

Flood Hazard Study and Mapping Project

San Joaquin River, Tuolumne River & Dry Creek, Stanislaus County



What Goes On Revised Maps?

If you would like to discuss the production phase of this flood map revision, please contact:

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For General Information:

Stanislaus County Flood Review & Building Permits:

<u>www.stancounty.gov/planning/</u> <u>bp/</u>floodplain-management.shtm

FEMA's Guidelines & Standards for Flood Hazard Mapping:

www.fema.gov/guidelines-andstandards-flood-risk-analysis-andmapping

FEMA preliminary Flood Insurance Rate Maps:

https://hazards.fema.gov/ femaportal/prelimdownload/

Flood Mapping Around Levees: www.fema.gov/fema-leveeresources-library



Your community is in the final stages of the flood map revision process called preliminary FIRM which includes a 90 day appeal period. The anticipated Flood Insurance Rate Map (FIRM) revision is called a physical map revision because only a limited number of FIRM panels are being updated. This fact sheet describes the ongoing and future steps of this flood mapping project.

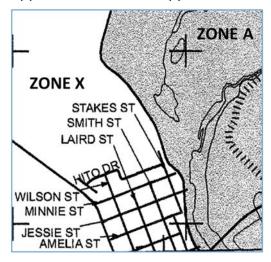
Revised flood map production involves depicting the results of new engineering analyses on updated FIRM panels. This update includes a flood hazard restudy of the Tuolumne River and Dry Creek by California Department of Water Resources (DWR) and the San Joaquin River by a FEMA contractor.

Topographic Data

FEMA uses the best terrain data available, supplemented by field survey when necessary, for mapping of revised flood zones. The topographic data used for this study consists of a Light Detection and Ranging (LiDAR) data obtained for California DWR.

Base Mapping

The FIRM's base map information consists of the digital data that are used to create the background setting for the revised mapping. This digital data includes political boundaries, streamlines and roads. During future data acquisition, FEMA's contractor, STARR II, will collect current base map data applicable to the remapped areas.



Effective (current) FIRM for Grayson: Zone A is a high risk flood area; Zone X is a moderate or low risk area outside a 1% annual chance floodplain

Engineering Analyses

The updated flood hazard data to be shown on the revised FIRM panels will be based on new engineering analyses. The hydraulic data used for the San Joaquin River analyses use the FLO-2D computer program.

The updated flood hazard data to be shown on the revised FIRM panels for the Tuolumne River and Dry Creek will be based on engineering analyses using the HEC-RAS computer program.



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Stanislaus County FIRM Revision Summary

- The current Flood Insurance Rate Map for Stanislaus County does not reflect protection by levees along the San Joaquin and Tuolumne Rivers from the 1% annual chance (100-year) flood
- The restudy involves approximately 30 miles along the San Joaquin River, 16 miles along the Tuolumne River and 8 miles along Dry Creek
- The flood map revision will update approximately 25 1"=1,000' scale Flood Insurance Rate Map panels
- Letter of Map Revision 17-09-2636P is in the revision area (panel 755)
- The schedule for delivery of draft GIS data and updated FIRM panels in preliminary format is to be determined

Floodplain Mapping

The FIRM revision will propose flood elevations in high-risk flood zones. For areas behind the San Joaquin River levee systems this is because the levees do not provide adequate protection from a 1% annual chance (100-year) flood.

Updated flood zone boundaries are mapped by matching flood elevations from the hydraulic analyses to topographic data. To ensure accuracy, current letters of map change are also considered during the FIRM revision process; their determinations will be revalidated if still valid.

Revised FIRM and FIS Preparation

FEMA will issue updated, preliminary (draft) FIRM panels for the areas of your community that are affected by this map revision. These preliminary FIRM panels will reflect the latest engineering analyses, base data, and topographic information available. Approximately 25 revised FIRM panels are expected for Stanislaus County.

In addition to the updated FIRM panels, local officials will receive an updated Flood Insurance Study (FIS) report that includes a narrative description of the study for the San Joaquin River, the Tuolumne River and Dry Creek, the engineering methods used, graphic profiles of flood elevations, and other information. A FIS and FIRM panels are also supported with a FIRM Database, which is the Geographic Information System data used to create the FEMA flood mapping.

Community Engagement

FEMA remains committed to working with and updating stakeholders of the progress of this mapping project as well as helping all in Stanislaus County and the Cities of Modesto, Patterson and Newman reduce future flood losses. More information from FEMA on living with levees is available at <u>www.fema.gov/livinglevees-its-shared-responsibility</u>

Future Steps

FEMA has issued preliminary FIRM panels for review and comment. Our community now has a 90-day appeal period starting July 30 and ending October 28, 2020. During this time. residents with technical scientific information, and as detailed hydraulic or such hydrologic data, can appeal the flood risk information on the preliminary maps. To review the proposed prelimininary flood maps for Stanislaus County: https:// hazards.fema.gov/femaportal/ prelimdownload

If you would like to discuss the study process or the FIRM revision for Stanislaus County, please contact:

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