

APPENDIX D
FLOODPLAIN CONSTRAINTS METHODOLOGY SUPPLEMENT

FLOODPLAIN CONSTRAINTS UPDATE

Floodplain constraints are relevant to the following sections:

- Regional overview of floodplain constraints (Chapter 3, page 3-15)
- Mandatory/State Policy Evaluation (Chapter 3, pages 3-18 - 3-24)
- Time Frame Evaluation (Chapter 3, pages 3-28 - 3-33)

Floodplain constraints and levee failure are the largest environmental infrastructure issues in the Central Valley. Future development in the Sacramento Region will be constrained by how the local cities, the Sacramento Area Flood Control Agency (SAFCA), and State legislation resolve floodplain constraints and levee reconstruction. Levees in the Natomas Area were recently decertified from 100-Year to 40-Year flood protection. However, a bond was recently passed to fix the levy and restore protection to the 100-Year flood level. It is very likely that the levy will be fixed within 5 years. Levees in West Sacramento were also recently decertified, but are currently in the process of obtaining funding to be rebuilt.

This Planning Study includes the most up-to-date floodplain-related data. Since floodplain data, policies and maps are being updated at the federal, State and local levels, data are sometimes out of date, on record but not public, or not graphically mapped. For this reason, notations regarding the floodplain status are made in the time frame evaluation chart (pages 3-30 - 3-33), but comparisons between jurisdictions will not always be direct.

FLOODPLAIN DATA SOURCES

Three types of data were consulted assessing the floodplain constraints of the opportunity areas: regional floodplain data maps or “Quad 3” (Q3) flood data, Flood Insurance Rate Maps (FIRM) and engineers’ reports. The Q3 map data help understand floodplains from a regional perspective. They are used in the map on page 3-15. They do not, however provide an accurate or up to date picture of current conditions. For this reason, the other two types of data were consulted to conduct the assessment in Chapter 3. The data types are further explained below.

Q3 FLOOD DATA¹

The digital Q3 Flood Data are designed to serve FEMA’s needs for disaster response activities, National Flood Insurance Program activities, risk assessment, and floodplain management. The data are expected to be used for a variety of planning applications including broad-based review for floodplain management, land-use planning, commercial site analysis, insurance target marketing, natural resource/environmental analyses, and real estate development and targeting.

Because digital Q3 Flood Data are controlled to the USGS 1:24,000 scale maps, they are not detailed enough for assessing many of the opportunity areas. The hardcopy Flood Insurance Rate Map and West Sacramento engineers’ reports were therefore consulted.

¹ Source: http://www.fema.gov/plan/prevent/fhm/fq_q3.shtm (September 30, 2007)

FLOOD INSURANCE RATE MAPS (FIRMS)²

These maps are more accurate than the Q3 maps and are coordinated with engineering reports for levy studies; therefore, they give an indication of the risk of developing the opportunity areas in the event of a typical flood or levy failure.

Flood Zone Designations are geographic areas that the FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM). Each zone reflects the severity or type of flooding in the area. The relevant zones to this Planning Study are:

Zones B, C, and X

Areas outside the 1-percent annual chance floodplain, areas of 1% annual chance sheet flow flooding where average depths are less than 1 foot, areas of 1% annual chance stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 1% annual chance flood by levees. No Base Flood Elevations or depths are shown within this zone. Insurance purchase is not required in these zones. In communities that participate in the National Flood Insurance Program (NFIP), flood insurance is available to all property owners and renters in these zones. An opportunity area in one of these zones could be developable within 0 -5 years, depending on other time frame evaluation criterion.

Zone AR

Areas with a temporarily increased flood risk due to the building or restoration of a flood control system (such as a levee or a dam). Mandatory flood insurance purchase requirements will apply, but rates will not exceed the rates for unnumbered A zones if the structure is built or restored in compliance with Zone AR floodplain management regulations. In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to this zone. An opportunity area in one of these zones could be developable within 6 - 10 years, depending on other time frame evaluation criterion.

Zone A

Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas, no depths or base flood elevations are shown within these zones. In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to this zone. An opportunity area in one of these zones could be developable within 11 - 25 years, depending on other time frame evaluation criterion.

WEST SACRAMENTO AREA FLOOD CONTROL AGENCY ASSESSMENT DISTRICT - FINAL ENGINEER'S REPORT

Engineers' Reports are the best way to get up to date and localized data. West Sacramento issued this report in July 2007 to: "support the creation of a new special benefit assessment district to provide approximately half the local share of the cost of constructing and maintaining the improvements that, based on current engineering and information, are needed to achieve the City's 200-year flood protection goals to assess its levy on the Sacramento River."

This report was consulted and provided data for the Time Frame Evaluation of West Sacramento opportunity areas (page 3-32).

² Source: www.fema.gov/pdf/fhm/ot_frmsb.pdf (September 30, 2007)

