate SACOG floodplain storage areas. **Table C-9** shows the total acreage for all storage areas. **Tables C-9a** through **C-9ab** show the total acreage for each individual SACOG storage area.

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[1] SACOG's development projections cover the area encompassed by the 27 floodplain storage basins used in connection with the EAD analysis. The boundaries of the Natomas Basin are coterminous with nine of these storage basins, and the projections for these basins were used to account for this portion of the Program Area. However, the remaining 18 storage basins cover an area that is 37.3 percent larger than the portion of the Program Area outside the Natomas Basin. To account for this geographical difference, EPS reduced the growth projected for these 18 storage basins by 37.3 percent and assigned the balance to this portion of the Program Area.

In most cases, the SACOG data shown in **Appendix C** has not been adjusted. However, in some cases, such as the Sutter Point Specific Plan or Greenbriar Specific Plan areas, EPS had more up-to-date information on current land use projections. EPS has modified land uses for these storage areas and noted any modifications in a footnote as necessary.

Table C-1
Sacramento Area Flood Control Agency - Development Fee
SACOG Land Use Assumptions

Land Use	SACOG DU/Acre [1]	Assumed Average DU Size (Sq. Ft.) [2]	SACOG FAR [1]	Average Number of Structure Stories [3]
Single-Family - One-/Two-Story				
Rural Residential [1]	<= 1.0	2,500	NA	1.5
Very Low Residential	1.1 - 4	2,500	NA	1.5
Low-Density Residential	4.1 - 8	2,000	NA	1.8
Medium-Density Residential	8.1 - 12	1,200	NA	1.8
Agricultural Residential	<= 1.0	2,500	NA	1.5
Multifamily - One-Story	8.1 - 12	1,500	NA	1.8
Multifamily - Two-Story				
Medium-High-Density Residential	12.1 - 25	1,200	NA	2.5
High-Density Residential	25.1+	1,000	NA	3.5
Urban Residential	50.0 - 100+	900	NA	4
Commercial				
High-Intensity Office	NA	NA	1.1 - 3.0	6
Moderate-Intensity Office	NA	NA	0.3 - 1.0	3
Community/Neighborhood Retail	NA	NA	0.2 - 0.3	2
Regional Retail	NA	NA	0.2 - 0.3	1
Public/Quasi-Public	NA	NA	0.2 - 0.3	2.5
Community/Neighborhood Commercial/Office	NA	NA	0.2 - 0.3	2
Regional Commercial/Office	NA	NA	0.3 - 0.4	3
Mixed Use Employment Focus	15 - 25	NA	0.75 - 1.0	2.5
Mixed Use Residential Focus	60 - 90	NA	1.5 - 2.5	5
High-Density Mixed Use Center or Corridor	40 - 42	NA	1.0 - 1.2	3.5
Medical Facility	NA	NA	0.2 - 0.3	1
K-12 Schools	NA	NA	0.2 - 0.3	1
University/College	NA	NA	0.2 - 0.3	1
Industrial				
Light Industrial	NA	NA	0.2 - 0.3	1
Light Industrial Office	NA	NA	0.2 - 0.3	1
Heavy Industrial	NA	NA	0.1 - 0.2	1
Other				
Park	NA	NA	NA	NA
Agriculture	NA	NA	NA	NA
Airport	NA	NA	NA	NA

"assump"

Source: SACOG Land Use Menus and EPS.

[1] From SACOG Land Use Menus.
[2] EPS Assumption.
[3] Average number of stories based upon pictures of sample product envisioned per the SACOG land use projections.

Table C-2
Sacramento Area Flood Control Agency - Development Fee
EPS Base Assumptions Adapted from SACOG Assumptions

Land Use	Assumed Structure Stories [1]	Assumed Average DU Size	Assumed Units/Acre or FAR [2]
Source	*Table C-1*	*Table C-1*	
Single-Family - One-/Two-Story		*Sq. Ft.*	*Units/Acre*
Rural Residential	1.50	2,500	0.50
Very Low Residential	1.50	2,500	1.63
Low-Density Residential	1.80	2,000	4.81
Medium-Density Residential	1.80	1,200	8.81
Agricultural Residential	1.50	2,500	0.18
Multifamily - One-Story	1.80	1,500	8.81
Formula	*a*	*b*	*c*
Multifamily Residential - Two-Story [3]		*Sq. Ft.*	*Units/Acre*
Medium-High-Density Residential	2.50	1,200	14.46
High-Density Residential	3.50	1,000	29.66
Urban Residential	4.00	900	59.15
Source	*Table C-1*		
Commercial			*FAR*
High-Intensity Office	6.00	NA	2.05
Moderate-Intensity Office	3.00	NA	0.65
Community/Neighborhood Retail	2.00	NA	0.25
Regional Retail	1.00	NA	0.25
Public/Quasi-Public	2.50	NA	0.25
Community/Neighborhood Commercial/Office	2.00	NA	0.25
Regional Commercial/Office	3.00	NA	0.35
Mixed Use Employment Focus	2.50	NA	0.88
Mixed Use Residential Focus	5.00	NA	2.00
High-Density Mixed Use Center or Corridor	3.50	NA	1.10
Medical Facility	1.00	NA	0.25
K-12 Schools	1.00	NA	0.25
University/College	1.00	NA	0.25
Industrial			
Light Industrial	1.00	NA	0.25
Light Industrial-Office	1.00	NA	0.25
Heavy Industrial	1.00	NA	0.15
Other			
Park	NA	NA	NA
Agriculture	NA	NA	NA
Airport	1.00	NA	0.15

"sfperacre"

Source: EPS

[1] Damageable portion of structures is assumed to be limited to the first two floors of the structure for Single-Family Residential and the first floor only for all other land uses. This is similar to the SAFCA Consolidated Capital Assessment District methodology.
[2] The density assumption used reflects an average density within the SACOG Assumed range which reflects the projected number of dwelling unit estimated by SACOG and EPS.
[3] The damageable square feet of structure for multifamily residential is assumed to be limited to only 1st 2 floors of the structure.

Table C-3
Sacramento Area Flood Control Agency - Development Fee
Summary of Projected Acres by Storage Area

Storage Area	Projected Residential Acres: Single-Family One-Story	Single-Family Two-Story	Multifamily One-Story	Multifamily Two-Story	Total Residential	Projected Non-Residential Acres: Commercial	Industrial	Total Non-Residential	Total Acreage
Reference Table	*Table C-8*	*Table C-8*	*Table C-8*	*Table C-8*		*Table C-8*	*Table C-8*	*Table C-8*	
SA_27	0	0	0	0	0	0	0	0	0
SA_28	-13	-13	0	0	-27	0	172	172	145
SA_29	0	0	0	0	0	0	0	0	0
SA_30	589	1,767	1	179	2,536	1,096	2,008	3,104	5,640
SA_31	47	188	1	19	255	456	972	1,428	1,683
SA_32	434	1,659	1	562	2,656	656	120	776	3,432
SA_33	63	264	1	261	589	89	-36	53	642
SA_34	29	118	1	108	256	58	-1	57	313
SA_35	11	42	1	13	67	29	0	29	96
Natomas Basin [1]	**1,160**	**4,025**	**6**	**1,142**	**6,333**	**2,383**	**3,235**	**5,618**	**11,951**
SA_38	0	1	1	59	61	-57	0	-57	4
SA_39	2	7	1	77	87	19	-64	-44	43
SA_170	12	47	1	49	109	29	46	75	184
SA_171	11	46	1	117	176	82	3	84	260
SA_172	30	45	1	21	98	66	-1	65	163
SA_173	12	20	1	93	126	161	3	163	290
SA_174	18	68	1	64	150	36	73	110	260
SA_175	-1	-3	1	37	34	-14	-16	-29	5
SA_176	0	-1	1	68	68	2	-8	-6	62
SA_177	35	138	1	152	326	180	1,050	1,230	1,556
SA_178	24	96	1	136	257	17	22	39	296
SA_179	43	164	1	145	353	36	135	171	524
SA_180	400	1,354	1	576	2,332	128	299	427	2,759
SA_181	15	59	1	3	78	18	0	18	95
SA_182	330	983	1	553	1,868	114	46	160	2,028
SA_183	869	2,103	1	138	3,112	180	61	241	3,352
SA_206	24	94	1	88	207	50	101	151	358
SA_230	0	0	0	0	0	11	0	11	11
SA_231	142	545	1	222	911	282	288	570	1,481
All Other Areas	**1,967**	**5,768**	**18**	**2,599**	**10,352**	**1,336**	**2,041**	**3,378**	**13,729**
Total	**3,127**	**9,793**	**24**	**3,741**	**16,684**	**3,720**	**5,276**	**8,996**	**25,680**

"sum_acres"

Source: EPS

[1] Includes SA 27,28,29,30,31,32,33,34 and 35.

Table C-4
Sacramento Area Flood Control Agency - Development Fee
Summary of Project Residential Units

Impact Zone	Projected Residential Units Single-Family Units	Multifamily Units	Total Residential
Reference Table	*Table C-8*	*Table C-8*	
SA_27	0	0	0
SA_28	-5	0	-5
SA_29	0	0	0
SA_30	13,739	3,464	17,202
SA_31	2,497	439	2,936
SA_32	15,093	11,150	26,243
SA_33	2,519	4,456	6,975
SA_34	1,109	3,491	4,600
SA_35	394	711	1,105
Natomas Basin [1]	**35,347**	**23,711**	**59,058**
SA_38	4	2,759	2,763
SA_39	82	1,583	1,665
SA_170	459	932	1,391
SA_171	426	2,261	2,687
SA_172	203	442	645
SA_173	122	1,994	2,117
SA_174	517	1,561	2,078
SA_175	-22	1,248	1,226
SA_176	-5	3,936	3,931
SA_177	856	3,437	4,293
SA_178	779	3,445	4,224
SA_179	1,171	2,859	4,031
SA_180	9,920	11,448	21,368
SA_181	474	52	525
SA_182	7,283	11,002	18,285
SA_183	11,487	2,276	13,764
SA_206	712	2,149	2,861
SA_230	0	0	0
SA_231	5,088	3,521	8,609
All Other Areas	**39,558**	**56,905**	**96,463**
Total	**74,904**	**80,616**	**155,520**

"sum_units"

Source: EPS

[1] Includes SA 27,28,29,30,31,32,33,34 and 35.

Table C-5
Sacramento Area Flood Control Agency - Development Fee
Summary of Projected Residential Square Feet Developed

Impact Zone	Projected Residential Square Feet: Single-Family One-Story	Single-Family Two-Story	Multifamily One-Story	Multifamily Two-Story	Total Residential	Projected Non-Residential Square Feet: Commercial	Industrial	Other	Total Non-Residential	Total Square Feet
Reference Table	*Table C-8*	*Table C-8*	*Table C-8*	*Table C-8*		*Table C-8*	*Table C-8*		*Table C-8*	
SA_27	0	0	0	0	0	0	0		0	0
SA_28	-6,082	-6,082	0	0	-12,164	0	1,871,773		1,871,773	1,859,609
SA_29	0	0	0	0	0	0	0		0	0
SA_30	6,500,220	21,568,380	13,221	4,145,640	32,227,461	62,423,658	36,736,762		99,160,420	131,387,880
SA_31	758,160	3,032,640	13,221	430,000	4,234,021	14,929,754	10,583,991		25,513,745	29,747,766
SA_32	4,281,364	16,816,563	13,221	12,192,443	33,303,591	8,621,983	1,570,817		10,192,800	43,496,391
SA_33	684,669	2,752,890	13,221	5,074,627	8,525,407	948,258	-394,980		553,277	9,078,684
SA_34	302,143	1,208,513	13,221	3,424,012	4,947,889	1,657,131	-3,920		1,653,211	6,601,100
SA_35	108,557	434,229	13,221	639,405	1,195,412	881,066	0		881,066	2,076,478
Natomas Basin [1]	**12,629,031**	**45,807,132**	**79,325**	**25,906,127**	**84,421,616**	**89,461,851**	**50,364,442**		**139,826,293**	**224,247,909**
SA_38	1,406	5,623	13,221	2,550,752	2,571,002	-770,707	4,900		-765,807	1,805,195
SA_39	19,176	78,048	13,221	1,709,690	1,820,134	1,546,238	-653,618		892,621	2,712,755
SA_170	121,628	486,025	13,221	1,025,195	1,646,069	1,655,498	460,320		2,115,818	3,761,887
SA_171	117,954	473,896	13,221	2,482,899	3,087,970	1,603,248	37,549		1,640,796	4,728,766
SA_172	130,793	272,701	13,221	471,158	887,872	1,364,528	-7,623		1,356,905	2,244,777
SA_173	63,212	142,121	13,221	2,129,240	2,347,793	2,659,033	31,320		2,690,353	5,038,146
SA_174	169,695	670,067	13,221	1,614,419	2,467,402	717,607	650,133		1,367,740	3,835,142
SA_175	-6,502	-26,557	13,221	1,206,578	1,186,741	388,229	-169,884		218,345	1,405,085
SA_176	-2,003	-8,319	13,221	3,545,788	3,548,687	4,050,971	-83,069		3,967,902	7,516,589
SA_177	333,847	1,335,388	13,221	3,633,431	5,315,887	2,958,922	10,030,953		12,989,875	18,305,762
SA_178	240,479	967,611	13,221	3,545,463	4,766,774	2,151,004	291,024		2,442,028	7,208,802
SA_179	408,228	1,604,001	13,221	3,124,660	5,150,111	373,592	1,113,219		1,486,812	6,636,922
SA_180	3,526,712	12,991,371	13,221	12,511,802	29,043,105	2,554,761	3,644,578		6,199,339	35,242,445
SA_181	148,077	587,172	13,221	51,165	799,636	457,641	0		457,641	1,257,277
SA_182	2,424,222	8,973,758	13,221	12,020,048	23,431,249	9,082,184	504,098		9,586,282	33,017,531
SA_183	5,078,942	17,061,874	13,221	2,613,781	24,767,817	2,791,760	699,813		3,491,574	28,259,391
SA_206	233,943	923,762	13,221	2,225,656	3,396,582	989,302	896,281		1,885,582	5,282,164
SA_230	0	0	0	0	0	115,543	0		115,543	115,543
SA_231	1,411,960	5,554,084	13,221	4,098,430	11,077,695	7,587,107	3,005,052		10,592,159	21,669,853
All Other Areas	**14,421,767**	**52,092,625**	**237,976**	**60,560,156**	**127,312,524**	**42,276,461**	**20,455,047**		**62,731,508**	**190,044,032**
Total	**27,050,799**	**97,899,756**	**317,301**	**86,466,283**	**211,734,139**	**131,738,312**	**70,819,490**		**202,557,801**	**414,291,940**

"sum_sq_ft"

Source: EPS

[1] Includes SA 27,28,29,30,31,32,33,34 and 35.

