

Flood protection: It's serious business.

May–June 2007

Get the Facts about Flood Protection

Learn more about levee evaluation findings, plans for projects, costs for levee improvements and the proposed annual parcel assessment by attending a series of public workshops (see details below).

For more information, please visit the project web site at: www.westsacfloodingprotection.com.

Each community workshop will begin at 6:30 p.m. at West Sacramento Civic Center, 1110 West Capitol Avenue, on the following dates:

Tuesday, May 15
Plan to Finance Improvements

Tuesday, June 5
Open House
(Bring your questions!)

Expected Flood Redesignation Will Result in Mandatory, More Costly Insurance

As part of a national effort to update all Flood Insurance Rate Maps, the maps which show the level of flood protection in any given location, the Federal Emergency Management Agency (FEMA) is in the process of re-evaluating the level of protection provided by all existing flood protection systems in the country.

The City of West Sacramento is currently shown by FEMA as being in a Zone X Flood Designation. Zone X applies to areas with less than 1 percent chance of flooding in any given year (100-year protection).

Flood Insurance in West Sacramento is currently optional, though the city encourages anyone living behind a levee to maintain current flood insurance. If re-mapped out of the X Zone and into an AE, AR or A-99 Zone, flood insurance will become mandatory for all federally guaranteed mortgage loans, which includes nearly all bank, credit union and commercial loans. The purchase of voluntary flood insurance now would allow property owners to obtain a lower rate than would otherwise be charged for mandatory flood insurance after the re-mapping. Please talk to your insurance agent for details.

In anticipation of a remapping by FEMA into a category other than a Zone X, an objective of future flood protection improvements is to ensure a return to a Zone X Flood Designation as quickly as possible.



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Reducing Flood Risk in West Sacramento

Because West Sacramento is almost entirely surrounded by water, improving the levees that protect residents and property from catastrophic flooding is a priority for city leaders. Although the city's levees have been improved over the years, the U.S. Army Corps of Engineers recently adopted new, stricter criteria for the evaluation and construction of levee systems. In response, the city partnered with the State Department of Water Resources on an aggressive program to reevaluate the condition of its levees. The preliminary results are in: Substantial improvements must be made to meet the new federal criteria and protect the lives and livelihoods of those living and working in West Sacramento.

Serious Flooding Would Affect the Local Economy

Without substantial improvements to West Sacramento levees, area properties could suffer billions of dollars in structural and land damages if the city were to experience a large-scale flooding event. The overall impact to the local economy from a disruption in the delivery of services, losses in employment and displacement of government and emergency response agencies would be drastic. For that reason, the City of West Sacramento is preparing to raise the local share toward an estimated \$400 million to improve its levees. Read on for more information.

Levee improvements and repairs are necessary to protect lives and property and meet new federal criteria.

Preliminary Levee Evaluation Results

West Sacramento's levees were evaluated using new criteria adopted by the U.S. Army Corps of Engineers for stability, seepage, erosion, geometry and freeboard. The most commonly identified problems were underseepage, through-seepage and erosion. Please review the map for more information. Identified problems may apply to part, but not all, of each reach.

Levee Deficiencies and Possible Improvements

Structural deficiencies and potential solutions are summarized in the table below. The final plan for improvements will be reviewed by the State Department of Water Resources and the U.S. Army Corps of Engineers prior to adoption.



| Problem (Deficiency) | Solution (Improvement) |
|--|---|
| Erosion —This breakdown of levee structures can be caused by everything from fast moving flows, waves and recreational use along levees. | Installation of rock "benches" —control erosion and maintain existing vegetation and aquatic habitat Set back levees —move back the existing levee to reestablish a river bank, provide stability |
| Underseepage —When rivers reach flood stage, pressure builds up in layers of sand and gravel underground, forcing water under the levees and out of the ground. In this case, the integrity of the levee can be severely compromised. The water can erode the levee foundation, leading to failure. | Cutoff walls —provide a barrier to minimize seepage Seepage berms —provide a safe and non-destructive path for underseepage to exit the ground Relief wells —provide a safe and non-destructive path for underseepage to exit the ground |
| Through-seepage —Seepage through the existing levee that can erode the interior of the levee. | Cutoff walls —provide a barrier to minimize seepage |
| Freeboard —Vertical height between water surface and the top of a dam, levee or floodwall. | Levee raising —raising the levee to meet the federal safety specifications and criteria. A "crown-only" method is used to raise levees up to 6 inches, while a "full levee" method is used to raise levees 6 inches or more |
| Slope stability (steep slopes) | Slope flattening —material, typically rock, is extracted and replaced with imported material |

www.westsacfloodingprotection.com



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WSAFCA Public Hearing on the proposed flood protection assessment

6 p.m., Tuesday, July 10, City Council Chambers

Property owners can provide public comment and cast or change their ballots

Resident
West Sacramento
California

To find your proposed property assessment, visit www.westsacfloodingprotection.com, click on "assessment calculator" and enter your parcel number (directions for locating your parcel number can be found on Web site).

