

Acceleration of Flood Damage Reduction Projects Concept

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The Federal Emergency Management Agency's (FEMA) Map Modernization Program, liability concerns, and the public safety and economic loss concerns dramatized by the 2005 levee-related flooding of New Orleans, have converged to trigger engineering reviews of the adequacy of levee systems throughout the nation. In many cases, local agencies and the U.S. Army Corps of Engineers (Corps) have found that repairs or improvements are needed for the levees to meet FEMA's 100-year flood protection standard – and that even higher levels of protection (sometimes previously thought to already exist) are warranted for many urbanized areas protected by levees.

Many local and state agencies are taking initiative to make these levee repairs and improvements using local and state funds. In some cases, local and state funding is sufficient to meet the need. But in most cases, Federal funding is needed too. The only significant source of Federal funding for such work is through the Corps, providing a 65% cost share for most flood management projects. This involves a lengthy study, authorization, and construction process that is totally reliant upon annual appropriations by Congress. The unfortunate result is that the process typically takes decades.

Congress provided one important tool to mitigate this delay of Federal investment – crediting. If a non-Federal partner of a Corps feasibility study chose to perform early construction of some project features, usually limited to 30% of the total project cost that would eventually be authorized by Congress, such work could ultimately count (be credited) toward the non-Federal partner's cost share. Crediting is helpful for communities to at least address the most urgent or critical levee problems and to accelerate the overall project construction schedule. But it still leaves most of the construction to the Corps and its lengthy, appropriations-based schedule. Worse yet, through a recent policy decision by the Assistant Secretary of the Army, this one tool provided by Congress has been eviscerated. No longer can local agencies receive credit for early construction during Corps studies, and the amount of creditable non-Federal construction that can be performed even late in the process has been greatly reduced. Although crediting was tremendously helpful in improving public safety, it never was the answer to the question of how to complete public safety projects quickly – largely because crediting policy never did provide credit for constructing more than about 30% of the Federally-authorized project.

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For example, the Sacramento region is well known for having many hundreds of thousands of existing residents subject to a high level of flood risk. To address that risk many levee improvement agencies are partnering with the State of California and the Corps on feasibility studies which should lead to authorized Federal projects. Not content to wait for completion of those studies, these same agencies are prepared to implement locally-driven levee improvement projects which will be a part of the projects later seeking Congressional authorization. These communities plan, design, and permit these projects and then construct as many miles of levee improvements as can be funded locally. These agencies have also been developing these projects under financial plans based on receiving credit for most of the construction. Constrained local agency funds limit the length of project that can be constructed without credit.

In addition, a cumbersome regulatory approval process by the Corps under 33 U.S.C. Section 408 leads to a delay in the ability of these local agencies to construct repairs and improvements to Federally-authorized levees, irrespective of whether crediting is involved. Streamlining the approval process implemented by the Corps under 33 U.S.C. Section 408 could shave many months or a year off of a time-consuming and expensive approval process. Around the country the Corps administers this authority for modifying Federally-authorized levees under varying rules, with some Corps districts requiring that any action to modify a levee be subject to extensive and expensive review. This can be true even where the local agency seeks to simply ensure that the Federally-authorized levee functions as it was originally intended (for example, by the construction of seepage cutoff walls to address under-seepage not previously appreciated). A national coalition of local agencies has proposed Section 408 reform to the Corps, but as the Corps is updating its Section 408 guidance, it has declined to work with the coalition to streamline and improve that guidance.

Addressing both the crediting and the regulatory approval limitations would help to quickly reduce the risk of flooding for hundreds of thousands of residents while simultaneously injecting thousands of design and construction jobs at a time when the economy is starved for new infrastructure projects – all using local and state funds. As helpful as this would be, it would still leave many communities vulnerable to a sustained high residual flood risk from the levees that await repair and improvement by the Corps.

This demonstrates the compelling need for a new avenue for Federal funding of levee projects. Instead of relying solely on the Corps and its schedule and appropriations, minor adjustments to an existing FEMA grant program, along with additional grant funds, would lead to faster construction and many more miles of levee improvements at a substantially reduced Federal cost.

FEMA's Flood Mitigation Assistance Program has been used by FEMA to fund small projects and building relocations, but has not been used on Federally-authorized levees. Modifying the program would allow FEMA funds to be expended on such levee repairs and improvements. Assuming a 50/50 Federal/non-Federal match, it is easy to identify approximately \$400 million of State and local funds in the Sacramento region alone which could be matched against \$400 million in Federal funds. This infusion, again coupled with the regulatory streamlining discussed above, could lead to much higher levels of safety for hundreds of thousands of residents and tens of thousands of new jobs, all in short order. Some of the specific projects in the Sacramento Region which stand ready to seek such funds include the Sutter Butte Flood Control Agency (\$300 million), the West Sacramento Area Flood Control Agency (\$120 million), and the Sacramento Area Flood Control Agency (\$20 million). Additional projects throughout California's Central Valley and the South coast could add hundreds of millions of dollars of additional opportunities.

The Federal savings from this new avenue would occur in four ways: (1) reduced Federal cost share as compared to Corps projects, (2) reduced total project cost because it is constructed at the local level, where costs tend to be lower than Corps-built projects, (3) reduced likelihood of needing Federal disaster recovery funding, and (4) additional flood risk management requirements that communities could be encouraged to meet through rules that FEMA would develop for the grant program, such as achieving higher levels of flood protection than the minimum 100-year protection and providing annual flood risk notifications to residents.