Table C-6
Sacramento Area Flood Control Agency - Development Fee
Summary of Projected Damageable Square Feet

Impact Zone	Projected Residential Damageable Square Feet: Single-Family One-Story	Single-Family Two-Story	Multifamily One-Story	Multifamily Two-Story	Total Residential	Projected Non-Residential Damageable Square Feet: Commercial	Industrial	Other	Total Non-Residential	Total Damageable Square Feet
Reference Table	*Table C-8*	*Table C-8*	*Table C-8*	*Table C-8*		*Table C-8*	*Table C-8*	*Table C-8*		
SA_27	0	0	0	0	0	0	0		0	0
SA_28	-6,082	-6,082	0	0	-12,164	0	1,871,773		1,871,773	1,859,609
SA_29	0	0	0	0	0	0	0		0	0
SA_30	6,500,220	21,568,380	13,221	3,316,512	31,398,333	12,226,203	36,736,762		48,962,965	80,361,297
SA_31	758,160	3,032,640	13,221	245,714	4,049,735	5,803,172	10,583,991		16,387,163	20,436,898
SA_32	4,281,364	16,816,563	13,221	8,413,749	29,524,896	4,379,417	1,570,817		5,950,234	35,475,130
SA_33	684,669	2,752,890	13,221	3,759,935	7,210,715	427,062	-394,980		32,082	7,242,796
SA_34	302,143	1,208,513	13,221	1,966,427	3,490,304	283,928	-3,920		280,007	3,770,312
SA_35	108,557	434,229	13,221	324,914	880,921	268,391	0		268,391	1,149,312
Natomas Basin [1]	**12,629,031**	**45,807,132**	**79,325**	**18,027,251**	**76,542,739**	**23,388,173**	**50,364,442**		**73,752,616**	**150,295,355**
SA_38	1,406	5,623	13,221	1,329,930	1,350,179	-319,480	4,900		-314,579	1,035,599
SA_39	19,176	78,048	13,221	1,187,116	1,297,560	418,583	-653,618		-235,035	1,062,525
SA_170	121,628	486,025	13,221	729,150	1,350,023	591,519	460,320		1,051,840	2,401,863
SA_171	117,954	473,896	13,221	1,741,654	2,346,724	607,622	37,549		645,171	2,991,895
SA_172	130,793	272,701	13,221	322,915	739,629	510,407	-7,623		502,784	1,242,413
SA_173	63,212	142,121	13,221	1,421,962	1,640,515	1,099,302	31,320		1,130,622	2,771,137
SA_174	169,695	670,067	13,221	1,046,046	1,899,029	246,873	650,133		897,006	2,796,034
SA_175	-6,502	-26,557	13,221	688,416	668,578	34,873	-169,884		-135,011	533,568
SA_176	-2,003	-8,319	13,221	1,785,730	1,788,629	945,445	-83,069		862,377	2,651,005
SA_177	333,847	1,335,388	13,221	2,358,189	4,040,645	1,112,991	10,030,953		11,143,944	15,184,589
SA_178	240,479	967,611	13,221	2,240,440	3,461,751	719,139	291,024		1,010,164	4,471,914
SA_179	408,228	1,604,001	13,221	2,171,450	4,196,900	319,295	1,113,219		1,432,514	5,629,414
SA_180	3,526,712	12,991,371	13,221	8,674,960	25,206,263	978,209	3,644,578		4,622,787	29,829,050
SA_181	148,077	587,172	13,221	40,661	789,131	155,673	0		155,673	944,804
SA_182	2,424,222	8,973,758	13,221	8,310,694	19,721,895	2,260,121	504,098		2,764,220	22,486,115
SA_183	5,078,942	17,061,874	13,221	1,974,326	24,128,362	953,895	699,813		1,653,708	25,782,070
SA_206	233,943	923,762	13,221	1,442,091	2,613,016	340,341	896,281		1,236,622	3,849,638
SA_230	0	0	0	0	0	46,217	0		46,217	46,217
SA_231	1,411,960	5,554,084	13,221	3,156,489	10,135,754	2,452,090	3,005,052		5,457,142	15,592,896
All Other Areas	**14,421,767**	**52,092,625**	**237,976**	**40,622,218**	**107,374,585**	**13,473,117**	**20,455,047**		**33,928,164**	**141,302,749**
Total	**27,050,799**	**97,899,756**	**317,301**	**58,649,469**	**183,917,325**	**36,861,290**	**70,819,490**		**107,680,780**	**291,598,104**

"sum_damage"

Source: EPS

[1] Includes SA 27,28,29,30,31,32,33,34 and 35.

Table C-7
Sacramento Area Flood Control Agency - Development Fee
11-Year and 30-Year Allocable Square Feet

Land Use	30 Year Projected Damageable Square Feet in Storage Areas [1]	11 Year Projected Damageable Square Feet in Storage Areas [1]
Source	*Table C-6*	
Formula	*a*	*b = a / (11/30)*
Natomas Basin Development		
One-Story Residential		
Single-Family	12,629,031	4,630,645
Multifamily	79,325	29,086
Two-Story Residential		
Single-Family	45,807,132	16,795,948
Multifamily	18,027,251	6,609,992
Commercial	23,388,173	8,575,664
Industrial	50,364,442	18,466,962
Subtotal	**150,295,355**	**55,108,297**
All Other Development		
One-Story Residential		
Single-Family	14,421,767	5,287,981
Multifamily	237,976	87,258
Two-Story Residential		
Single-Family	52,092,625	19,100,629
Multifamily	40,622,218	14,894,813
Commercial	13,473,117	4,940,143
Industrial	20,455,047	7,500,184
Subtotal	**141,302,749**	**51,811,008**
Consolidated Land Use in Flood Plain		
One-Story Residential		
Single-Family	27,050,799	9,918,626
Multifamily	317,301	116,344
Two-Story Residential		
Single-Family	97,899,756	35,896,577
Multifamily	58,649,469	21,504,805
Commercial	36,861,290	13,515,806
Industrial	70,819,490	25,967,146
Subtotal	**291,598,104**	**106,919,305**

"11_yr"

Source: EPS

[1] Represents all Damageable Square in Impact Zones as provided by David Ford Consulting Engineering.

Table C-8
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area Total

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	345.65	173	432,062	432,062
Very Low Residential - One-Story	2,500	1.00	2.10	50%	572.51	1,203	3,008,499	3,008,499
Low-Density Residential - One-Story	2,000	1.00	5.28	20%	1,490.45	7,873	15,746,823	15,746,823
Medium-Density Residential - One-Story	1,200	1.00	8.96	20%	731.51	6,558	7,869,496	7,869,496
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	-13.29	-2	-6,082	-6,082
Subtotal Single-Family - One-Story					**3,126.83**	**15,805**	**27,050,799**	**27,050,799**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	345.65	173	432,062	432,062
Very Low Residential - Two-Story	2,500	2.00	2.10	50%	572.51	1,203	3,008,499	3,008,499
Low-Density Residential - Two-Story	2,000	2.00	5.28	80%	5,961.80	31,494	62,987,292	62,987,292
Medium-Density Residential - Two-Story	1,200	2.00	8.96	80%	2,926.05	26,232	31,477,985	31,477,985
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	-13.29	-2	-6,082	-6,082
Subtotal Single-Family					**9,792.7**	**59,099**	**97,899,756**	**97,899,756**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**24.0**	**212**	**317,301**	**317,301**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.81	100%	2,475.83	36,670	44,004,042	35,203,234
High-Density Residential	1,000	3.50	29.54	100%	1,049.84	31,012	31,011,600	17,720,914
Urban Residential	900	4.00	59.15	100%	215.09	12,723	11,450,641	5,725,321
Subtotal Multifamily - Two-Story					**3,740.8**	**80,405**	**86,466,283**	**58,649,469**
Total Units					**16,684.3**	**155,520**	**211,734,139**	**183,917,325**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	721.61	NA	64,438,273	10,739,712
Moderate-Intensity Office	NA	3.00	0.65	100%	653.18	NA	18,494,203	6,164,734
Community/Neighborhood Retail	NA	2.00	0.25	100%	128.70	NA	1,401,547	700,773
Regional Retail	NA	1.00	0.25	100%	304.37	NA	3,314,614	3,314,614
Public/Quasi-Public	NA	2.50	0.25	100%	-192.37	NA	-2,094,860	-837,944
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	765.18	NA	8,332,847	4,166,423
Regional Commercial/Office	NA	3.00	0.35	100%	106.83	NA	1,628,705	542,902
Mixed Use Employment Focus	NA	2.50	0.88	100%	449.83	NA	17,145,270	6,858,108
Mixed Use Residential Focus	NA	5.00	2.00	100%	126.23	NA	10,997,158	2,199,432
High-Density Mixed Use Center or Corridor	NA	3.50	0.81	100%	201.94	NA	7,095,227	2,027,208
Medical Facility	NA	1.00	0.25	100%	90.48	NA	985,327	985,327
K-12 Schools	NA	1.00	0.25	100%	319.73	NA	NA	NA
University/College	NA	1.00	0.25	100%	43.99	NA	NA	NA
Subtotal Commercial					**3,719.7**	**NA**	**131,738,312**	**36,861,290**
Industrial								
Light Industrial	NA	1.00	0.32	100%	4,858.54	NA	67,779,126	67,779,126
Light Industrial Office	NA	1.00	0.25	100%	71.46	NA	778,199	778,199
Heavy Industrial	NA	1.00	0.15	100%	346.21	NA	2,262,164	2,262,164
Subtotal Industrial					**5,276.2**	**NA**	**70,819,490**	**70,819,490**
Other								
Park	NA	NA	0.00	100%	1,223.74	NA	NA	NA
Agriculture	NA	NA	0.00	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	982.00	NA	6,416,388	6,416,388
Subtotal Other					**2,205.7**	**NA**	**6,416,388**	**6,416,388**
Total					**27,886.0**	**155,520**	**420,708,328**	**298,014,492**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8a
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_27

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9a*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.00	0	0	0
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	0.00	0	0	0
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	0.00	0	0	0
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**0.00**	**0**	**0**	**0**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.00	0	0	0
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	0.00	0	0	0
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	0.00	0	0	0
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**0.0**	**0**	**0**	**0**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**0.0**	**0**	**0**	**0**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	0.00	0	0	0
High-Density Residential	1,000	3.50	29.66	100%	0.00	0	0	0
Urban Residential	900	4.00	59.15	100%	0.00	0	0	0
Subtotal Multifamily - Two-Story					**0.0**	**0**	**0**	**0**
Total Units					**0.0**	**0**	**0**	**0**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.00	NA	0	0
Moderate-Intensity Office	NA	3.00	0.65	100%	0.00	NA	0	0
Community/Neighborhood Retail	NA	2.00	0.25	100%	0.00	NA	0	0
Regional Retail	NA	1.00	0.25	100%	0.00	NA	0	0
Public/Quasi-Public	NA	2.50	0.25	100%	0.00	NA	0	0
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	0.00	NA	0	0
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**0.0**	**NA**	**0**	**0**
Industrial								
Light Industrial	NA	1.00	0.25	100%	0.00	NA	0	0
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Industrial					**0.0**	**NA**	**0**	**0**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**0.0**	**0**	**0**	**0**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8b
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_28

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9b*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.00	0	0	0
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	0.00	0	0	0
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	0.00	0	0	0
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	-13.29	-2	-6,082	-6,082
Subtotal Single-Family - One-Story					**-13.29**	**-2**	**-6,082**	**-6,082**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.00	0	0	0
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	0.00	0	0	0
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	0.00	0	0	0
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	-13.29	-2	-6,082	-6,082
Subtotal Single-Family					**-13.3**	**-2**	**-6,082**	**-6,082**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**0.0**	**0**	**0**	**0**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	0.00	0	0	0
High-Density Residential	1,000	3.50	29.66	100%	0.00	0	0	0
Urban Residential	900	4.00	59.15	100%	0.00	0	0	0
Subtotal Multifamily - Two-Story					**0.0**	**0**	**0**	**0**
Total Units					**-26.6**	**-5**	**-12,164**	**-12,164**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.00	NA	0	0
Moderate-Intensity Office	NA	3.00	0.65	100%	0.00	NA	0	0
Community/Neighborhood Retail	NA	2.00	0.25	100%	0.00	NA	0	0
Regional Retail	NA	1.00	0.25	100%	0.00	NA	0	0
Public/Quasi-Public	NA	2.50	0.25	100%	0.00	NA	0	0
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	0.00	NA	0	0
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**0.0**	**NA**	**0**	**0**
Industrial								
Light Industrial	NA	1.00	0.25	100%	171.88	NA	1,871,773	1,871,773
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Industrial					**171.9**	**NA**	**1,871,773**	**1,871,773**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**145.3**	**-5**	**1,859,609**	**1,859,609**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8c
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_29

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9c*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.00	0	0	0
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	0.00	0	0	0
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	0.00	0	0	0
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**0.00**	**0**	**0**	**0**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.00	0	0	0
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	0.00	0	0	0
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	0.00	0	0	0
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**0.0**	**0**	**0**	**0**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**0.0**	**0**	**0**	**0**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	0.00	0	0	0
High-Density Residential	1,000	3.50	29.66	100%	0.00	0	0	0
Urban Residential	900	4.00	59.15	100%	0.00	0	0	0
Subtotal Multifamily - Two-Story					**0.0**	**0**	**0**	**0**
Total Units					**0.0**	**0**	**0**	**0**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.00	NA	0	0
Moderate-Intensity Office	NA	3.00	0.65	100%	0.00	NA	0	0
Community/Neighborhood Retail	NA	2.00	0.25	100%	0.00	NA	0	0
Regional Retail	NA	1.00	0.25	100%	0.00	NA	0	0
Public/Quasi-Public	NA	2.50	0.25	100%	0.00	NA	0	0
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	0.00	NA	0	0
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**0.0**	**NA**	**0**	**0**
Industrial								
Light Industrial	NA	1.00	0.25	100%	0.00	NA	0	0
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Industrial					**0.0**	**NA**	**0**	**0**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**0.0**	**0**	**0**	**0**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8d
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_30

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2 [3]*		*Table C-9d*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	3.00	50%	197.00	591	1,477,500	1,477,500
Low-Density Residential - One-Story	2,000	1.00	6.40	20%	392.40	2,511	5,022,720	5,022,720
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	0.00	0	0	0
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**589.40**	**3,102**	**6,500,220**	**6,500,220**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	3.00	50%	197.00	591	1,477,500	1,477,500
Low-Density Residential - Two-Story	2,000	2.00	6.40	80%	1,569.60	10,045	20,090,880	20,090,880
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	0.00	0	0	0
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**1,766.6**	**10,636**	**21,568,380**	**21,568,380**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	19.30	100%	179.00	3,455	4,145,640	3,316,512
High-Density Residential	1,000	3.50	29.66	100%	0.00	0	0	0
Urban Residential	900	4.00	59.15	100%	0.00	0	0	0
Subtotal Multifamily - Two-Story					**179.0**	**3,455**	**4,145,640**	**3,316,512**
Total Units					**2,536.0**	**17,202**	**32,227,461**	**31,398,333**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	663.00	NA	59,204,574	9,867,429
Moderate-Intensity Office	NA	3.00	0.35	100%	0.00	NA	0	0
Community/Neighborhood Retail	NA	2.00	0.25	100%	0.00	NA	0	0
Regional Retail	NA	1.00	0.25	100%	185.00	NA	2,014,650	2,014,650
Public/Quasi-Public	NA	2.50	0.25	100%	0.00	NA	0	0
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	0.00	NA	0	0
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	0.35	100%	79.00	NA	1,204,434	344,124
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	169.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**1,096.0**	**NA**	**62,423,658**	**12,226,203**
Industrial								
Light Industrial	NA	1.00	0.42	100%	2,008.00	NA	36,736,762	36,736,762
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Industrial					**2,008.0**	**NA**	**36,736,762**	**36,736,762**
Other								
Park	NA	NA	NA	100%	846.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**846.0**	**NA**	**0**	**0**
Total					**6,486.0**	**17,202**	**131,387,880**	**80,361,297**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.
[3] EPS has adjusted the SACOG assumed densities to reflect current proposals for development within this zone.

