

# The Federal Flood Risk Management Standard (FFRMS)

**Purpose:** I've tried to put this paper together in a way to further inform various groups about the potential impacts of the President's recent Executive Order (EO) creating and implementing a new FFRMS. I see this action as extremely significant and potentially having huge negative implications for Louisiana. This paper is not intended to be the definitive source or the "end all-be all" document on this topic. Instead, I hope that it can be a basis for further discussion and action in response to this new standard. There are in fact other aspects of this intentionally not mentioned in a failed attempt at brevity and because I have not yet had the opportunity to further consider them.

**General:** On January 30<sup>th</sup> 2015 President Obama signed an Executive Order "*Establishing a Federal Flood Risk Management Standard and a process for further soliciting and considering stakeholder input*". Among other things, this EO made amendments to a May, 1977 EO 11988 on Federal Policy on Floodplain Management. As part of the implementation of this process, FEMA, on behalf of the Mitigation Framework Leadership Group (MitFLG, the multi-agency group that developed the standard) has published a draft of the Guidelines for implementing the amended EO 11988 by all federal agencies consistent with the FFRMS. This draft Guidelines has been released for a 60 day Public Comment Period for consideration of implementation by the agencies.

The EO supplants an overarching shift in Federal Policy in four (4) fundamental areas.

## 1) Away from flood control and protection to a risk management strategy.

From the Guidelines:

"... the FFRMS reflects a transition beyond a former emphasis on "*flood control and protection*" to a broader focus on "*flood risk management*."

"Changes in terminologies from "protection" to a broader focus on resilience and risk management reflect the recognition that floodwaters cannot be fully controlled, full protection from floods cannot be provided by any measure or combination of measures, and risk cannot be completely eliminated."

## 2) To avoid directly or indirectly encouraging development in a floodplain.

From the EO:

"... requires executive departments and agencies (agencies) to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative."

From the Guidance:

"The preferred method for satisfying this requirement is to avoid sites in the base floodplain."

"The Guidelines do not intend to prohibit floodplain development in all cases, but rather to create a consistent government policy against such development under most circumstances."

I suspect I need not remind the readers of this document that most of Louisiana is in a floodplain, either Coastal or Riverine.

3) The new standard is intended for all federal agencies in all actions.

From the Guidance:

"The basic concepts expressed in Section 1 of the Order are: (1) all agencies are covered; (2) all actions are covered; (3) all agencies are to affirmatively carry out efforts to, and provide a good example of, sound floodplain management practices; and (4) all agencies are required to act, not merely consider, reducing risk, minimizing adverse impacts, and restoring and preserving floodplain values."

4) Where the previous EO relied on the use of the FEMA derived 1% annual flood Plain (100yr.) for federal agency consideration, the new EO broadens the floodplain by directing the agency to consider any and all actions against a floodplain defined by one of the following:

- i) A climate informed science approach that uses best available actionable data and methods that integrate current and future changes in flooding based on climate science.
- ii) Expanding the horizontal and vertical size of the flood plain by adopting a 2 foot freeboard above the FEMA NFIP base flood Elevation for non-critical actions and a 3 foot freeboard for critical actions.
- iii) Using the 0.2 percent annual chance flood (500 yr.)
- iv) Using another elevation and flood hazard area identified in a future update of the FFRMS.

The climate science approach is the clear preference and the other options only allowed if that "data" is not available.

From the Guidance"

"When actionable climate science is available, the Climate-informed Science Approach is preferred. In cases where relevant data are not available, the other two approaches are acceptable methods to determine the elevation and floodplain.

"Agencies should use an approach that takes advantage of best- available information and data. When actionable climate science is available, the Climate-informed Science Approach is preferred."

The FFRMS is to be reviewed annually and updated every 5 years.

**History:** *(I'd like to give credit to Andre' McDonald, President of the Fort Bend Flood Management Association for his research in this regard some of which is taken directly from an article he has written. Also, I would like to credit Dan Delich of the Levee Issues Alliance and Ms. Amy Larson with the National Waterways Conference for their work in gathering much of the history and bringing this issue into the light.)*

This is first a foremost a climate change based initiative of the federal government. Its origins likely lead to the March 30<sup>th</sup> 2011 issuance of Presidential Policy Directive / PPD-8: National Preparedness.

