



FLOOD PROTECTION TEAM

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MODERNIZATION OF FEMA'S NATIONAL FLOOD INSURANCE PROGRAM FOR AGRICULTURE

California's Capital Region is surrounded by agricultural lands that are protected by levee systems. Agriculture is one of the most appropriate land uses in the floodplain because it minimizes the population at risk, requires relatively few structures, uses the land productively to provide a much-needed commodity, and provides wildlife benefits. In other words, a vibrant, sustainable agricultural economy is a key defense against risky and unwise floodplain development, however, the requirements of National Flood Insurance Program (NFIP) are interfering with the sustainability of agriculture in deep floodplains.

Requested Action:

As FEMA updates Flood Insurance Rate Maps to show new Special Flood Hazard Areas (SFHA) behind previously accredited levees throughout many of the Sacramento Valley's agricultural areas, sustainability of Sacramento Valley agriculture has become a major concern. There are two primary impacts when an agricultural area is mapped into an SFHA: (1) land use requirements for elevating or floodproofing new and substantially improved (which includes substantially damaged) structures to or above the Base Flood Elevation (BFE), and (2) a requirement to purchase a flood insurance policy through the NFIP for each structure with a federally backed mortgage.

A review of FEMA's mapping procedures, insurance requirements, insurance rates, and policies indicates that agricultural facilities in leveed areas of the Sacramento Valley are beginning to bear a disproportionately large share of the financial burden of the NFIP and are contributing to the decline of agriculture in the floodplain. To address these issues the following actions are proposed: Support modification of the NFIP to eliminate financial disincentives to agricultural operations in the floodplain and active engagement with the Federal Emergency Management Agency (FEMA) to implement the

Agricultural Floodplain Ordinance Task Force (Task Force) recommendations to promote the sustainability of agriculture in FEMA regulated floodplains by modifying the rules and practices under the NFIP.

Background:

Congress established the NFIP with the passage of the National Flood Insurance Act of 1968. The NFIP has served the country well to reduce the risk of flooding through the implementation of essential floodplain management practices in exchange for federally backed flood insurance. The levee system in the Sacramento Valley is a Federal system administered by the U.S. Army Corps of Engineers (USACE). At the inception of the NFIP, the Sacramento Valley levees were largely assumed to meet FEMA's base flood requirements based on representations by USACE. In 2001, FEMA began the NFIP Map Modernization Program to manage flood risk information digitally. As part of this process, most levees protecting rural communities in the Sacramento Valley were found to not meet FEMA's current engineering criteria for levees and the lands behind them were mapped into the floodplain.

It is important that NFIP regulations, which were created with urbanization of the floodplain in mind, do not have the unintended consequence of injuring California's agricultural economy. However, as currently implemented, NFIP regulations have the potential to cause displacement of vibrant agricultural communities and inhibit a competitive agricultural industry. This will have long-term implications for the sustainability of productive agriculture within FEMA regulated floodplains. Displacement of agriculture has the potential to create a 'land-use vacuum' that could lead to increased urbanization of floodplains.

Specifically, there are two primary impacts when agricultural areas are mapped into the floodplain: (1) land use requirements for elevating or floodproofing new and substantially improved structures up to or above the base flood elevation (BFE), and (2) a requirement to purchase a flood insurance policy through the NFIP for each structure with a federally backed mortgage.

Support modification of the NFIP to eliminate financial disincentives:

Supporting modification of the NFIP to eliminate financial disincentives eases the requirements of the NFIP that do not make sense when applied to agriculture. Under draft legislation pending introduction, FEMA would (1) map leveed areas into a new zone that would specifically apply to agricultural lands protected by levees but that do not reach the 100-year level of protection. This new AL zone would have actuarially-based rates and would use an interim X zone rate until the new rate could be implemented; (2) be directed to implement a pilot program to use "blanket policies" that would bundle multiple low-value agricultural structures under a single policy; and (3) be directed to apply the same rates to wet flood proofed agricultural structures as would apply to dry flood proofed structures.

Administrative Support for Task Force Recommendations:

In 2014, FEMA officials and the Government Accountability Office encouraged exploration of ideas to address sustainability of modern agriculture in deep floodplains. The Task Force was formed in late 2015 to explore ideas that could be implemented administratively by FEMA without changing law or regulation. The Task Force is comprised of officials from FEMA, California Department of

Water Resources, the California Central Valley Flood Protection Board, reclamation districts, levee districts, flood control agencies, counties, engineers, farmers, and non-governmental organizations (including the California Farm Bureau, various local farm bureaus, the Association of State Flood Plain Managers (ASFPM), the National Association of Flood and Stormwater Management Agencies, and American Rivers). The Task Force recommends that FEMA consider the nine action items reflected on the attachment.

Conclusion:

Agriculture is the dominant land use in California's Sacramento Valley and represents a necessary and vital component of our State's economy. Maintaining rural open space and agriculture is also an integral component of prudent floodplain management. Keeping land in agriculture prevents the urbanization of floodplains while also providing important habitat. This helps to limit the population at risk in these floodplains and helps to minimize damages to property in the event of a large flood. California's Sacramento Valley is unique in that the State has recently invested hundreds of millions of dollars to understand flood risk and to proactively improve levee protected areas, including many agricultural areas. Finally, farmers are uniquely situated to assist with monitoring and flood fighting during high water events. Thus, ensuring the long-term sustainability of agriculture in the floodplain is a fundamental goal of State and local agencies in managing flood risk in the Sacramento Valley.