Table C-8e
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_31

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2 [3]*		*Table C-9e*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.00	0	0	0
Low-Density Residential - One-Story	2,000	1.00	7.81	20%	25.44	199	397,200	397,200
Medium-Density Residential - One-Story	1,200	1.00	13.93	20%	21.60	301	360,960	360,960
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**47.04**	**499**	**758,160**	**758,160**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.00	0	0	0
Low-Density Residential - Two-Story	2,000	2.00	7.81	80%	101.76	794	1,588,800	1,588,800
Medium-Density Residential - Two-Story	1,200	2.00	13.93	80%	86.40	1,203	1,443,840	1,443,840
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**188.2**	**1,998**	**3,032,640**	**3,032,640**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	0.00	0	0	0
High-Density Residential	1,000	3.50	22.99	100%	18.70	430	430,000	245,714
Urban Residential	900	4.00	59.15	100%	0.00	0	0	0
Subtotal Multifamily - Two-Story					**18.7**	**430**	**430,000**	**245,714**
Total Units					**254.9**	**2,936**	**4,234,021**	**4,049,735**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.00	NA	0	0
Moderate-Intensity Office	NA	3.00	0.65	100%	108.60	NA	3,074,900	1,024,967
Community/Neighborhood Retail	NA	2.00	0.25	100%	33.30	NA	362,637	181,319
Regional Retail	NA	1.00	0.25	100%	0.00	NA	0	0
Public/Quasi-Public	NA	2.50	0.25	100%	3.90	NA	42,471	16,988
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	0.00	NA	0	0
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	300.40	NA	11,449,746	4,579,898
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	10.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**456.2**	**NA**	**14,929,754**	**5,803,172**
Industrial								
Light Industrial	NA	1.00	0.25	100%	828.10	NA	9,018,009	9,018,009
Light Industrial Office	NA	1.00	0.25	100%	143.80	NA	1,565,982	1,565,982
Heavy Industrial	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Industrial					**971.9**	**NA**	**10,583,991**	**10,583,991**
Other								
Park	NA	NA	NA	100%	370.50	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	982.00	NA	6,416,388	6,416,388
Subtotal Other					**1,352.5**	**NA**	**6,416,388**	**6,416,388**
Total					**3,035.5**	**2,936**	**36,164,154**	**26,853,286**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.
[3] EPS has adjusted the SACOG assumed densities to reflect current proposals for development within this zone.

Table C-8f
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_32

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9f*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	-0.09	0	-106	-106
Very Low Residential - One-Story	2,500	1.00	1.63	50%	25.28	41	103,070	103,070
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	149.51	720	1,439,437	1,439,437
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	258.96	2,282	2,738,962	2,738,962
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**433.67**	**3,043**	**4,281,364**	**4,281,364**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	-0.09	0	-106	-106
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	25.28	41	103,070	103,070
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	598.03	2,879	5,757,749	5,757,749
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	1,035.85	9,130	10,955,850	10,955,850
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**1,659.1**	**12,050**	**16,816,563**	**16,816,563**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	365.84	5,291	6,348,673	5,078,939
High-Density Residential	1,000	3.50	29.66	100%	194.92	5,781	5,780,950	3,303,400
Urban Residential	900	4.00	59.15	100%	1.18	70	62,820	31,410
Subtotal Multifamily - Two-Story					**561.9**	**11,141**	**12,192,443**	**8,413,749**
Total Units					**2,655.7**	**26,243**	**33,303,591**	**29,524,896**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.00	NA	0	0
Moderate-Intensity Office	NA	3.00	0.65	100%	139.90	NA	3,961,129	1,320,376
Community/Neighborhood Retail	NA	2.00	0.25	100%	0.00	NA	0	0
Regional Retail	NA	1.00	0.25	100%	117.41	NA	1,278,595	1,278,595
Public/Quasi-Public	NA	2.50	0.25	100%	-8.74	NA	-95,179	-38,071
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	157.37	NA	1,713,759	856,880
Regional Commercial/Office	NA	3.00	0.35	100%	78.91	NA	1,203,062	401,021
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	51.48	NA	560,617	560,617
K-12 Schools	NA	1.00	0.25	100%	75.91	NA	NA	NA
University/College	NA	1.00	0.25	100%	43.99	NA	NA	NA
Subtotal Commercial					**656.2**	**NA**	**8,621,983**	**4,379,417**
Industrial								
Light Industrial	NA	1.00	0.25	100%	180.88	NA	1,969,783	1,969,783
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	-61.06	NA	-398,966	-398,966
Subtotal Industrial					**119.8**	**NA**	**1,570,817**	**1,570,817**
Other								
Park	NA	NA	NA	100%	7.24	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**7.2**	**NA**	**0**	**0**
Total					**3,439.0**	**26,243**	**43,496,391**	**35,475,130**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8g
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_33

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9g*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	-4.41	-2	-5,513	-5,513
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.19	0	775	775
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	21.78	105	209,733	209,733
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	45.35	400	479,674	479,674
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**62.92**	**503**	**684,669**	**684,669**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	-4.41	-2	-5,513	-5,513
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.19	0	775	775
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	87.14	419	838,930	838,930
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	181.41	1,599	1,918,697	1,918,697
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**264.3**	**2,016**	**2,752,890**	**2,752,890**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	216.85	3,136	3,763,147	3,010,518
High-Density Residential	1,000	3.50	29.66	100%	44.22	1,311	1,311,480	749,417
Urban Residential	900	4.00	59.15	100%	0.00	0	0	0
Subtotal Multifamily - Two-Story					**261.1**	**4,447**	**5,074,627**	**3,759,935**
Total Units					**589.3**	**6,975**	**8,525,407**	**7,210,715**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.00	NA	0	0
Moderate-Intensity Office	NA	3.00	0.65	100%	5.31	NA	150,347	50,116
Community/Neighborhood Retail	NA	2.00	0.25	100%	9.02	NA	98,228	49,114
Regional Retail	NA	1.00	0.25	100%	0.00	NA	0	0
Public/Quasi-Public	NA	2.50	0.25	100%	20.21	NA	220,087	88,035
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	44.04	NA	479,596	239,798
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	10.29	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**88.9**	**NA**	**948,258**	**427,062**
Industrial								
Light Industrial	NA	1.00	0.25	100%	-36.27	NA	-394,980	-394,980
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Industrial					**-36.3**	**NA**	**-394,980**	**-394,980**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**641.9**	**6,975**	**9,078,684**	**7,242,796**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8h
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_34

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9h*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.00	0	20	20
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	9.33	45	89,828	89,828
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	20.07	177	212,295	212,295
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**29.41**	**222**	**302,143**	**302,143**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.00	0	20	20
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	37.32	180	359,311	359,311
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	80.29	708	849,182	849,182
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**117.6**	**887**	**1,208,513**	**1,208,513**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	22.51	326	390,632	312,505
High-Density Residential	1,000	3.50	29.66	100%	64.78	1,921	1,921,249	1,097,857
Urban Residential	900	4.00	59.15	100%	20.89	1,236	1,112,131	556,065
Subtotal Multifamily - Two-Story					**108.2**	**3,482**	**3,424,012**	**1,966,427**
Total Units					**256.2**	**4,600**	**4,947,889**	**3,490,304**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	1.96	NA	175,024	29,171
Moderate-Intensity Office	NA	3.00	0.65	100%	30.38	NA	860,179	286,726
Community/Neighborhood Retail	NA	2.00	0.25	100%	-10.31	NA	-112,276	-56,138
Regional Retail	NA	1.00	0.25	100%	-2.44	NA	-26,572	-26,572
Public/Quasi-Public	NA	2.50	0.25	100%	-77.31	NA	-841,906	-336,762
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	18.04	NA	196,456	98,228
Regional Commercial/Office	NA	3.00	0.35	100%	3.95	NA	60,222	20,074
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	15.45	NA	1,346,004	269,201
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	77.86	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**57.6**	**NA**	**1,657,131**	**283,928**
Industrial								
Light Industrial	NA	1.00	0.25	100%	10.26	NA	111,731	111,731
Light Industrial Office	NA	1.00	0.25	100%	-10.26	NA	-111,731	-111,731
Heavy Industrial	NA	1.00	0.15	100%	-0.60	NA	-3,920	-3,920
Subtotal Industrial					**-0.6**	**NA**	**-3,920**	**-3,920**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**313.2**	**4,600**	**6,601,100**	**3,770,312**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8i
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_35

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9i*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.00	0	0	0
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	3.64	18	35,007	35,007
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	6.95	61	73,550	73,550
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**10.59**	**79**	**108,557**	**108,557**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.00	0	0	0
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	14.54	70	140,027	140,027
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	27.82	245	294,201	294,201
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**42.4**	**315**	**434,229**	**434,229**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	0.00	0	0	0
High-Density Residential	1,000	3.50	29.66	100%	2.46	73	72,959	41,691
Urban Residential	900	4.00	59.15	100%	10.64	629	566,447	283,223
Subtotal Multifamily - Two-Story					**13.1**	**702**	**639,405**	**324,914**
Total Units					**67.1**	**1,105**	**1,195,412**	**880,921**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	2.46	NA	219,673	36,612
Moderate-Intensity Office	NA	3.00	0.65	100%	21.64	NA	612,715	204,238
Community/Neighborhood Retail	NA	2.00	0.25	100%	0.00	NA	0	0
Regional Retail	NA	1.00	0.25	100%	0.82	NA	8,930	8,930
Public/Quasi-Public	NA	2.50	0.25	100%	1.16	NA	12,632	5,053
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	2.49	NA	27,116	13,558
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**28.6**	**NA**	**881,066**	**268,391**
Industrial								
Light Industrial	NA	1.00	0.25	100%	0.00	NA	0	0
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Industrial					**0.0**	**NA**	**0**	**0**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**95.6**	**1,105**	**2,076,478**	**1,149,312**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8j
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_38

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9j*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.00	0	0	0
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	0.15	1	1,406	1,406
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	0.00	0	0	0
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**0.15**	**1**	**1,406**	**1,406**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.00	0	0	0
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	0.58	3	5,623	5,623
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	0.00	0	0	0
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**0.6**	**3**	**5,623**	**5,623**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	0.31	4	5,380	4,304
High-Density Residential	1,000	3.50	29.66	100%	24.99	741	741,155	423,517
Urban Residential	900	4.00	59.15	100%	33.89	2,005	1,804,218	902,109
Subtotal Multifamily - Two-Story					**59.2**	**2,750**	**2,550,752**	**1,329,930**
Total Units					**60.9**	**2,763**	**2,571,002**	**1,350,179**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.39	NA	34,826	5,804
Moderate-Intensity Office	NA	3.00	0.65	100%	0.00	NA	0	0
Community/Neighborhood Retail	NA	2.00	0.25	100%	-2.72	NA	-29,621	-14,810
Regional Retail	NA	1.00	0.25	100%	-6.26	NA	-68,171	-68,171
Public/Quasi-Public	NA	2.50	0.25	100%	-47.25	NA	-514,553	-205,821
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	0.66	NA	7,187	3,594
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	-2.30	NA	-200,376	-40,075
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**-57.5**	**NA**	**-770,707**	**-319,480**
Industrial								
Light Industrial	NA	1.00	0.25	100%	0.45	NA	4,900	4,900
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Industrial					**0.4**	**NA**	**4,900**	**4,900**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**3.9**	**2,763**	**1,805,195**	**1,035,599**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8k
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_39

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9k*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	-0.11	0	-448	-448
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	-0.04	0	-366	-366
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	1.89	17	19,990	19,990
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**1.74**	**16**	**19,176**	**19,176**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	-0.11	0	-448	-448
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	-0.15	-1	-1,463	-1,463
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	7.56	67	79,960	79,960
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**7.3**	**66**	**78,048**	**78,048**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	58.33	844	1,012,241	809,793
High-Density Residential	1,000	3.50	29.66	100%	13.50	400	400,384	228,791
Urban Residential	900	4.00	59.15	100%	5.58	330	297,065	148,533
Subtotal Multifamily - Two-Story					**77.4**	**1,574**	**1,709,690**	**1,187,116**
Total Units					**87.5**	**1,665**	**1,820,134**	**1,297,560**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.30	NA	26,789	4,465
Moderate-Intensity Office	NA	3.00	0.65	100%	9.94	NA	281,441	93,814
Community/Neighborhood Retail	NA	2.00	0.25	100%	-2.05	NA	-22,325	-11,162
Regional Retail	NA	1.00	0.25	100%	-6.45	NA	-70,241	-70,241
Public/Quasi-Public	NA	2.50	0.25	100%	-26.34	NA	-286,843	-114,737
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	11.24	NA	122,404	61,202
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	6.45	NA	245,842	98,337
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	26.07	NA	1,249,170	356,906
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**19.2**	**NA**	**1,546,238**	**418,583**
Industrial								
Light Industrial	NA	1.00	0.25	100%	-54.65	NA	-595,139	-595,139
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	-8.95	NA	-58,479	-58,479
Subtotal Industrial					**-63.6**	**NA**	**-653,618**	**-653,618**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**43.0**	**1,665**	**2,712,755**	**1,062,525**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8l
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_170

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9l*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.04	0	163	163
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	2.94	14	28,306	28,306
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	8.81	78	93,160	93,160
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**11.79**	**92**	**121,628**	**121,628**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.04	0	163	163
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	11.76	57	113,223	113,223
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	35.23	311	372,638	372,638
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**47.0**	**367**	**486,025**	**486,025**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	36.90	534	640,351	512,281
High-Density Residential	1,000	3.50	29.66	100%	11.54	342	342,254	195,574
Urban Residential	900	4.00	59.15	100%	0.80	47	42,590	21,295
Subtotal Multifamily - Two-Story					**49.2**	**923**	**1,025,195**	**729,150**
Total Units					**109.1**	**1,391**	**1,646,069**	**1,350,023**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.00	NA	0	0
Moderate-Intensity Office	NA	3.00	0.65	100%	10.00	NA	283,140	94,380
Community/Neighborhood Retail	NA	2.00	0.25	100%	-28.12	NA	-306,227	-153,113
Regional Retail	NA	1.00	0.25	100%	-4.15	NA	-45,194	-45,194
Public/Quasi-Public	NA	2.50	0.25	100%	2.69	NA	29,294	11,718
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	5.45	NA	59,351	29,675
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	42.90	NA	1,635,134	654,053
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**28.8**	**NA**	**1,655,498**	**591,519**
Industrial								
Light Industrial	NA	1.00	0.25	100%	35.94	NA	391,387	391,387
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	10.55	NA	68,934	68,934
Subtotal Industrial					**46.5**	**NA**	**460,320**	**460,320**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**184.3**	**1,391**	**3,761,887**	**2,401,863**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8m
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_171

