



Expires – Upon Issuance of LPP

New Location Hydraulic Studies Policy

I. BACKGROUND

According to Chapter 17 of the Caltrans Standard Environmental Reference (SER) anytime a project is within a base floodplain, the district must prepare a Location Hydraulic Study (LHS) and Summary Floodplain Encroachment Report (SFER) form. These forms and guidance are derived from the Caltrans Highway Design Manual (HDM) Chapter 800 which is ultimately derived from the federal regulation **23 CFR 650A Location and Hydraulic Design of Encroachments of Flood Plains**. The LHS and SFER forms have been identified as cumbersome for many districts and Local Public Agencies (LPAs) when required for low risk projects such as paving, striping, sign or camera installation, curb/gutter/sidewalks, and bicycle paths. Because of this, there is variability on how Caltrans Districts within Local Assistance clear these types of projects that are in a base floodplain.

II. POLICY

According to 23 CFR 650A “Action” shall mean any highway construction, reconstruction, rehabilitation, repair, or improvement undertaken with federal-aid highway funds or FHWA approval.” Therefore, according to the CFR this law applies to all projects that fit under the definition of “Action” that are within a base flood plain. The regulations do not define an exception for FEMA’s floodplains.

Under location hydraulic studies CFR 650.111: “Location studies shall include discussion of the following items, **commensurate with the significance of the risk** or environmental impact, for all alternatives containing encroachments and for those actions which would support base floodplain development” and under content of design studies CFR 650.117 “the detail of studies shall be **commensurate with the risk associated with the encroachment** and with other economic, engineering, social or environmental concerns.”

The language in CFR 650.111 and 650.117 highlight where there is flexibility with what type of review is performed. Caltrans SER and HDM guidance is correct that this law applies to all projects regardless of size; however, the CFR does not require the level of detail for every project that the LHS and SFER forms provide. The HDM also recognizes this and mentions flexibility that can be applied when filling out the LHS form:

“Any reasonable adaptation of the technical information for ‘Location Hydraulic Study’ form, Figure 804.7A, may be utilized to document and summarize the findings of the ‘Location Hydraulic Study’ when the project is expected to be processed with a categorical exclusion ... Figure 804.7A is considered the suggested minimum hydraulic and engineering documentation for floodplain encroachments (bridge, culvert, channel change, slope protection, embankment, etc.). It is intended as a guide tool to help address the items listed in 23 CFR 650.111 and should be prepared jointly by the Project Engineer and Hydraulics Engineer. Since every location is unique, **some of the questions may not apply**, or additional considerations may need to be added.”



III. PROCEDURE

The LPA should use the *Floodplain Encroachment Location Hydraulic Study (LHS) Memo-No Significant Encroachment* for low risk project types located within the floodplain:

<https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/env/kelly-hobb-floodplains-clearance-memo.pdf>.

These are typically NEPA CE projects. The new guidance will not change/revise the existing LHS form but will allow low risk project types (i.e. installation or replacement of pavement, striping, signs, cameras, traffic signals, roundabouts, curb, gutter, bicycle facilities, pedestrian facilities, in-kind maintenance activities and other related project types) within the floodplain to be processed without the use of the LHS or SFER. If the federal-aid project falls under one of these project types, and clearly meets the definitions stated in the memo, no additional analysis pursuant to 23 CFR 650 Subpart A is necessary, and the memo will suffice for floodplain encroachment documentation under Subpart A to file. In addition, the signed PES will serve as documentation for the project file with reference to the LHS Memo.

District Planners should work closely with LPA staff when determining the commensurate level of floodplain encroachment documentation required for these project types. If projects can not meet the conditions of the memo, the standard Caltrans local assistance floodplain encroachment process must be followed.

IV. APPLICABILITY/IMPACTS

This Office Bulletin applies to all local assistance federal-aid projects 'off' the State Highway System. This policy is subject to annual review and recommendation of the Federal Highway Administration (FHWA) NEPA Delegation Audit Teams and Department NEPA Delegation Self-Assessment Review Teams.

Per the March 2, 2021 [NEPA PROCESS IMPROVEMENT TEAM: CATEGORICAL EXCLUSION CHECKLIST NOT REQUIRED Memo](#), **Exhibit 6-E: Categorical Exclusion Checklist** is no longer required.

Recommended:	<u>Original Signature on file</u>	<u>November 1, 2021</u>
	Guadalupe (Lupe) V. Jiménez, Senior Environmental Planner	Date

Approved:	<u>Original Signature on file</u>	<u>November 1, 2021</u>
	Kelly Hobbs, Chief Office of Environmental Compliance and Outreach	Date

Attachments: Revised [Exhibit 6B: Instructions for Completing the PES Form](#) (dated November 2021)