Agricultural Floodplain Ordinance Task Force Recommendations

1. Levee Relief cuts with EOP and floodplain management ordinance

Levee relief cuts are not recognized on FIRMs and not considered when floodplain administrators issue permits for construction in Zone A. The Task Force recommends that FEMA recognize levee relief cuts that are properly planned and adopted by a community and:

- Update FEMA 265 to provide guidance on how a floodplain administrator should estimate the BFE in Zone A when considering a relief cut.
- In Zone A, FEMA should approve a floodplain administrator use of lowered BFEs for relief cuts, coupled with a special floodplain management ordinance, for permitting new and substantially improved agricultural structures.
- Where a FIRM contains Zone AE that reflects ponding against a downstream levee, use the letter of map revision process to modify the Zone AE to reflect the lowered BFE that results from a planned relief cut, provided that the community adopts a special floodplain management ordinance. The ordinance would require new and substantially improved non-agricultural structures in Zone AE to be elevated (or floodproofed) to or above the BFE that would result without the relief cut.

2. Zone D with floodplain management ordinance and flood insurance instrument

Elevation and floodproofing requirements for new and substantially improved agricultural structures in deep SFHAs can be costly and burdensome, impacting agriculture sustainability. There is no direct way under current regulations to provide relief from these requirements in an SFHA. But there is an indirect way, using Zone D. The Task Force recommends that FEMA offer an option to remap SFHAs as Zone D in leveed areas that meet the following requirements:

- The community adopts a special floodplain ordinance that requires elevation (or floodproofing) up to or above the BFE for new and substantially improved non-agricultural structures in the new Zone D.
- The community implements a self-reporting program that indicates compliance with the special floodplain management ordinance in the new Zone D.
- The community adopts a levee risk management plan for the new Zone D.
- The community mitigates the loss of the mandatory purchase requirement for the structures in the new Zone D. Exceptions may include structures without federally backed mortgages, residential detached structures, and low-value structures. The goal would be to have more insurance coverage than currently exists in the SFHA. The Task Force has identified two potential mechanisms for achieving this: (1) an ordinance requiring flood insurance purchase, and (2) Community Choice Flood Risk Financing (e.g., purchase of a multi-year group flood insurance policy from a private insurance carrier).

3. Zone X (Shaded) for certified levee reaches

FEMA's Operating Guidance 12-13 does not allow accreditation of a reach of levee unless the entire levee system can be certified and accredited, and therefore Zone D is used on the FIRM behind reaches of levee that meet all requirements for certification. The Task Force recommends that FEMA revise its Operating Guidance 12-13 to map areas behind a certified reach of levee as Zone X (Shaded) instead of Zone D if the certified reach of levee is part of a larger levee system and it is providing protection from the Base Flood. If the levee reach does not meet freeboard requirements, the Task Force recommends that FEMA continue to implement Operating Guidance 12-13 as currently written and map the area as Zone D.

4. Wet floodproofing rules for agricultural structures

FEMA's rules require flood vents (or openings) for entry and exit of floodwaters in all wet floodproofed agricultural structures. The Task Force recommends allowing human intervention for providing entry of floodwaters into agricultural structures in situations when large doors on at least two sides of the building could be locked open. If human intervention is authorized, appropriate conditions should be established in a Flood Emergency Operation Plan approved by the community and/or community's floodplain administrator.

5. Insurance rates for non-accredited levees

FEMA's insurance rates for structures behind a non-accredited levee are the same as if there was no levee at all. Yet many non-accredited levees provide protection from frequent floods and significantly reduce flood risk. The Task Force recommends that FEMA use sound actuarial science to amend its insurance rates to reflect the flood protection provided by a non-accredited levee as documented by a civil engineer, following a specific methodology and meeting specific criteria recommended by the Task Force.

6. Insurance rates for Zone D protected by a sound reach of levee

FEMA's Operating Guidance 12-13 created a new type of Zone D – one that has been studied and the flood risk is known. The Task Force recommends that FEMA amend its insurance rates to

include two separate rating tables for Zone D. One rating table would be for areas identified on the FIRM as 'Zone D Undetermined/Unknown' – the historic Zone D. Another (new) rating table would be for areas identified on the FIRM as 'Zone D Protected by Levee' – for areas mapped as Zone D following FEMA's Operating Guidance 12-13.

7. Insurance rates for agricultural structures

The Task Force understands that when FEMA developed insurance rates for agricultural structures decades ago, there was insufficient claims data to develop rates unique to agricultural structures. The Task Force recommends that FEMA develop insurance rates for agricultural structures separately from other types of structures, update the Flood Insurance Manual with the new rates, and apply them expeditiously.

8. Insurance rates for wet floodproofed structures

FEMA's rules allow for wet floodproofing of agricultural structures by variance; however, insurance rates for wet floodproofed structures are the same as if there was no floodproofing. The Task Force recommends that FEMA recognize wet floodproofing of agricultural structures in its insurance rates and address it similar to dry floodproofing, by updating the Flood Insurance Manual with the new rates.

9. Add levee risk management activities to CRS

FEMA's Community Rating System (CRS) provides credits that can reduce insurance premiums in CRS-participating communities. Several CRS credit categories are applicable in rural/agricultural areas. But in leveed areas of a community, the credits would be dissipated throughout the larger community, rendering them ineffective for rewarding good levee risk management in a particular leveed area of a community. The Task Force recommends that the CRS program recognize a sub-community within a community. The Task Force also recommends that federal levees should be eligible for CRS points for levee maintenance unless the levee is operated and maintained by the federal government. Most of the federal levees in the Sacramento Valley are not operated or maintained by the federal government.