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9m*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	-0.17	0	-693	-693
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	4.24	20	40,803	40,803
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	7.36	65	77,844	77,844
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**11.43**	**85**	**117,954**	**117,954**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	-0.17	0	-693	-693
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	16.95	82	163,211	163,211
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	29.44	259	311,378	311,378
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**46.2**	**341**	**473,896**	**473,896**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	82.88	1,199	1,438,274	1,150,619
High-Density Residential	1,000	3.50	29.66	100%	32.44	962	962,108	549,776
Urban Residential	900	4.00	59.15	100%	1.55	92	82,518	41,259
Subtotal Multifamily - Two-Story					**116.9**	**2,252**	**2,482,899**	**1,741,654**
Total Units					**175.5**	**2,687**	**3,087,970**	**2,346,724**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.00	NA	0	0
Moderate-Intensity Office	NA	3.00	0.65	100%	40.97	NA	1,160,025	386,675
Community/Neighborhood Retail	NA	2.00	0.25	100%	17.93	NA	195,258	97,629
Regional Retail	NA	1.00	0.25	100%	0.00	NA	0	0
Public/Quasi-Public	NA	2.50	0.25	100%	3.41	NA	37,135	14,854
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	22.16	NA	241,322	120,661
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	-0.80	NA	-30,492	-12,197
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	-2.03	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**81.6**	**NA**	**1,603,248**	**607,622**
Industrial								
Light Industrial	NA	1.00	0.25	100%	4.69	NA	51,074	51,074
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	-2.07	NA	-13,525	-13,525
Subtotal Industrial					**2.6**	**NA**	**37,549**	**37,549**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**259.8**	**2,687**	**4,728,766**	**2,991,895**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8n
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_172

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9n*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	7.45	4	9,306	9,306
Very Low Residential - One-Story	2,500	1.00	1.63	50%	18.19	30	74,184	74,184
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	3.79	18	36,451	36,451
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	1.03	9	10,852	10,852
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**30.45**	**61**	**130,793**	**130,793**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	7.45	4	9,306	9,306
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	18.19	30	74,184	74,184
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	15.14	73	145,804	145,804
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	4.10	36	43,407	43,407
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**44.9**	**142**	**272,701**	**272,701**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	13.85	200	240,349	192,279
High-Density Residential	1,000	3.50	29.66	100%	7.19	213	213,241	121,852
Urban Residential	900	4.00	59.15	100%	0.33	20	17,568	8,784
Subtotal Multifamily - Two-Story					**21.4**	**433**	**471,158**	**322,915**
Total Units					**97.7**	**645**	**887,872**	**739,629**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.00	NA	0	0
Moderate-Intensity Office	NA	3.00	0.65	100%	10.76	NA	304,659	101,553
Community/Neighborhood Retail	NA	2.00	0.25	100%	27.29	NA	297,188	148,594
Regional Retail	NA	1.00	0.25	100%	-7.05	NA	-76,775	-76,775
Public/Quasi-Public	NA	2.50	0.25	100%	16.54	NA	180,121	72,048
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	1.15	NA	12,524	6,262
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	16.97	NA	646,812	258,725
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**65.7**	**NA**	**1,364,528**	**510,407**
Industrial								
Light Industrial	NA	1.00	0.25	100%	-0.70	NA	-7,623	-7,623
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Industrial					**-0.7**	**NA**	**-7,623**	**-7,623**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**162.7**	**645**	**2,244,777**	**1,242,413**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8o
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_173

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9o*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	1.09	1	1,356	1,356
Very Low Residential - One-Story	2,500	1.00	1.63	50%	8.72	14	35,553	35,553
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	1.04	5	9,994	9,994
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	1.54	14	16,309	16,309
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**12.39**	**33**	**63,212**	**63,212**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	1.09	1	1,356	1,356
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	8.72	14	35,553	35,553
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	4.15	20	39,975	39,975
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	6.17	54	65,237	65,237
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**20.1**	**89**	**142,121**	**142,121**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	53.51	774	928,596	742,877
High-Density Residential	1,000	3.50	29.66	100%	37.18	1,103	1,102,687	630,107
Urban Residential	900	4.00	59.15	100%	1.84	109	97,957	48,978
Subtotal Multifamily - Two-Story					**92.5**	**1,985**	**2,129,240**	**1,421,962**
Total Units					**126.0**	**2,117**	**2,347,793**	**1,640,515**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	-0.87	NA	-77,689	-12,948
Moderate-Intensity Office	NA	3.00	0.65	100%	39.04	NA	1,105,379	368,460
Community/Neighborhood Retail	NA	2.00	0.25	100%	103.25	NA	1,124,393	562,196
Regional Retail	NA	1.00	0.25	100%	-1.22	NA	-13,286	-13,286
Public/Quasi-Public	NA	2.50	0.25	100%	0.80	NA	8,712	3,485
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	8.74	NA	95,179	47,589
Regional Commercial/Office	NA	3.00	0.35	100%	2.48	NA	37,810	12,603
Mixed Use Employment Focus	NA	2.50	0.88	100%	7.28	NA	277,477	110,991
Mixed Use Residential Focus	NA	5.00	2.00	100%	1.16	NA	101,059	20,212
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**160.7**	**NA**	**2,659,033**	**1,099,302**
Industrial								
Light Industrial	NA	1.00	0.25	100%	2.96	NA	32,234	32,234
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	-0.14	NA	-915	-915
Subtotal Industrial					**2.8**	**NA**	**31,320**	**31,320**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**289.5**	**2,117**	**5,038,146**	**2,771,137**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8p
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_174

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9p*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.11	0	131	131
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.68	1	2,772	2,772
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	11.26	54	108,429	108,429
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	5.52	49	58,362	58,362
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**17.57**	**104**	**169,695**	**169,695**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.11	0	131	131
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.68	1	2,772	2,772
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	45.05	217	433,714	433,714
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	22.07	195	233,449	233,449
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**67.9**	**413**	**670,067**	**670,067**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	39.74	575	689,636	551,708
High-Density Residential	1,000	3.50	29.66	100%	15.08	447	447,244	255,568
Urban Residential	900	4.00	59.15	100%	8.97	531	477,540	238,770
Subtotal Multifamily - Two-Story					**63.8**	**1,553**	**1,614,419**	**1,046,046**
Total Units					**150.3**	**2,078**	**2,467,402**	**1,899,029**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	1.90	NA	169,666	28,278
Moderate-Intensity Office	NA	3.00	0.65	100%	8.59	NA	243,217	81,072
Community/Neighborhood Retail	NA	2.00	0.25	100%	4.94	NA	53,797	26,898
Regional Retail	NA	1.00	0.25	100%	0.64	NA	6,970	6,970
Public/Quasi-Public	NA	2.50	0.25	100%	3.34	NA	36,373	14,549
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	10.97	NA	119,463	59,732
Regional Commercial/Office	NA	3.00	0.35	100%	5.78	NA	88,122	29,374
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**36.2**	**NA**	**717,607**	**246,873**
Industrial								
Light Industrial	NA	1.00	0.25	100%	39.06	NA	425,363	425,363
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	34.40	NA	224,770	224,770
Subtotal Industrial					**73.5**	**NA**	**650,133**	**650,133**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**259.9**	**2,078**	**3,835,142**	**2,796,034**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8q
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_175

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9q*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.04	0	183	183
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	-0.36	-2	-3,428	-3,428
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	-0.31	-3	-3,258	-3,258
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**-0.62**	**-4**	**-6,502**	**-6,502**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.04	0	183	183
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	-1.42	-7	-13,710	-13,710
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	-1.23	-11	-13,030	-13,030
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**-2.6**	**-18**	**-26,557**	**-26,557**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	9.56	138	165,901	132,721
High-Density Residential	1,000	3.50	29.66	100%	16.69	495	494,993	282,853
Urban Residential	900	4.00	59.15	100%	10.25	606	545,684	272,842
Subtotal Multifamily - Two-Story					**36.5**	**1,240**	**1,206,578**	**688,416**
Total Units					**34.3**	**1,226**	**1,186,741**	**668,578**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	2.06	NA	183,954	30,659
Moderate-Intensity Office	NA	3.00	0.65	100%	-3.72	NA	-105,328	-35,109
Community/Neighborhood Retail	NA	2.00	0.25	100%	-8.83	NA	-96,159	-48,079
Regional Retail	NA	1.00	0.25	100%	-0.39	NA	-4,247	-4,247
Public/Quasi-Public	NA	2.50	0.25	100%	-1.13	NA	-12,306	-4,922
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	-11.88	NA	-129,373	-64,687
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	6.68	NA	254,608	101,843
Mixed Use Residential Focus	NA	5.00	2.00	100%	3.41	NA	297,079	59,416
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**-13.8**	**NA**	**388,229**	**34,873**
Industrial								
Light Industrial	NA	1.00	0.25	100%	-15.60	NA	-169,884	-169,884
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Industrial					**-15.6**	**NA**	**-169,884**	**-169,884**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**4.9**	**1,226**	**1,405,085**	**533,568**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8r
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_176

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9r*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.02	0	102	102
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	-0.26	-1	-2,465	-2,465
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	0.03	0	360	360
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**-0.20**	**-1**	**-2,003**	**-2,003**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.02	0	102	102
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	-1.02	-5	-9,859	-9,859
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	0.14	1	1,438	1,438
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**-0.9**	**-4**	**-8,319**	**-8,319**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	2.14	31	37,137	29,710
High-Density Residential	1,000	3.50	29.66	100%	0.80	24	23,726	13,558
Urban Residential	900	4.00	59.15	100%	65.46	3,872	3,484,924	1,742,462
Subtotal Multifamily - Two-Story					**68.4**	**3,927**	**3,545,788**	**1,785,730**
Total Units					**68.3**	**3,931**	**3,548,687**	**1,788,629**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	3.89	NA	347,369	57,895
Moderate-Intensity Office	NA	3.00	0.65	100%	-4.38	NA	-124,015	-41,338
Community/Neighborhood Retail	NA	2.00	0.25	100%	-26.29	NA	-286,298	-143,149
Regional Retail	NA	1.00	0.25	100%	-0.28	NA	-3,049	-3,049
Public/Quasi-Public	NA	2.50	0.25	100%	-60.58	NA	-659,716	-263,886
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	-7.45	NA	-81,131	-40,565
Regional Commercial/Office	NA	3.00	0.35	100%	-4.62	NA	-70,437	-23,479
Mixed Use Employment Focus	NA	2.50	0.88	100%	2.56	NA	97,574	39,030
Mixed Use Residential Focus	NA	5.00	2.00	100%	2.17	NA	189,050	37,810
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	96.87	NA	4,641,623	1,326,178
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**1.9**	**NA**	**4,050,971**	**945,445**
Industrial								
Light Industrial	NA	1.00	0.25	100%	-7.34	NA	-79,933	-79,933
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	-0.48	NA	-3,136	-3,136
Subtotal Industrial					**-7.8**	**NA**	**-83,069**	**-83,069**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**62.4**	**3,931**	**7,516,589**	**2,651,005**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8s
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_177

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9s*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.00	0	0	0
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	33.32	160	320,838	320,838
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	1.23	11	13,009	13,009
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**34.55**	**171**	**333,847**	**333,847**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.00	0	0	0
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	133.30	642	1,283,351	1,283,351
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	4.92	43	52,037	52,037
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**138.2**	**685**	**1,335,388**	**1,335,388**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	71.08	1,028	1,233,500	986,800
High-Density Residential	1,000	3.50	29.66	100%	80.92	2,400	2,399,931	1,371,389
Urban Residential	900	4.00	59.15	100%	0.00	0	0	0
Subtotal Multifamily - Two-Story					**152.0**	**3,428**	**3,633,431**	**2,358,189**
Total Units					**325.8**	**4,293**	**5,315,887**	**4,040,645**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.00	NA	0	0
Moderate-Intensity Office	NA	3.00	0.65	100%	57.60	NA	1,630,886	543,629
Community/Neighborhood Retail	NA	2.00	0.25	100%	8.96	NA	97,574	48,787
Regional Retail	NA	1.00	0.25	100%	0.00	NA	0	0
Public/Quasi-Public	NA	2.50	0.25	100%	86.92	NA	946,559	378,624
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	26.07	NA	283,902	141,951
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**179.6**	**NA**	**2,958,922**	**1,112,991**
Industrial								
Light Industrial	NA	1.00	0.25	100%	727.28	NA	7,920,079	7,920,079
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	323.06	NA	2,110,874	2,110,874
Subtotal Industrial					**1,050.3**	**NA**	**10,030,953**	**10,030,953**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**1,555.7**	**4,293**	**18,305,762**	**15,184,589**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units.
The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8t
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_178

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9t*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	-0.23	0	-288	-288
Very Low Residential - One-Story	2,500	1.00	1.63	50%	-0.39	-1	-1,610	-1,610
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	14.27	69	137,351	137,351
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	9.93	88	105,027	105,027
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**23.57**	**155**	**240,479**	**240,479**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	-0.23	0	-288	-288
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	-0.39	-1	-1,610	-1,610
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	57.06	275	549,402	549,402
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	39.72	350	420,106	420,106
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**96.2**	**624**	**967,611**	**967,611**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	68.39	989	1,186,819	949,455
High-Density Residential	1,000	3.50	29.66	100%	52.71	1,563	1,563,277	893,301
Urban Residential	900	4.00	59.15	100%	14.94	884	795,368	397,684
Subtotal Multifamily - Two-Story					**136.0**	**3,436**	**3,545,463**	**2,240,440**
Total Units					**256.8**	**4,224**	**4,766,774**	**3,461,751**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.15	NA	13,395	2,232
Moderate-Intensity Office	NA	3.00	0.65	100%	-10.90	NA	-308,623	-102,874
Community/Neighborhood Retail	NA	2.00	0.25	100%	-46.28	NA	-503,989	-251,995
Regional Retail	NA	1.00	0.25	100%	6.59	NA	71,765	71,765
Public/Quasi-Public	NA	2.50	0.25	100%	-2.32	NA	-25,265	-10,106
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	4.01	NA	43,669	21,834
Regional Commercial/Office	NA	3.00	0.35	100%	2.54	NA	38,725	12,908
Mixed Use Employment Focus	NA	2.50	0.88	100%	53.93	NA	2,055,542	822,217
Mixed Use Residential Focus	NA	5.00	2.00	100%	8.79	NA	765,785	153,157
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**16.5**	**NA**	**2,151,004**	**719,139**
Industrial								
Light Industrial	NA	1.00	0.25	100%	33.21	NA	361,657	361,657
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	-10.81	NA	-70,633	-70,633
Subtotal Industrial					**22.4**	**NA**	**291,024**	**291,024**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**295.7**	**4,224**	**7,208,802**	**4,471,914**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8u
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_179