The National Mitigation Framework was released in May of 2013 which also served to establish the Mitigation Framework Leadership Group (MitFLG), *"a senior level coordinating body for national-level mitigation activities seeking to foster a culture of risk management and mitigation in all planning, decision making and development."*

*"Acting on the President's Climate Action Plan, the MitFLG, in conjunction with FEMA, has recently been focused on working with Federal agencies to evaluate their flood risk reduction standards. In April 2013, the Hurricane Sandy Rebuilding Task Force ("Task Force") called for development of a minimum flood risk reduction standard and announced that all federally funded Sandy-related rebuilding projects needed to meet a consistent flood risk reduction standard. The Task Force, led by the U.S. Department of Housing and Urban Development ("HUD"), prepared the Hurricane Sandy Rebuilding Strategy. President Obama's Climate Action Plan, released in June 2013, directs agencies to "incorporate the most recent science on expected rates of sea-level rise (which vary by region) and build upon work done by the Task Force" in developing a standard that "takes into account increased risk from extreme weather events, sea-level rise, and other impacts of climate change."*

In early November 2014 we began to hear that the MitFLG was planning on simply releasing their new standard for public comment then implementation. Senator Chochran wrote a letter to the POTUS stating:

*"I am writing to urge you to cease development and delay issuance of any Federal Flood Risk Management Standard (FFRMS) until the American public and its representatives in Congress have been given ample opportunity to understand and inform any such standard."*

We brought this to the attention of our delegation who were instrumental in getting the following included in the FY15 Omnibus Appropriations Act.

*"Sec. 749. None of the funds made available by this or any other Act may be used to implement a new Federal Flood Risk Management Standard until the Administration has solicited and considered input from the Governors, mayors, and other stakeholders."*

But, in January it became clear that the POTUS intended to only tweak the EO to include superficial language about getting input from the congress and public and forge ahead. Again, Senator Chochran wrote a letter to the POTUS stating:

“I am concerned that you intend to soon issue a new Flood Risk Management Standard despite the prohibitions contained in Section 749 of the Fiscal Year 2015 Consolidated and Further Continuing Appropriations Act, which you signed into law just one month ago.

Should you begin implementation of a new Flood Risk Management Standard through unilateral issuance of agency guidance, an executive order, or a memorandum before input from Governors, mayors, and other stakeholders has been solicited and considered, you will be acting in opposition to the clear intent of Congress. Such disregard for a bipartisan provision of law calling for transparency and public engagement would be troubling. As I stated in my November 20, 2014, letter to you, the public and its elected representatives deserve to understand the costs, benefits and scientific rationale behind any such standard before it is issued.

I urge you again to halt development or issuance of the FFRMS and work with Congress and other stakeholders to develop a better understanding of the implications of additional Federal actions to manage flood risk. I look forward to your response to these concerns and those expressed in my November 20th letter.”

Additionally, Senator Vitter wrote a very strong letter to the POTUS opposing the implementation of these new standards and asking a series of very specific questions. Other Senators and Congressmen joined in the letter writing campaign.

Still, on January 30<sup>th</sup>, the President signed this EO beginning the 60 day comment period on the draft guidelines.

**Concerns:** In no particular order, I raise the following serious concerns on the implementation of this new FFRMS by all federal agencies for all to consider:

1) This Federal Standard is intended to be used by all Federal Agencies in all of their actions.

That is, consideration of the expanded floodplain and direct and indirect impact to floodplain development does not simply apply to the consideration of a federal agency building, repairing or expanding a facility for its own purpose. It also must be considered in any and all programs administered by the agency as well as any and all activities which it regulates. The potential implications on an agency by agency basis are huge.

2) The FFRMS is intended as a guiding principle to be implemented and used by all federal agencies. As such, it is more descriptive than it is prescriptive leaving individual agencies, working in consultation with the Water Resources Council, the Federal Interagency Floodplain

Management Task Force, FEMA and the Council on Environmental Quality to develop specific implementation standards for each agency. This will make even limited involvement in the shaping of the individual agency implementation and policy a very difficult task both legislatively and from a stakeholder point of view. There are literally hundreds of federal agencies that will each have to develop their individual interpretation of this EO and implement policy accordingly.