Mix of Federal, State and Local Funds to Help Pay for Levee Improvements

Federal and state dollars will fund the majority of the nearly \$400 million in flood protection improvements for West Sacramento. Communities are not eligible to receive these funds unless they also contribute to project costs. Historically, West Sacramento and other California communities have been required to fund between 7 and 10 percent of total costs for flood protection improvements. As communities throughout the state and the nation proceed with plans to meet the revised national levee criteria, funding for flood protection will become more competitive. Funding needs will outweigh the amount available for federal and state cost-sharing assistance.

In order to better position itself to obtain federal and state help, West Sacramento has an aggressive local financing plan to provide a 21 percent local contribution to flood protection, or approximately \$84 million. Existing property owners would raise half of the local funding needed through a proposed annual parcel assessment while new development would contribute the remaining half through an in-lieu fee program.

Public improvements may be funded through an assessment district on any properties that would benefit from the work. In this instance, the city's more than 15,000 parcels within the proposed assessment district will receive a substantial reduction

in expected damages in the event of a major flood. The proposed assessment district boundary is the same as the boundary for the City of West Sacramento.

In late May, the flood control agency will ask property owners to consider a new annual parcel assessment to fund approximately half the local share for overall levee improvements (10.5 percent or \$42 million). Revenues from the assessment would go toward improvements needed to provide the city with 200-year flood protection. It would also pay for ongoing operations and maintenance of the city's levees, another requirement that must be met to receive state and federal cost-sharing assistance.

Ballots will be mailed to all parcel owners on May 22 and should be mailed back before July 10. If the new district is approved, the existing WSAFCA district and assessment will be eliminated. On July 10, the flood control agency board will hold a public hearing on the proposed assessment district. Ballots may also be cast or changed at that meeting.

West Sacramento property owners can read the Draft Engineer's Report that presents the estimated costs of necessary improvements and repairs by reach and overall financing plan online at www.westsac-floodprotection.com.

How Proposed Parcel Assessments Were Calculated

In calculating proposed annual assessments, the flood control agency analyzed the depth of flooding and damages to structures and land in the event of a serious flood. As a result, proposed assessments directly relate to the special benefit each parcel receives in terms of a reduction in flood risk.

The calculation considers land use (residential or commercial, for instance), first floor structure size, parcel acreage, and depth of flooding. You may also visit the Web site to review the Engineers' Report and learn more about how the assessments are calculated.

Approximately half of single family residential parcels would pay between \$40 and \$100 per year and nearly half would pay between \$100 per year and \$130 per year. A few, however, will be paying slightly less or more.

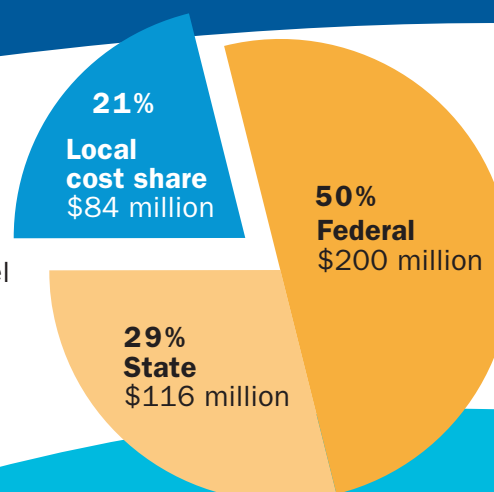
Estimated Costs and Sources for Funding

Development to Pay Its Own Way

Before the issuance of a building permit, new development in West Sacramento must demonstrate that the proposed structure will have 200-year flood protection. This may be accomplished through the construction of flood management improvements and other mitigations, or the payment of an in-lieu fee. It is estimated the in-lieu fee would raise the remaining half of the local cost share (10.5 percent or \$42 million).

Local cost share:

- In-lieu fee
- Annual parcel assessment



Preliminary studies estimate costs for levee improvements at \$400 million.

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