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9u*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	-0.13	0	-169	-169
Very Low Residential - One-Story	2,500	1.00	1.63	50%	2.41	4	9,806	9,806
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	30.99	149	298,366	298,366
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	9.48	84	100,225	100,225
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**42.74**	**237**	**408,228**	**408,228**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	-0.13	0	-169	-169
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	2.41	4	9,806	9,806
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	123.96	597	1,193,465	1,193,465
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	37.90	334	400,899	400,899
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**164.1**	**935**	**1,604,001**	**1,604,001**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	99.52	1,439	1,727,039	1,381,631
High-Density Residential	1,000	3.50	29.66	100%	42.96	1,274	1,274,110	728,063
Urban Residential	900	4.00	59.15	100%	2.32	137	123,511	61,755
Subtotal Multifamily - Two-Story					**144.8**	**2,851**	**3,124,660**	**2,171,450**
Total Units					**352.7**	**4,031**	**5,150,111**	**4,196,900**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.17	NA	15,181	2,530
Moderate-Intensity Office	NA	3.00	0.65	100%	-1.73	NA	-48,983	-16,328
Community/Neighborhood Retail	NA	2.00	0.25	100%	8.25	NA	89,843	44,921
Regional Retail	NA	1.00	0.25	100%	22.04	NA	240,016	240,016
Public/Quasi-Public	NA	2.50	0.25	100%	-8.62	NA	-93,872	-37,549
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	15.74	NA	171,409	85,704
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**35.9**	**NA**	**373,592**	**319,295**
Industrial								
Light Industrial	NA	1.00	0.25	100%	52.46	NA	571,289	571,289
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	82.94	NA	541,930	541,930
Subtotal Industrial					**135.4**	**NA**	**1,113,219**	**1,113,219**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**523.9**	**4,031**	**6,636,922**	**5,629,414**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8v
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_180

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9v*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	-12.68	-6	-15,850	-15,850
Very Low Residential - One-Story	2,500	1.00	1.63	50%	95.09	155	387,676	387,676
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	219.54	1,057	2,113,674	2,113,674
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	98.44	868	1,041,212	1,041,212
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**400.39**	**2,073**	**3,526,712**	**3,526,712**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	-12.68	-6	-15,850	-15,850
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	95.09	155	387,676	387,676
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	878.15	4,227	8,454,696	8,454,696
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	393.78	3,471	4,164,849	4,164,849
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**1,354.3**	**7,847**	**12,991,371**	**12,991,371**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	396.50	5,734	6,880,737	5,504,590
High-Density Residential	1,000	3.50	29.66	100%	167.50	4,968	4,967,726	2,838,700
Urban Residential	900	4.00	59.15	100%	12.46	737	663,339	331,669
Subtotal Multifamily - Two-Story					**576.5**	**11,439**	**12,511,802**	**8,674,960**
Total Units					**2,332.2**	**21,368**	**29,043,105**	**25,206,263**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	9.24	NA	825,114	137,519
Moderate-Intensity Office	NA	3.00	0.65	100%	13.94	NA	394,697	131,566
Community/Neighborhood Retail	NA	2.00	0.25	100%	-49.86	NA	-542,975	-271,488
Regional Retail	NA	1.00	0.25	100%	8.16	NA	88,862	88,862
Public/Quasi-Public	NA	2.50	0.25	100%	-6.37	NA	-69,369	-27,748
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	161.73	NA	1,761,240	880,620
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	2.55	NA	97,193	38,877
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	-11.79	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**127.6**	**NA**	**2,554,761**	**978,209**
Industrial								
Light Industrial	NA	1.00	0.25	100%	449.99	NA	4,900,391	4,900,391
Light Industrial Office	NA	1.00	0.25	100%	-62.08	NA	-676,051	-676,051
Heavy Industrial	NA	1.00	0.15	100%	-88.73	NA	-579,762	-579,762
Subtotal Industrial					**299.2**	**NA**	**3,644,578**	**3,644,578**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**2,759.0**	**21,368**	**35,242,445**	**29,829,050**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8w
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_181

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9w*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.42	1	1,712	1,712
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	8.58	41	82,588	82,588
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	6.03	53	63,777	63,777
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**15.03**	**95**	**148,077**	**148,077**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.42	1	1,712	1,712
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	34.31	165	330,350	330,350
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	24.12	213	255,110	255,110
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**58.9**	**378**	**587,172**	**587,172**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	2.88	42	49,979	39,983
High-Density Residential	1,000	3.50	29.66	100%	0.04	1	1,186	678
Urban Residential	900	4.00	59.15	100%	0.00	0	0	0
Subtotal Multifamily - Two-Story					**2.9**	**43**	**51,165**	**40,661**
Total Units					**77.8**	**525**	**799,636**	**789,131**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.00	NA	0	0
Moderate-Intensity Office	NA	3.00	0.65	100%	15.24	NA	431,505	143,835
Community/Neighborhood Retail	NA	2.00	0.25	100%	1.07	NA	11,652	5,826
Regional Retail	NA	1.00	0.25	100%	0.00	NA	0	0
Public/Quasi-Public	NA	2.50	0.25	100%	1.13	NA	12,306	4,922
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	0.20	NA	2,178	1,089
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**17.6**	**NA**	**457,641**	**155,673**
Industrial								
Light Industrial	NA	1.00	0.25	100%	0.00	NA	0	0
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Industrial					**0.0**	**NA**	**0**	**0**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**95.4**	**525**	**1,257,277**	**944,804**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8x
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_182

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9x*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	77.50	39	96,875	96,875
Very Low Residential - One-Story	2,500	1.00	1.63	50%	35.36	58	144,168	144,168
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	125.02	602	1,203,671	1,203,671
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	92.61	816	979,508	979,508
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**330.49**	**1,515**	**2,424,222**	**2,424,222**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	77.50	39	96,875	96,875
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	35.36	58	144,168	144,168
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	500.08	2,407	4,814,684	4,814,684
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	370.44	3,265	3,918,031	3,918,031
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**983.4**	**5,769**	**8,973,758**	**8,973,758**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	371.07	5,366	6,439,433	5,151,546
High-Density Residential	1,000	3.50	29.66	100%	174.11	5,164	5,163,766	2,950,723
Urban Residential	900	4.00	59.15	100%	7.83	463	416,849	208,425
Subtotal Multifamily - Two-Story					**553.0**	**10,993**	**12,020,048**	**8,310,694**
Total Units					**1,867.9**	**18,285**	**23,431,249**	**19,721,895**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.00	NA	0	0
Moderate-Intensity Office	NA	3.00	0.65	100%	15.95	NA	451,608	150,536
Community/Neighborhood Retail	NA	2.00	0.25	100%	7.53	NA	82,002	41,001
Regional Retail	NA	1.00	0.25	100%	19.48	NA	212,137	212,137
Public/Quasi-Public	NA	2.50	0.25	100%	-167.25	NA	-1,821,353	-728,541
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	113.06	NA	1,231,223	615,612
Regional Commercial/Office	NA	3.00	0.35	100%	9.82	NA	149,716	49,905
Mixed Use Employment Focus	NA	2.50	0.88	100%	10.91	NA	415,835	166,334
Mixed Use Residential Focus	NA	5.00	2.00	100%	94.81	NA	8,259,847	1,651,969
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	9.29	NA	101,168	101,168
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**113.6**	**NA**	**9,082,184**	**2,260,121**
Industrial								
Light Industrial	NA	1.00	0.25	100%	46.29	NA	504,098	504,098
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Industrial					**46.3**	**NA**	**504,098**	**504,098**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**2,027.8**	**18,285**	**33,017,531**	**22,486,115**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8y
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_183

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9y*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	276.91	138	346,138	346,138
Very Low Residential - One-Story	2,500	1.00	1.63	50%	181.13	295	738,494	738,494
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	375.37	1,807	3,614,036	3,614,036
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	35.95	317	380,275	380,275
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**869.37**	**2,558**	**5,078,942**	**5,078,942**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	276.91	138	346,138	346,138
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	181.13	295	738,494	738,494
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	1,501.50	7,228	14,456,144	14,456,144
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	143.82	1,268	1,521,098	1,521,098
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**2,103.4**	**8,930**	**17,061,874**	**17,061,874**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	122.53	1,772	2,126,347	1,701,078
High-Density Residential	1,000	3.50	29.66	100%	13.94	413	413,433	236,248
Urban Residential	900	4.00	59.15	100%	1.39	82	74,000	37,000
Subtotal Multifamily - Two-Story					**137.9**	**2,268**	**2,613,781**	**1,974,326**
Total Units					**3,111.6**	**13,764**	**24,767,817**	**24,128,362**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.00	NA	0	0
Moderate-Intensity Office	NA	3.00	0.65	100%	29.80	NA	843,757	281,252
Community/Neighborhood Retail	NA	2.00	0.25	100%	51.13	NA	556,806	278,403
Regional Retail	NA	1.00	0.25	100%	-39.42	NA	-429,284	-429,284
Public/Quasi-Public	NA	2.50	0.25	100%	13.87	NA	151,044	60,418
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	131.38	NA	1,430,728	715,364
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	2.74	NA	238,709	47,742
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	-9.51	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**180.0**	**NA**	**2,791,760**	**953,895**
Industrial								
Light Industrial	NA	1.00	0.25	100%	69.77	NA	759,795	759,795
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	-9.18	NA	-59,982	-59,982
Subtotal Industrial					**60.6**	**NA**	**699,813**	**699,813**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**3,352.2**	**13,764**	**28,259,391**	**25,782,070**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8z
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_206

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9z*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.14	0	181	181
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.94	2	3,822	3,822
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	15.53	75	149,481	149,481
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	7.61	67	80,459	80,459
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**24.22**	**143**	**233,943**	**233,943**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.14	0	181	181
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.94	2	3,822	3,822
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	62.10	299	597,923	597,923
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	30.43	268	321,835	321,835
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**93.6**	**569**	**923,762**	**923,762**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	54.79	792	950,739	760,591
High-Density Residential	1,000	3.50	29.66	100%	20.79	617	616,575	352,329
Urban Residential	900	4.00	59.15	100%	12.37	731	658,342	329,171
Subtotal Multifamily - Two-Story					**87.9**	**2,140**	**2,225,656**	**1,442,091**
Total Units					**206.8**	**2,861**	**3,396,582**	**2,613,016**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	2.62	NA	233,904	38,984
Moderate-Intensity Office	NA	3.00	0.65	100%	11.84	NA	335,302	111,767
Community/Neighborhood Retail	NA	2.00	0.25	100%	6.81	NA	74,165	37,082
Regional Retail	NA	1.00	0.25	100%	0.88	NA	9,608	9,608
Public/Quasi-Public	NA	2.50	0.25	100%	4.60	NA	50,144	20,057
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	15.12	NA	164,693	82,347
Regional Commercial/Office	NA	3.00	0.35	100%	7.97	NA	121,486	40,495
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**49.9**	**NA**	**989,302**	**340,341**
Industrial								
Light Industrial	NA	1.00	0.25	100%	53.85	NA	586,411	586,411
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	47.42	NA	309,870	309,870
Subtotal Industrial					**101.3**	**NA**	**896,281**	**896,281**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**357.9**	**2,861**	**5,282,164**	**3,849,638**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8aa
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_230

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9aa*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	0.00	0	0	0
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	0.00	0	0	0
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	0.00	0	0	0
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**0.00**	**0**	**0**	**0**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	0.00	0	0	0
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	0.00	0	0	0
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	0.00	0	0	0
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**0.0**	**0**	**0**	**0**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**0.0**	**0**	**0**	**0**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	0.00	0	0	0
High-Density Residential	1,000	3.50	29.66	100%	0.00	0	0	0
Urban Residential	900	4.00	59.15	100%	0.00	0	0	0
Subtotal Multifamily - Two-Story					**0.0**	**0**	**0**	**0**
Total Units					**0.0**	**0**	**0**	**0**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	0.00	NA	0	0
Moderate-Intensity Office	NA	3.00	0.65	100%	0.00	NA	0	0
Community/Neighborhood Retail	NA	2.00	0.25	100%	0.00	NA	0	0
Regional Retail	NA	1.00	0.25	100%	0.00	NA	0	0
Public/Quasi-Public	NA	2.50	0.25	100%	10.61	NA	115,543	46,217
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	0.00	NA	0	0
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	0.00	NA	0	0
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**10.6**	**NA**	**115,543**	**46,217**
Industrial								
Light Industrial	NA	1.00	0.25	100%	0.00	NA	0	0
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Industrial					**0.0**	**NA**	**0**	**0**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**10.6**	**0**	**115,543**	**46,217**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-8ab
Sacramento Area Flood Control Agency - Development Fee
Total Projected Square Feet and Damageable Square Feet by Storage Area

Storage Area SA_231

Land Use	Assumed Average DU Size	Assumed Structure Stories	Average Units per Acre / FAR	% of Total Acres [2]	Projected Future Acres	Projected Units	Projected Square Feet	Projected Damageable Square Feet
Source	*Table C-1*	*Table C-2*	*Table C-2*		*Table C-9ab*			
Formula	*a*	*b*	*c*	*d*	*e = acres * d*	*f = c * e*	*g = f * a*	*h = g/b* (1 or 2)*
Single-Family [1]								
Rural Residential - One-Story	2,500	1.00	0.50	50%	0.00	0	0	0
Very Low Residential - One-Story	2,500	1.00	1.63	50%	7.67	13	31,251	31,251
Low-Density Residential - One-Story	2,000	1.00	4.81	20%	42.98	207	413,766	413,766
Medium-Density Residential - One-Story	1,200	1.00	8.81	20%	91.42	806	966,943	966,943
Agricultural Residential - One-Story	2,500	1.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family - One-Story					**142.06**	**1,025**	**1,411,960**	**1,411,960**
Rural Residential - Two-Story	2,500	2.00	0.50	50%	0.00	0	0	0
Very Low Residential - Two-Story	2,500	2.00	1.63	50%	7.67	13	31,251	31,251
Low-Density Residential - Two-Story	2,000	2.00	4.81	80%	171.90	828	1,655,062	1,655,062
Medium-Density Residential - Two-Story	1,200	2.00	8.81	80%	365.69	3,223	3,867,771	3,867,771
Agricultural Residential - Two-Story	2,500	2.00	0.18	50%	0.00	0	0	0
Subtotal Single-Family					**545.3**	**4,063**	**5,554,084**	**5,554,084**
Multifamily - One-Story	**1,500**	**1.00**	8.81	**100%**	**1.0**	**9**	**13,221**	**13,221**
Multifamily - Two-Story (or greater)								
Medium-High-Density Residential	1,200	2.50	14.46	100%	207.65	3,003	3,603,493	2,882,795
High-Density Residential	1,000	3.50	29.66	100%	12.38	367	367,167	209,810
Urban Residential	900	4.00	59.15	100%	2.40	142	127,770	63,885
Subtotal Multifamily - Two-Story					**222.4**	**3,512**	**4,098,430**	**3,156,489**
Total Units					**910.8**	**8,609**	**11,077,695**	**10,135,754**
Formula		*a*	*b*	*c*	*d = b x c*		*e = b x d x 43,560*	*f = e / a*
Commercial								
High-Intensity Office	NA	6.00	2.05	100%	34.34	NA	3,066,493	511,082
Moderate-Intensity Office	NA	3.00	0.65	100%	104.41	NA	2,956,265	985,422
Community/Neighborhood Retail	NA	2.00	0.25	100%	23.68	NA	257,875	128,938
Regional Retail	NA	1.00	0.25	100%	11.01	NA	119,899	119,899
Public/Quasi-Public	NA	2.50	0.25	100%	44.36	NA	483,080	193,232
Community/Neighborhood Commercial/Office	NA	2.00	0.25	100%	34.89	NA	379,952	189,976
Regional Commercial/Office	NA	3.00	0.35	100%	0.00	NA	0	0
Mixed Use Employment Focus	NA	2.50	0.88	100%	0.00	NA	0	0
Mixed Use Residential Focus	NA	5.00	2.00	100%	0.00	NA	0	0
High-Density Mixed Use Center or Corridor	NA	3.50	1.10	100%	0.00	NA	0	0
Medical Facility	NA	1.00	0.25	100%	29.71	NA	323,542	323,542
K-12 Schools	NA	1.00	0.25	100%	0.00	NA	NA	NA
University/College	NA	1.00	0.25	100%	0.00	NA	NA	NA
Subtotal Commercial					**282.4**	**NA**	**7,587,107**	**2,452,090**
Industrial								
Light Industrial	NA	1.00	0.25	100%	258.03	NA	2,809,947	2,809,947
Light Industrial Office	NA	1.00	0.25	100%	0.00	NA	0	0
Heavy Industrial	NA	1.00	0.15	100%	29.86	NA	195,105	195,105
Subtotal Industrial					**287.9**	**NA**	**3,005,052**	**3,005,052**
Other								
Park	NA	NA	NA	100%	0.00	NA	NA	NA
Agriculture	NA	NA	NA	100%	0.00	NA	NA	NA
Airport	NA	1.00	0.15	100%	0.00	NA	0	0
Subtotal Other					**0.0**	**NA**	**0**	**0**
Total					**1,481.0**	**8,609**	**21,669,853**	**15,592,896**