3) On the surface, it sounds like a good idea. Why not ask the federal government to more closely consider how it spends federal funds on project and programs from a flood risk management point of view? To that I would add, why not consider the federal investment from a risk management point of view including consideration to earthquakes, wildfires, mudslides, tornados and tsunamis as well? But that's not happening; just flooding. The trouble is that this FFRMS particularly impacts Louisiana and not the entirety of the US. Just like NFIP reform, it was easy to push through when most did not feel it would impact them. They were wrong then and they would be wrong now.

4) The proposed FFRMS does not recognize that the situation in Louisiana is truly unique. The geography of the Mississippi River Delta in Louisiana is unique in the United States. This delta has built up a broad coast unlike anything anywhere else in the US. With more traditional coast, such as in New Jersey where much of this standard has been derived from Hurricane Sandy recovery efforts, it might be possible to reconsider the location of a structure or program by moving landward a few hundred feet. In traditional coast, moving inland from the sea will take one from seal level to 30+ feet in elevation in less than a mile in many cases. In Louisiana, to reach a similar elevation requires a transect of 40 to 70 miles. Most other river deltas in the US are estuarine or inverted deltas and they are much smaller than the Mississippi River flood plain / Gulf Coastal flood plain. We simply must live and work on our delta in order to bring the resources of this delta to the US. (Not to mention preserving our unique history and culture.)

5) The EO is not really set up to seriously consider public input. Let's face it; this new standard was developed by the MitFLG without input from Congress, State or Local government and other stakeholders even though the very charter that created the MitFLG required such input. It is now being implemented by the Administration over objections from Congress stating it should have input from others. The EO itself provides a fast track to implementation that includes a 60 day, after the entire thing has already been developed, public comment period. This public Comment period is followed by consideration of the public comments received by MitFLG who will make recommendations to revise the FFRMS based on public comments if required and then pass this along to the Water Resources Council. But, within 30 days of the end of the public comment period the EO states:

“each agency shall submit an implementation plan to the National Security Council staff that contains milestones and a timeline for implementation of this order and the Standard, by the agency as it applies to the agency's processes and mission.”

So, while we are just getting a first look at all of this, the individual agencies will simultaneously be preparing to submit a plan on how they will implement it. That timing, and the use of “listening sessions” does not bode well for earnest consideration of the public comments.

6) The foundation of the FFRMS is based on an emphasis on moving away from flood control and protection to a flood risk management strategy. The idea is that the risk of flooding can never be completely eliminated from the use of protection strategies. In Louisiana, I believe we all know this. But, should we re-name the state’s Coastal Protection and Restoration Authority to the Coastal Risk Management and Avoidance of Flooding by moving to Arkansas Authority?

Flood risk management is code for avoid the floodplain altogether. You can do that in some places. Making room for the river initiatives and building a bit higher; but, in the same general area can work in some places. The problem in Louisiana is that we have few options other than structural flood control and protection for a large part of our population. This change in strategy, coupled with a desire to not directly or indirectly encourage further (future) development in areas not aligned with this new strategy should be a huge concern for us. Will federal investment or re-investment in our communities be denied because we live where we live and are protected by systems (some of them federal) that do not align themselves with this new flood risk management strategy? An excerpt from the guidance document is quite telling.

*“... For example, the location of a major public service structure or facility (a post office, library or office building), in the floodplain, requires new or additional investment in or construction of support facilities for food service, parking, etc. Further, simply through their location, such actions would foster additional developments in the floodplain. Floodplain development could be indirectly supported by the provision of infrastructure (water and waste water systems, power supplies, highway and secondary road networks, mass transit systems and airports) outside the floodplain.”*

7) The stated preferred method for determining the floodplain elevation, size and area is through the use of a climate informed science approach that uses best available actionable data and methods that integrate current and future changes in flooding based on climate science. I do not believe that I have ever typed a sentence with more current buzz words and phrases; but, what does it all mean? Don’t misunderstand my point. I believe we should be responding to things we can and have accurately measured over the years. We should build and plan accordingly. Such is the case with localized data on Relative Sea Level Rise. We would ignore these historically measured changes at our own peril. But, the preferred and describe actionable climate informed science approach is rather nebulous and hard to pin down. Each agency could come up with its own idea of just what this entails. Each agency will in fact have to come up with something. But, again, these things are localized and it will be difficult to develop a strategy that works across the nation. There is plenty of room for an agency to hide

its true intentions on the selection of projects and programs when the justification for or against proceeding with the project, program or regulation can be based on such an analysis.