"futurefeet"

Source: EPS

[1] Single-Family Land Uses have been broken apart into 1 and 2 Story land use categories for purposes of this analysis. Unit Size and Density are assumed to remain the same.
[2] For purposes of this analysis, EPS found it necessary to estimate a breakdown between number of one-story single-family units and number of two-story single-family units. The assumed breakdown is as follows:
-Rural Residential: 50% one-story, 50% two-story.
-Very Low-Density Residential: 50% one-story, 50% two-story.
-Low-Density Residential: 20% one-story, 80% two-story.
-Medium-Density Residential: 20% one-story, 80% two-story.
-Agricultural Residential: 50% one-story, 50% two-story.

Table C-9
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

Land Use [1]	Storage Area Total Total Acres
Single-Family - One-/Two-Story	
Rural Residential	691.30
Very Low-Density Residential	1,145.01
Low-Density Residential	7,452.25
Medium-Density Residential	3,657.57
Agricultural Residential	-26.58
Subtotal Single-Family - One-/Two-Story	**12,919.55**
Multifamily - One-Story [2]	**24.00**
Multifamily - Two-story	
Medium-High-Density Residential	2,475.83
High-Density Residential	1,049.84
Urban Residential	215.09
Subtotal Multifamily - Two-story	**3,740.75**
Commercial	
High-Intensity Office	721.61
Moderate-Intensity Office	653.18
Community/Neighborhood Retail	128.70
Regional Retail	304.37
Public/Quasi-Public	-192.37
Community/Neighborhood Commercial/Office	765.18
Regional Commercial/Office	106.83
Mixed Use Employment Focus	449.83
Mixed Use Residential Focus	126.23
High-Density Mixed Use Center or Corridor	201.94
Medical Facility	90.48
K-12 Schools	319.73
University/College	43.99
Subtotal Commercial	**3,719.71**
Industrial	
Light Industrial	4,858.54
Light Industrial-Office	71.46
Heavy Industrial	346.21
Subtotal Industrial	**5,276.21**
Other	
Park	1,223.74
Agriculture	0.00
Airport	982.00
Subtotal Other	**2,205.74**
TOTAL	**27,886.0**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed a minimal amount of multifamily one-story development in order to develop a relative relationship for modeling purposes.

Table C-9a
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_27
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	0.00
Low-Density Residential	0.00
Medium-Density Residential	0.00
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**0.00**
Multifamily - One-Story [2]	**0.00**
Multifamily - Two-story	
Medium-High-Density Residential	0.00
High-Density Residential	0.00
Urban Residential	0.00
Subtotal Multifamily - Two-story	**0.00**
Commercial	
High-Intensity Office	0.00
Moderate-Intensity Office	0.00
Community/Neighborhood Retail	0.00
Regional Retail	0.00
Public/Quasi-Public	0.00
Community/Neighborhood Commercial/Office	0.00
Regional Commercial/Office	0.00
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**0.00**
Industrial	
Light Industrial	0.00
Light Industrial-Office	0.00
Heavy Industrial	0.00
Subtotal Industrial	**0.00**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**0.0**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] Assumes no multifamily one-story development as this zone has little or no other residential development.

Table C-9b
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_28
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	0.00
Low-Density Residential	0.00
Medium-Density Residential	0.00
Agricultural Residential	-26.58
Subtotal Single-Family - One-/Two-Story	**-26.58**
Multifamily - One-Story [2]	**0.00**
Multifamily - Two-story	
Medium-High-Density Residential	0.00
High-Density Residential	0.00
Urban Residential	0.00
Subtotal Multifamily - Two-story	**0.00**
Commercial	
High-Intensity Office	0.00
Moderate-Intensity Office	0.00
Community/Neighborhood Retail	0.00
Regional Retail	0.00
Public/Quasi-Public	0.00
Community/Neighborhood Commercial/Office	0.00
Regional Commercial/Office	0.00
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**0.00**
Industrial	
Light Industrial	171.88
Light Industrial-Office	0.00
Heavy Industrial	0.00
Subtotal Industrial	**171.88**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**145.3**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] Assumes no multifamily one-story development as this zone has little or no other residential development.

Table C-9c
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_29
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	0.00
Low-Density Residential	0.00
Medium-Density Residential	0.00
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**0.00**
Multifamily - One-Story [2]	**0.00**
Multifamily - Two-story	
Medium-High-Density Residential	0.00
High-Density Residential	0.00
Urban Residential	0.00
Subtotal Multifamily - Two-story	**0.00**
Commercial	
High-Intensity Office	0.00
Moderate-Intensity Office	0.00
Community/Neighborhood Retail	0.00
Regional Retail	0.00
Public/Quasi-Public	0.00
Community/Neighborhood Commercial/Office	0.00
Regional Commercial/Office	0.00
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**0.00**
Industrial	
Light Industrial	0.00
Light Industrial-Office	0.00
Heavy Industrial	0.00
Subtotal Industrial	**0.00**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**0.0**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] Assumes no multifamily one-story development as this zone has little or no other residential development.

Table C-9d
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_30
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	394.00
Low-Density Residential	1,962.00
Medium-Density Residential	0.00
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**2,356.00**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	179.00
High-Density Residential	0.00
Urban Residential	0.00
Subtotal Multifamily - Two-story	**179.00**
Commercial	
High-Intensity Office	663.00
Moderate-Intensity Office	0.00
Community/Neighborhood Retail	0.00
Regional Retail	185.00
Public/Quasi-Public	0.00
Community/Neighborhood Commercial/Office	0.00
Regional Commercial/Office	0.00
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	79.00
Medical Facility	0.00
K-12 Schools	169.00
University/College	0.00
Subtotal Commercial	**1,096.00**
Industrial	
Light Industrial	2,008.00
Light Industrial-Office	0.00
Heavy Industrial	0.00
Subtotal Industrial	**2,008.00**
Other	
Park	846.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**846.00**
TOTAL	**6,486.0**

"land_use"

Source: SACOG

[1] EPS has adjusted the SACOG Projections to reflect the current Sutter Pointe Specific plan land use proposal.

[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9e
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_31
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	0.00
Low-Density Residential	127.20
Medium-Density Residential	108.00
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**235.20**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	0.00
High-Density Residential	18.70
Urban Residential	0.00
Subtotal Multifamily - Two-story	**18.70**
Commercial	
High-Intensity Office	0.00
Moderate-Intensity Office	108.60
Community/Neighborhood Retail	33.30
Regional Retail	0.00
Public/Quasi-Public	3.90
Community/Neighborhood Commercial/Office	0.00
Regional Commercial/Office	0.00
Mixed Use Employment Focus	300.40
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	10.00
University/College	0.00
Subtotal Commercial	**456.20**
Industrial	
Light Industrial	828.10
Light Industrial-Office	143.80
Heavy Industrial	0.00
Subtotal Industrial	**971.90**
Other	
Park	370.50
Agriculture	0.00
Airport	982.00
Subtotal Other	**1,352.50**
TOTAL	**3,035.5**

"land_use"

Source: SACOG

[1] EPS has adjusted SACOG projections to only reflect the current Greenbriar land use proposal and Airport SPA.

[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9f
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_32
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	-0.17
Very Low-Density Residential	50.56
Low-Density Residential	747.54
Medium-Density Residential	1,294.81
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**2,092.74**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	365.84
High-Density Residential	194.92
Urban Residential	1.18
Subtotal Multifamily - Two-story	**561.94**
Commercial	
High-Intensity Office	0.00
Moderate-Intensity Office	139.90
Community/Neighborhood Retail	0.00
Regional Retail	117.41
Public/Quasi-Public	-8.74
Community/Neighborhood Commercial/Office	157.37
Regional Commercial/Office	78.91
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	51.48
K-12 Schools	75.91
University/College	43.99
Subtotal Commercial	**656.23**
Industrial	
Light Industrial	180.88
Light Industrial-Office	0.00
Heavy Industrial	-61.06
Subtotal Industrial	**119.82**
Other	
Park	7.24
Agriculture	0.00
Airport	0.00
Subtotal Other	**7.24**
TOTAL	**3,439.0**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9g
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_33
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	-8.82
Very Low-Density Residential	0.38
Low-Density Residential	108.92
Medium-Density Residential	226.76
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**327.24**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	216.85
High-Density Residential	44.22
Urban Residential	0.00
Subtotal Multifamily - Two-story	**261.07**
Commercial	
High-Intensity Office	0.00
Moderate-Intensity Office	5.31
Community/Neighborhood Retail	9.02
Regional Retail	0.00
Public/Quasi-Public	20.21
Community/Neighborhood Commercial/Office	44.04
Regional Commercial/Office	0.00
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	10.29
University/College	0.00
Subtotal Commercial	**88.87**
Industrial	
Light Industrial	-36.27
Light Industrial-Office	0.00
Heavy Industrial	0.00
Subtotal Industrial	**-36.27**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**641.9**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9h
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_34
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	0.01
Low-Density Residential	46.65
Medium-Density Residential	100.36
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**147.02**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	22.51
High-Density Residential	64.78
Urban Residential	20.89
Subtotal Multifamily - Two-story	**108.18**
Commercial	
High-Intensity Office	1.96
Moderate-Intensity Office	30.38
Community/Neighborhood Retail	-10.31
Regional Retail	-2.44
Public/Quasi-Public	-77.31
Community/Neighborhood Commercial/Office	18.04
Regional Commercial/Office	3.95
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	15.45
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	77.86
University/College	0.00
Subtotal Commercial	**57.58**
Industrial	
Light Industrial	10.26
Light Industrial-Office	-10.26
Heavy Industrial	-0.60
Subtotal Industrial	**-0.60**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**313.2**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9i
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_35
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	0.00
Low-Density Residential	18.18
Medium-Density Residential	34.77
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**52.95**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	0.00
High-Density Residential	2.46
Urban Residential	10.64
Subtotal Multifamily - Two-story	**13.10**
Commercial	
High-Intensity Office	2.46
Moderate-Intensity Office	21.64
Community/Neighborhood Retail	0.00
Regional Retail	0.82
Public/Quasi-Public	1.16
Community/Neighborhood Commercial/Office	2.49
Regional Commercial/Office	0.00
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**28.57**
Industrial	
Light Industrial	0.00
Light Industrial-Office	0.00
Heavy Industrial	0.00
Subtotal Industrial	**0.00**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**95.6**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9j
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

Storage Area SA_38

Land Use [1]	Total Acres
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	0.00
Low-Density Residential	0.73
Medium-Density Residential	0.00
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**0.73**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	0.31
High-Density Residential	24.99
Urban Residential	33.89
Subtotal Multifamily - Two-story	**59.19**
Commercial	
High-Intensity Office	0.39
Moderate-Intensity Office	0.00
Community/Neighborhood Retail	-2.72
Regional Retail	-6.26
Public/Quasi-Public	-47.25
Community/Neighborhood Commercial/Office	0.66
Regional Commercial/Office	0.00
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	-2.30
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**-57.48**
Industrial	
Light Industrial	0.45
Light Industrial-Office	0.00
Heavy Industrial	0.00
Subtotal Industrial	**0.45**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**3.9**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9k
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_39
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	-0.22
Low-Density Residential	-0.19
Medium-Density Residential	9.45
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**9.04**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	58.33
High-Density Residential	13.50
Urban Residential	5.58
Subtotal Multifamily - Two-story	**77.41**
Commercial	
High-Intensity Office	0.30
Moderate-Intensity Office	9.94
Community/Neighborhood Retail	-2.05
Regional Retail	-6.45
Public/Quasi-Public	-26.34
Community/Neighborhood Commercial/Office	11.24
Regional Commercial/Office	0.00
Mixed Use Employment Focus	6.45
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	26.07
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**19.16**
Industrial	
Light Industrial	-54.65
Light Industrial-Office	0.00
Heavy Industrial	-8.95
Subtotal Industrial	**-63.60**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**43.0**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9l
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_170
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	0.08
Low-Density Residential	14.70
Medium-Density Residential	44.04
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**58.82**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	36.90
High-Density Residential	11.54
Urban Residential	0.80
Subtotal Multifamily - Two-story	**49.24**
Commercial	
High-Intensity Office	0.00
Moderate-Intensity Office	10.00
Community/Neighborhood Retail	-28.12
Regional Retail	-4.15
Public/Quasi-Public	2.69
Community/Neighborhood Commercial/Office	5.45
Regional Commercial/Office	0.00
Mixed Use Employment Focus	42.90
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**28.77**
Industrial	
Light Industrial	35.94
Light Industrial-Office	0.00
Heavy Industrial	10.55
Subtotal Industrial	**46.49**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**184.3**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9m
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

Land Use [1]	Storage Area SA_171 Total Acres
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	-0.34
Low-Density Residential	21.19
Medium-Density Residential	36.80
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**57.65**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	82.88
High-Density Residential	32.44
Urban Residential	1.55
Subtotal Multifamily - Two-story	**116.87**
Commercial	
High-Intensity Office	0.00
Moderate-Intensity Office	40.97
Community/Neighborhood Retail	17.93
Regional Retail	0.00
Public/Quasi-Public	3.41
Community/Neighborhood Commercial/Office	22.16
Regional Commercial/Office	0.00
Mixed Use Employment Focus	-0.80
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	-2.03
University/College	0.00
Subtotal Commercial	**81.64**
Industrial	
Light Industrial	4.69
Light Industrial-Office	0.00
Heavy Industrial	-2.07
Subtotal Industrial	**2.62**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**259.8**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9n
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_172
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	14.89
Very Low-Density Residential	36.39
Low-Density Residential	18.93
Medium-Density Residential	5.13
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**75.34**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	13.85
High-Density Residential	7.19
Urban Residential	0.33
Subtotal Multifamily - Two-story	**21.37**
Commercial	
High-Intensity Office	0.00
Moderate-Intensity Office	10.76
Community/Neighborhood Retail	27.29
Regional Retail	-7.05
Public/Quasi-Public	16.54
Community/Neighborhood Commercial/Office	1.15
Regional Commercial/Office	0.00
Mixed Use Employment Focus	16.97
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**65.66**
Industrial	
Light Industrial	-0.70
Light Industrial-Office	0.00
Heavy Industrial	0.00
Subtotal Industrial	**-0.70**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**162.7**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9o
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_173
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	2.17
Very Low-Density Residential	17.44
Low-Density Residential	5.19
Medium-Density Residential	7.71
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**32.51**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	53.51
High-Density Residential	37.18
Urban Residential	1.84
Subtotal Multifamily - Two-story	**92.53**
Commercial	
High-Intensity Office	-0.87
Moderate-Intensity Office	39.04
Community/Neighborhood Retail	103.25
Regional Retail	-1.22
Public/Quasi-Public	0.80
Community/Neighborhood Commercial/Office	8.74
Regional Commercial/Office	2.48
Mixed Use Employment Focus	7.28
Mixed Use Residential Focus	1.16
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**160.66**
Industrial	
Light Industrial	2.96
Light Industrial-Office	0.00
Heavy Industrial	-0.14
Subtotal Industrial	**2.82**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**289.5**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9p
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_174
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.21
Very Low-Density Residential	1.36
Low-Density Residential	56.31
Medium-Density Residential	27.59
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**85.47**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	39.74
High-Density Residential	15.08
Urban Residential	8.97
Subtotal Multifamily - Two-story	**63.79**
Commercial	
High-Intensity Office	1.90
Moderate-Intensity Office	8.59
Community/Neighborhood Retail	4.94
Regional Retail	0.64
Public/Quasi-Public	3.34
Community/Neighborhood Commercial/Office	10.97
Regional Commercial/Office	5.78
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**36.16**
Industrial	
Light Industrial	39.06
Light Industrial-Office	0.00
Heavy Industrial	34.40
Subtotal Industrial	**73.46**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**259.9**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9q
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_175
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	0.09
Low-Density Residential	-1.78
Medium-Density Residential	-1.54
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**-3.23**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	9.56
High-Density Residential	16.69
Urban Residential	10.25
Subtotal Multifamily - Two-story	**36.50**
Commercial	
High-Intensity Office	2.06
Moderate-Intensity Office	-3.72
Community/Neighborhood Retail	-8.83
Regional Retail	-0.39
Public/Quasi-Public	-1.13
Community/Neighborhood Commercial/Office	-11.88
Regional Commercial/Office	0.00
Mixed Use Employment Focus	6.68
Mixed Use Residential Focus	3.41
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**-13.80**
Industrial	
Light Industrial	-15.60
Light Industrial-Office	0.00
Heavy Industrial	0.00
Subtotal Industrial	**-15.60**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**4.9**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9r
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_176
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	0.05
Low-Density Residential	-1.28
Medium-Density Residential	0.17
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**-1.06**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	2.14
High-Density Residential	0.80
Urban Residential	65.46
Subtotal Multifamily - Two-story	**68.40**
Commercial	
High-Intensity Office	3.89
Moderate-Intensity Office	-4.38
Community/Neighborhood Retail	-26.29
Regional Retail	-0.28
Public/Quasi-Public	-60.58
Community/Neighborhood Commercial/Office	-7.45
Regional Commercial/Office	-4.62
Mixed Use Employment Focus	2.56
Mixed Use Residential Focus	2.17
High-Density Mixed Use Center or Corridor	96.87
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**1.89**
Industrial	
Light Industrial	-7.34
Light Industrial-Office	0.00
Heavy Industrial	-0.48
Subtotal Industrial	**-7.82**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**62.4**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9s
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_177
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	0.00
Low-Density Residential	166.62
Medium-Density Residential	6.15
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**172.77**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	71.08
High-Density Residential	80.92
Urban Residential	0.00
Subtotal Multifamily - Two-story	**152.00**
Commercial	
High-Intensity Office	0.00
Moderate-Intensity Office	57.60
Community/Neighborhood Retail	8.96
Regional Retail	0.00
Public/Quasi-Public	86.92
Community/Neighborhood Commercial/Office	26.07
Regional Commercial/Office	0.00
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**179.55**
Industrial	
Light Industrial	727.28
Light Industrial-Office	0.00
Heavy Industrial	323.06
Subtotal Industrial	**1,050.34**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**1,555.7**

"land_use"

Source: SACOG

[1] Known Airport related development has been excluded from this impact zone since it is outside of the flood plain

[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9t
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_178
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	-0.46
Very Low-Density Residential	-0.79
Low-Density Residential	71.33
Medium-Density Residential	49.65
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**119.73**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	68.39
High-Density Residential	52.71
Urban Residential	14.94
Subtotal Multifamily - Two-story	**136.04**
Commercial	
High-Intensity Office	0.15
Moderate-Intensity Office	-10.90
Community/Neighborhood Retail	-46.28
Regional Retail	6.59
Public/Quasi-Public	-2.32
Community/Neighborhood Commercial/Office	4.01
Regional Commercial/Office	2.54
Mixed Use Employment Focus	53.93
Mixed Use Residential Focus	8.79
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**16.51**
Industrial	
Light Industrial	33.21
Light Industrial-Office	0.00
Heavy Industrial	-10.81
Subtotal Industrial	**22.40**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**295.7**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9u
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_179
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	-0.27
Very Low-Density Residential	4.81
Low-Density Residential	154.95
Medium-Density Residential	47.38
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**206.87**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	99.52
High-Density Residential	42.96
Urban Residential	2.32
Subtotal Multifamily - Two-story	**144.80**
Commercial	
High-Intensity Office	0.17
Moderate-Intensity Office	-1.73
Community/Neighborhood Retail	8.25
Regional Retail	22.04
Public/Quasi-Public	-8.62
Community/Neighborhood Commercial/Office	15.74
Regional Commercial/Office	0.00
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**35.85**
Industrial	
Light Industrial	52.46
Light Industrial-Office	0.00
Heavy Industrial	82.94
Subtotal Industrial	**135.40**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**523.9**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9v
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_180
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	-25.36
Very Low-Density Residential	190.17
Low-Density Residential	1,097.69
Medium-Density Residential	492.22
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**1,754.72**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	396.50
High-Density Residential	167.50
Urban Residential	12.46
Subtotal Multifamily - Two-story	**576.46**
Commercial	
High-Intensity Office	9.24
Moderate-Intensity Office	13.94
Community/Neighborhood Retail	-49.86
Regional Retail	8.16
Public/Quasi-Public	-6.37
Community/Neighborhood Commercial/Office	161.73
Regional Commercial/Office	0.00
Mixed Use Employment Focus	2.55
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	-11.79
University/College	0.00
Subtotal Commercial	**127.60**
Industrial	
Light Industrial	449.99
Light Industrial-Office	-62.08
Heavy Industrial	-88.73
Subtotal Industrial	**299.18**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**2,759.0**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9w
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_181
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	0.84
Low-Density Residential	42.89
Medium-Density Residential	30.15
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**73.88**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	2.88
High-Density Residential	0.04
Urban Residential	0.00
Subtotal Multifamily - Two-story	**2.92**
Commercial	
High-Intensity Office	0.00
Moderate-Intensity Office	15.24
Community/Neighborhood Retail	1.07
Regional Retail	0.00
Public/Quasi-Public	1.13
Community/Neighborhood Commercial/Office	0.20
Regional Commercial/Office	0.00
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**17.64**
Industrial	
Light Industrial	0.00
Light Industrial-Office	0.00
Heavy Industrial	0.00
Subtotal Industrial	**0.00**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**95.4**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9x
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_182
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	155.00
Very Low-Density Residential	70.72
Low-Density Residential	625.10
Medium-Density Residential	463.05
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**1,313.87**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	371.07
High-Density Residential	174.11
Urban Residential	7.83
Subtotal Multifamily - Two-story	**553.01**
Commercial	
High-Intensity Office	0.00
Moderate-Intensity Office	15.95
Community/Neighborhood Retail	7.53
Regional Retail	19.48
Public/Quasi-Public	-167.25
Community/Neighborhood Commercial/Office	113.06
Regional Commercial/Office	9.82
Mixed Use Employment Focus	10.91
Mixed Use Residential Focus	94.81
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	9.29
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**113.60**
Industrial	
Light Industrial	46.29
Light Industrial-Office	0.00
Heavy Industrial	0.00
Subtotal Industrial	**46.29**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**2,027.8**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9y
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_183
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	553.82
Very Low-Density Residential	362.26
Low-Density Residential	1,876.87
Medium-Density Residential	179.77
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**2,972.72**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	122.53
High-Density Residential	13.94
Urban Residential	1.39
Subtotal Multifamily - Two-story	**137.86**
Commercial	
High-Intensity Office	0.00
Moderate-Intensity Office	29.80
Community/Neighborhood Retail	51.13
Regional Retail	-39.42
Public/Quasi-Public	13.87
Community/Neighborhood Commercial/Office	131.38
Regional Commercial/Office	0.00
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	2.74
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	-9.51
University/College	0.00
Subtotal Commercial	**179.99**
Industrial	
Light Industrial	69.77
Light Industrial-Office	0.00
Heavy Industrial	-9.18
Subtotal Industrial	**60.59**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**3,352.2**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9z
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_206
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.29
Very Low-Density Residential	1.87
Low-Density Residential	77.63
Medium-Density Residential	38.04
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**117.83**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	54.79
High-Density Residential	20.79
Urban Residential	12.37
Subtotal Multifamily - Two-story	**87.94**
Commercial	
High-Intensity Office	2.62
Moderate-Intensity Office	11.84
Community/Neighborhood Retail	6.81
Regional Retail	0.88
Public/Quasi-Public	4.60
Community/Neighborhood Commercial/Office	15.12
Regional Commercial/Office	7.97
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**49.85**
Industrial	
Light Industrial	53.85
Light Industrial-Office	0.00
Heavy Industrial	47.42
Subtotal Industrial	**101.27**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**357.9**

"land_use"

Source: SACOG

[1] EPS has estimated the growth in this zone based upon its proportionate size to SA_174.
[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

Table C-9aa
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_230
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	0.00
Low-Density Residential	0.00
Medium-Density Residential	0.00
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**0.00**
Multifamily - One-Story [2]	**0.00**
Multifamily - Two-story	
Medium-High-Density Residential	0.00
High-Density Residential	0.00
Urban Residential	0.00
Subtotal Multifamily - Two-story	**0.00**
Commercial	
High-Intensity Office	0.00
Moderate-Intensity Office	0.00
Community/Neighborhood Retail	0.00
Regional Retail	0.00
Public/Quasi-Public	10.61
Community/Neighborhood Commercial/Office	0.00
Regional Commercial/Office	0.00
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	0.00
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**10.61**
Industrial	
Light Industrial	0.00
Light Industrial-Office	0.00
Heavy Industrial	0.00
Subtotal Industrial	**0.00**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**10.6**

"land_use"

Source: SACOG

[1] Reflects development projections as provided by SACOG except where noted otherwise.
[2] Assumes no multifamily one-story development as this zone has little or no other residential development.

Table C-9ab
Sacramento Area Flood Control Agency - Development Fee
Summary of Acreage Projection By Storage Area

	Storage Area SA_231
Land Use [1]	**Total Acres**
Single-Family - One-/Two-Story	
Rural Residential	0.00
Very Low-Density Residential	15.33
Low-Density Residential	214.88
Medium-Density Residential	457.11
Agricultural Residential	0.00
Subtotal Single-Family - One-/Two-Story	**687.32**
Multifamily - One-Story [2]	**1.00**
Multifamily - Two-story	
Medium-High-Density Residential	207.65
High-Density Residential	12.38
Urban Residential	2.40
Subtotal Multifamily - Two-story	**222.43**
Commercial	
High-Intensity Office	34.34
Moderate-Intensity Office	104.41
Community/Neighborhood Retail	23.68
Regional Retail	11.01
Public/Quasi-Public	44.36
Community/Neighborhood Commercial/Office	34.89
Regional Commercial/Office	0.00
Mixed Use Employment Focus	0.00
Mixed Use Residential Focus	0.00
High-Density Mixed Use Center or Corridor	0.00
Medical Facility	29.71
K-12 Schools	0.00
University/College	0.00
Subtotal Commercial	**282.40**
Industrial	
Light Industrial	258.03
Light Industrial-Office	0.00
Heavy Industrial	29.86
Subtotal Industrial	**287.89**
Other	
Park	0.00
Agriculture	0.00
Airport	0.00
Subtotal Other	**0.00**
TOTAL	**1,481.0**

"land_use"

Source: SACOG

[1] Known Airport related development has been excluded from this impact zone since it is outside of the flood plain

[2] EPS has assumed 1 acre of multifamily one-story development as there is other residential development in this zone.

APPENDIX D

SAFCA
FLOOD CONTROL DEVELOPMENT IMPACT FEE
WORKSHEET AND EXAMPLE FEE CALCULATIONS

SAFCA Flood Control Development Impact Fee (DIF) Worksheet D-1
Table D-1 Land Use Category Descriptions and Assessor Codes D-3
Table D-2 Development Example 1 ..... D-4
Table D-3 Development Example 2 ..... D-5
Table D-4 Development Example 3 ..... D-6
Table D-5 Development Example 4 ..... D-7
Table D-6 Development Example 5 ..... D-8
Table D-7 Development Example 6 ..... D-9
Table D-8 Development Example 7 ..... D-10
Table D-9 Development Example 8 ..... D-11

SAFCA
Flood Control Development Impact Fee (DIF) Worksheet

Section I: Property Description

Date: _____

Prepared by: _____ Agency: _____

Property Description After Completion of Project

Location/Address: _____

Assessor Land Use Code: _____

Land Use Category/Description: _____

[1]Damageable Square Feet: _____ Number of Floors: _____

[1]For Single-Family and Multifamily land uses, damageable square footage includes the habitable square footage of the first two floors of the structure. For all other land uses, the damageable square footage includes only the first floor habitable square footage.

Section II: Fee Calculation

☐ Project is Exempt [2]Exemption Category _____

☐ Fee applies (see below for calculation).

DIF Calculation:

A) [3][4]Land Use Category/Current Fee Rate: _____ / _____

B) Damageable Square Feet: _____

DIF: A x B = _____

[2]See **Table 9** of the report for a listing of the Exemption Categories.

[3]See the attached **Table D-1** for a listing of the land use categories and the applicable base year fee rates. For the applicable fee rate, refer to the updated fee schedule provided by SAFCA.

[4]For projects in a redevelopment project area, where the governing redevelopment agency provides financial assistance to the project, the applicable fee rate and land use category for the project will be the multifamily two-story residential rate and the damageable square footage of project will be determined based on the first two floors of the structure.