8) Is this EO an infringement on State's rights? Is it what the government is supposed to do?

From the Guidance:

"The comprehensiveness of the Order recognizes that each agency, in carrying out the various types of actions enumerated in this section, can affect the floodplain through any of its actions. The mandate that the agencies take a leadership role places them in a unique position relative to State, Tribal, Regional, and Local levels of government in carrying out actions which affect the floodplain. This role requires the agencies to lead other public and private entities in achieving the goals of the Order by setting a good example."

Is this what a government "of the people, for the people and by the people" really supposed to do? Lead the people?

**Strategy:** Frankly, I'm not exactly sure how we should respond to this. We face a very unique situation. The plan has already been set and put in motion by the POTUS over the objections of Congress and legislation (signed by the President himself) forbidding its advancement based on the budget he approved. It is on its way to hundreds of agencies for implementation. We are way behind this thing.

Fortunately, we are not alone. Besides all of our Legislative Delegation being plugged into this issue, the Levee Issues Alliance, the National Waterways Conference, the Mississippi Valley Flood Control Association, the Upper Mississippi, Illinois and Missouri Rivers Association, the MO Levee and Drainage District, Harris County FCD, Greater New Orleans Inc. and others are planning to be actively involved in this issue. I hope to involve the Association of Levee Boards of Louisiana and the issue has already been brought up before the State CPRA. I believe we will need everyone's help.

Given that the train has already left the station so to speak, I believe one possible approach to address the ultimate impacts of this EO are to ask a bunch of very specific questions on an agency by agency basis. Perhaps our legislators can compel the agencies to address all questions.

To that end, I believe Senator Vitter asked some very pertinent question in his letter to the POTUS a few of which are repeated below:

From Senator Vitter's letter:

"... Consequently, the closed-door, multi-agency efforts to develop new federal flood risk management standards involve multiple scientific matters of serious concern, and so the practical considerations and ultimate potential impacts are serious enough to bring to your attention. I appreciate your consideration of these concerns and ask that the appropriate agency staff provide thorough and complete responses to the following inquiries:

1. What potential restrictions on federal investments have been reviewed as a potential impact of expanding floodplain area designations?
2. How would new standards impact permit issuance, emergency preparation response and recovery programs administered by the Corps; USDA agricultural assistance programs; Federal highway aid and USDOT TIGER grants; HUD CDBG grants; Federal loan guarantees; FEMA flood insurance; and floodplain management and disaster response programs?
3. What considerations have been given to federally funded activities, and how would those impact specific regions of the country where the expansion is proposed?
4. What cost-benefit analysis has been completed in promulgating the flood risk management standards, and how can the public obtain access to that analysis? Where can discussion documents be found on alternatives that have been considered, including alternatives for restructuring or improving floodplain use and occupancy?
5. Who was involved in developing the science and technical knowledge upon which the standard is based?
6. If agencies have refused to give the appropriate consideration of alternatives as required under the National Environmental Policy Act, please explain why there was no consideration of alternatives.
7. Why has the Administration chosen to forego any public participation in developing the standard? In particular, why have regions of the country with known floodplain risks been excluded from the development process?
8. In developing the increased flood base elevation requirements what processes were used to develop those requirements? What cost-benefit analysis was performed, and in particular what scientific research are you using as a baseline from which to develop the flood risk associated with climate change?

I believe these questions are all very valid and just a small sampling of what we really must know about the impacts of this new FFRMS. I hope that others can propose an effective approach to stopping this new standard from destroying Louisiana, its industry, its people and our culture. The FFRMS is an attempt at social engineering that will be very bad for Louisiana and much of our nation. There is no doubt that our Government can and should be smarter about decisions it makes; but, doing this through an EO and not through Congress is ill advised.

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