Section III: Applicable Credits

☐ Project is Eligible for Credit [4]Credit Category _____

DIF Credit Calculation:

A) [5]Prior and Use Category/Current Fee Rate: _____ / _____

B) Damageable Square Feet: _____

DIF Credit: A x B = _____

Resulting DIF: DIF – DIF Credit (not less than $0) = _____

[4]See **Table 9** of the report for a listing of the Credit Categories.

[5]See the attached **Table D-1** for a listing of the land use categories and the applicable base year fee rates. For credits, the prior land use category will be the land use of the structure that previously existed. For the applicable fee rate, refer to the updated fee schedule provided by SAFCA.

Table D-1
Sacramento Area Flood Control Agency - Development Fee
Land Use Category Descriptions and Assessor Codes

DIF Land Use Category	Detailed Description [1]	Applicable Sacramento County Assessor's Codes [2]	Base Year Fee Rate [3]
Single-Family One-Story Residential	Includes structures that are Single Family Dwellings which are designed exclusively for occupancy by one family. The structure should include no more than one story of habitable square footage.	A1, A2	$1.79
Multifamily One-Story Residential	Includes structures that are occupied by three or more families living independently of each other, but under one roof. Ownership of the building(s) could be a single ownership of units and land (e.g., apartments) or individual ownership of each unit and joint ownership of common area (e.g., condos). The structure should include no more than one story of habitable square footage.	A3, A4, AD, AE, AF, AG, AL	$1.00
Single-Family Two-Story Residential	Includes structures that are Single Family Dwellings which are designed exclusively for occupancy by one family. The structure should include no less than one story of habitable square footage.	A1, A2	$1.72
Multifamily Two-Story Residential	Includes structures that are occupied by three or more families living independently of each other, but under one roof. Ownership of the building(s) could be a single ownership of units and land (e.g., apartments) or individual ownership of each unit and joint ownership of common area (e.g., condos). The structure should include no less than one story of habitable square footage.	A3, A4, AD, AE, AF, AG, AL	$1.06
Commercial	Includes, but is not limited to, structures that are occupied by retail and office establishments providing products or commercial services to the general public.	BA, BB, BC, BD, BE, BF, BG, BH, BI, CA, CB, CC, CD, CE, CG, CH, CJ, CF	$2.69
Industrial	Includes, but is not limited to, structures that are occupied by manufacturing outlets, miscellaneous industrial, heavy and light industrial, warehousing, distribution, storage, lumber yards, truck terminals, and bulk plants.	GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, Gl, GM	$1.79

"l_use"

[1] Adapted from the City of Sacramento City Code §17.16.010 (Zoning Code).
[2] Represents only the first two characters of the Assessor's Use Codes. Adapted from the Operations Manual of the County of Sacramento Office of the Assessor Section 13-14.
[3] Base Year is 2009.

Table D-2
Sacramento Area Flood Control Agency - Development Fee Program
Development Example 1

Assumptions

Project	Construction of a new 2,500 sq.ft. Single Story Single Family residential Property.
Land Use Type	Single Family Residential
Total sq.ft.	2,500
Stories	1
Damageable sq.ft (first 2 stories) [1]	2,500

Development Fee Determination

Is the parcel located within the Fee Program Boundary?	Yes
Does this project qualify for exemption or a credit? (If a credit exists, calculate below)	No
What is the existing land use, and what is the planned land use?	One-Story Residential

Fee Calculations

Item	Formula	Value	Application
New Damageable sq.ft.	*a*	2,500	New or additional square footage constructed in the project on the first 2 stories.
Cost Fee per Damageable sq.ft.	*b*	$1.79	Fee rate for single story Single Family Residential (Table D-1 as updated)
Development Impact Fee (DIF)	***c = a*b***	**$4,475.00**	

"example_1"

Source: EPS

[1] Damageable square footage is the structure square footage of the first two floors of residential development or the first floor of all other type of development. For purposes of calculating the DIF, damageable square footage should only include the habitable square footage of the new structure. Habitable square footage can be generally classified as all square footage that contains conditioned air. This would include all new square footage constructed except garages, porches, decks, entryways, awnings, carports, driveways, breezeways and the like.

Table D-3
Sacramento Area Flood Control Agency - Development Fee Program
Development Example 2

Assumptions

Project	Construction of a new 2,500 sq.ft. Two Story Single Family residential Property.
Land Use Type	Single Family Residential
Total sq.ft.	2,500
Stories	2
Damageable sq.ft. (first 2 stories) [1]	2,500

Development Fee Determination

Is the parcel located within the Fee Program Boundary?	Yes
Does this project qualify for exemption or a credit? (If a credit exists, calculate below)	No
What is the existing land use, and what is the planned land use?	Two-Story Residential

Fee Calculations

Item	Formula	Value	Application
New Damageable sq.ft.	*a*	2,500	New or additional square footage constructed in the project on the first 2 stories.
Cost Fee per Damageable sq.ft.	*b*	$1.72	Fee rate for 2 story Single Family Residential (Table D-1 as updated)
Development Impact Fee (DIF)	***c = a*b***	**$4,300.00**	

"example_2"

Source: EPS.

[1] Damageable square footage is the structure square footage of the first two floors of residential development or the first floor of all other type of development. For purposes of calculating the DIF, damageable square footage should only include the habitable square footage of the new structure. Habitable square footage can be generally classified as all square footage that contains conditioned air. This would include all new square footage constructed except garages, porches, decks, entryways, awnings, carports, driveways, breezeways and the like.

Table D-4
Sacramento Area Flood Control Agency - Development Fee Program
Development Example 3

Assumptions

Project	Construction of a new 20,000 sq.ft. 4-story (even spread of SF on each floor) Multi Family Structure.
Land Use Type	Multifamily Residential
Total sq.ft.	20,000
Stories	4
Damageable sq.ft. (first 2 stories) [1]	10,000

Development Fee Determination

Is the parcel located within the Fee Program Boundary?	Yes
Does this project qualify for exemption or a credit? (If a credit exists, calculate below)	No
What is the existing land use, and what is the planned land use?	Two-Story Multifamily.

Fee Calculations

Item	Formula	Value	Application
New Damageable sq.ft.	*a*	10,000	New or additional square footage constructed in the project on the first 2 stories.
Cost Fee per Damageable sq.ft.	*b*	$1.06	Fee rate for 2 story Multifamily Residential (Table D-1 as updated)
Development Impact Fee (DIF)	***c = a*b***	**$10,600.00**	

"example_3"

Source: EPS.

[1] Damageable square footage is the structure square footage of the first two floors of residential development or the first floor of all other type of development. For purposes of calculating the DIF, damageable square footage should only include the habitable square footage of the new structure. Habitable square footage can be generally classified as all square footage that contains conditioned air. This would include all new square footage constructed except garages, porches, decks, entryways, awnings, carports, driveways, breezeways and the like.

Table D-5
Sacramento Area Flood Control Agency - Development Fee Program
Development Example 4

Assumptions

Project	Construction of a 1,000 sq.ft. addition to an existing 2-story house.
Land Use Type	Residential
Total sq.ft.	1,000
Stories	2
Damageable sq.ft. (first 2 stories) [1]	1,000

Development Fee Determination

Is the parcel located within the Fee Program Boundary?	Yes
Does this project qualify for exemption or a credit? (If a credit exists, calculate below)	No
What is the existing land use, and what is the planned land use?	Two-Story Single-family.

Fee Calculations

Item	Formula	Value	Application
New Damageable sq.ft.	*a*	1,000	New or additional square footage constructed in the project on the first 2 stories.
Cost Fee per Damageable sq.ft.	*b*	$1.72	Fee rate for 2 story Single-Family Residential (Table D-1 as updated)
Development Impact Fee (DIF)	***c = a*b***	**$1,720.00**	

"example_4"

Source: EPS.

[1] Damageable square footage is the structure square footage of the first two floors of residential development or the first floor of all other type of development. For purposes of calculating the DIF, damageable square footage should only include the habitable square footage of the new structure. Habitable square footage can be generally classified as all square footage that contains conditioned air. This would include all new square footage constructed except garages, porches, decks, entryways, awnings, carports, driveways, breezeways and the like.

Table D-6
Sacramento Area Flood Control Agency - Development Fee Program
Development Example 5

Assumptions

Project	Construction of a 150,000 sq.ft. 3-story Commercial Office Building with even spread of sq. ft. per floor.
Land Use Type	Commercial
Total sq.ft.	150,000
Stories	3
Damageable sq.ft. (first 2 stories) [1]	100,000

Development Fee Determination

Is the parcel located within the Fee Program Boundary?	Yes
Does this project qualify for exemption or a credit? (If a credit exists, calculate below)	No
What is the existing land use, and what is the planned land use?	Two-Story Single-family.

Fee Calculations

Item	Formula	Value	Application
New Damageable sq.ft.	*a*	100,000	New or additional square footage constructed in the project on the first 2 stories.
Cost Fee per Damageable sq.ft.	*b*	$2.69	Fee rate for Commercial Development (Table D-1 as updated)
Development Impact Fee (DIF)	***c = a*b***	**$269,000.00**	

"example_5"

Source: EPS.

[1] Damageable square footage is the structure square footage of the first two floors of residential development or the first floor of all other type of development. For purposes of calculating the DIF, damageable square footage should only include the habitable square footage of the new structure. Habitable square footage can be generally classified as all square footage that contains conditioned air. This would include all new square footage constructed except garages, porches, decks, entryways, awnings, carports, driveways, breezeways and the like.

Table D-7
Sacramento Area Flood Control Agency - Development Fee Program
Development Example 6

Assumptions

Project	Redevelopment of an existing 100,000 sq. ft. Industrial building to office with an additional 10,000 sq. ft. addition.
Land Use Type	Industrial/Commercial
Total sq.ft.	110,000
Stories	1
Damageable sq.ft. (first 2 stories) [1]	
Original sq. ft.	100,000
Additional sq.ft.	10,000
Total sq.ft.	**110,000**
Exemption/Credit Available	Credit

Development Fee Determination

Is the parcel located within the Fee Program Boundary?	Yes	
Does this project qualify for exemption or a credit? (If a credit exists, calculate below)	Credit	Pre-Existing Structure Credit: Developer will receive a credit against the DIF for the new development. Credit will be determined by applying the existing land use DIF rate with the old footprint against the new land use and new footprint. The fee shall not be less than zero. (**Table 9**)
What is the existing land use, and what is the planned land use?	Industrial to become Commercial	

Fee Calculations

Item	Formula	Value	Application
New Structure DIF			
New Damageable sq.ft.	*d*	110,000	Total square footage including new development.
Cost Fee per Damageable sq.ft.	*e*	$2.69	Fee rate for commercial. (Table D-1 as updated)
Total Redeveloped DIF	***f = d*e***	**$295,900.00**	
Pre-Existing DIF Credit			
Original Damageable sq.ft.	*a*	100,000	Original damageable square footage.
Cost Fee per Damageable sq.ft.	*b*	$1.79	Fee rate for industrial. (Table D-1 as updated)
Total Pre-Existing DIF	***c = a*b***	**$179,000.00**	
Total Development Impact Fee			
Redeveloped DIF	*f*	$295,900.00	
Pre-Existing DIF	*c*	($179,000.00)	Pre-Existing DIF acts as credit towards the Total Development Impact Fee.
Total Development Impact Fee	***g = f - c***	**$116,900.00**	Total DIF results in Redeveloped DIF less Pre-Existing DIF.

"example_6"

Source: EPS.

[1] Damageable square footage is the structure square footage of the first two floors of residential development or the first floor of all other type of development. For purposes of calculating the DIF, damageable square footage should only include the habitable square footage of the new structure. Habitable square footage can be generally classified as all square footage that contains conditioned air. This would include all new square footage constructed except garages, porches, decks, entryways, awnings, carports, driveways, breezeways and the like.

Table D-8
Sacramento Area Flood Control Agency - Development Fee Program
Development Example 7

Assumptions

Project	Construction of a new 30,000 sq. ft. Office Structure in a redevelopment area where, a prior 10,000 sq. ft. 2-Story Multifamily building was demolished in 1999.
Land Use Type	2-Story Multifamily/Commercial
Total sq.ft.	30,000
Stories	1
Damageable sq.ft. (first 2 stories) [1]	
Previous sq. ft.	10,000
New sq.ft.	30,000

Development Fee Determination

Is the parcel located within the Fee Program Boundary?	Yes	
Does this project qualify for exemption or a credit? (If a credit exists, calculate below)	Credit	Vacant Site within Redevelopment Area: Credit will be computed based on the previous building footprint & fee rate for new development for any building area that existed after January 1998. (**Table 9**)
What is the existing land use, and what is the planned land use?	2-Story Multifamily to become Commercial	

Fee Calculations

Item	Formula	Value	Application
New Structure DIF			
New Damageable sq.ft.	*d*	30,000	Total square footage including new development.
Cost Fee per Damageable sq.ft.	*e*	$2.69	Fee rate for commercial. (Table D-1 as updated)
Total Redeveloped DIF	***f = d*e***	**$80,700.00**	
Pre-Existing DIF Credit			
Original Damageable sq.ft.	*a*	10,000	Original damageable square footage.
Cost Fee per Damageable sq.ft.	*b*	$1.06	Fee rate for 2-Story multifamily. (Table D-1 as updated)
Total Pre-Existing DIF	***c = a*b***	**$10,600.00**	
Total Development Impact Fee			
Redeveloped DIF	*f*	$80,700.00	
Pre-Existing DIF	*c*	($10,600.00)	Pre-Existing DIF acts as credit towards the Total Development Impact Fee.
Total Development Impact Fee	***g = f - c***	**$70,100.00**	Total DIF results in Redeveloped DIF less Pre-Existing DIF.

"example_7"

Source: EPS.

[1] Damageable square footage is the structure square footage of the first two floors of residential development or the first floor of all other type of development. For purposes of calculating the DIF, damageable square footage should only include the habitable square footage of the new structure. Habitable square footage can be generally classified as all square footage that contains conditioned air. This would include all new square footage constructed except garages, porches, decks, entryways, awnings, carports, driveways, breezeways and the like.

Table D-9
Sacramento Area Flood Control Agency - Development Fee Program
Development Example 8

Assumptions		
Project	Construction of a 250 sq.ft. addition to an existing 2-story house.	
Land Use Type	Residential	
Total sq.ft.	250	
Stories	2	
Damageable sq.ft. (first 2 stories) [1]	250	
Development Fee Determination		
Is the parcel located within the Fee Program Boundary?	Yes	
Does this project qualify for exemption or a credit? (If a credit exists, calculate below)	Exemption	The addition is 300 sq.ft. or less, thus the fee is not sufficient to justify the administrative costs. (**Table 9**).
What is the existing land use, and what is the planned land use?	2-Story Multifamily	

"example_8"

Source: EPS.

[1] Damageable square footage is the structure square footage of the first two floors of residential development or the first floor of all other type of development. For purposes of calculating the DIF, damageable square footage should only include the habitable square footage of the new structure. Habitable square footage can be generally classified as all square footage that contains conditioned air. This would include all new square footage constructed except garages, porches, decks, entryways, awnings, carports, driveways, breezeways and the like.