Memo:

To: To the ASFPM informal Climate Change Discussion Group members.

From: Bob Freitag

Date: September 24, 2020

Subject: Notes of the September 18, 2020 meeting (Zoom call)

Here are notes of the key points transcribed from our September 18th Zoom meeting. For those that could not attend, feel free to listen to the recording. Recorded Link

Our next meeting will be at 9am PT, October 23rd and will address the results of the Co-Chair Retreat and future directions. To join the meeting, on October 23rd at 9am Pacific Time, click here.

Those attending the September 18th meeting:

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At our May 24th meeting it was decided that future meetings would grouped into the discussion of specific areas of concern. This meeting was devoted largely to a discussion of how or changing climate would impact floodplain management regulations. Bill Neckamen volunteered to lead the discussion.

Bill Nechamen' s introduction.

Bill's comments are presented as bullet points and emphasize the intersection between climate change and a floodplain regulations. They were presented to initiate discussion / brain storming.

- Does the 1% flood make any sense whatsoever, even if we think about future conditions? We're looking at more extreme precipitation more concentrated precipitation. For example, a four inch storm that comes over two days has a much different impact than a four inch storm comes over two hours.
- What does that mean for regulations and what does that mean for how do we measure a regulatory flood a flood that we need to design or regulations around
- Thinking about sea level rise versus inland flooding we think of different scenarios, how differently show we treat them.
- I live in a state that's a coastal, riverine and great lake state. And we're also seeing two of the last four years have seen record flooding on our Great Lakes shorelines.
- We have meandering streams that are going to see more erosion in our stream system and expanding floodplain boundaries.
- If we're going to map larger floods, well obviously, our boundaries expand. But even with that, if we have a safety measure, if we have Freeboard. What sense does it make to confine freeboard to the special flood hazard area when the flood is going to extend beyond it. The flood that we're building freeboard to protect against. Should we have no build zones, and if so, how do we define them?
- Should we consider wet flood proofing options, particularly for larger buildings in dense urban areas that we're not going to completely move away from
- Should we have building access standards? Your building may be high and dry but you can't get to it.
- A few years ago I was at a mapping meeting in Westchester County, New York, just north of New York City and there was a fire chief representing one of the communities that was practically in tears relaying how during Sandy, there was an emergency call that came in for a man that was having a heart attack his house was not being flooded, but the emergency officials couldn't get to it. And the man died and the fire official is practically in tears talking about it.
- Should we talk about no net fill, no fill at all.
- We talked about different standards based on the probable lifespan of a project. A highway has a longer lifespan than a Walmart. And should we consider different standards based on that and then infrastructure standards in general. Some infrastructure cannot avoid flood zones roads, bridges,
- Waste water and wastewater. How do we treat them? How do we treat standards for bridges and culverts?
- Can we incentivize floodplain preservation? Are there tools which we can do that.

Regulation thoughts and issues discussed – in absolutely no order:

- Regulatory tools
    - When the Government does buy they do not have to restrict purchase to fee simple. Life estates, easements, development rights should be available to help reduce risk
    - Regulations as police powers directed at individual entities is much broader than that included with in the NFIP. Available powers include the purchasing development rights,

transferring development rights, tax increment financing, buying or leasing back with the constraints. These need to be explored
    - We need to tie building useful life with that of the land, and associated levels of risk tolerances.
    - Regulations place the onus on the entity being regulated and the enforcer. May be regulations could be allowed to be interpreted by the entity based on best available science, and the enforcer defines what is considered best available science.
    - In Massachusetts developers set the rules. They are both the relators and those being regulated. Therefore standards must be imposed from on high.
- Equity
    - Equity must be considered. Not all floodprone properties are occupied by the wealthy. Some blue collar works have inherited lands and other families live on cheaper marginal floodplains.
    - Climate change is father marginalizing the already marginalized. We are seeing this with Covid-19.
    - We have to internalize the risk to the owners. There are billions of at-risk properties. We as tax payers cannot afford to buy every at-risk property.
    - All lands could be consider floodplains and the onus is on the owner to prove that the property will not be flooded during the life of the property, or if there is a risk, how the risk should be mitigated. This would increase the cost of development if all had to get and H and H report. The regulating entity could prove guidance to help with costs falling short of providing specific maps.
    - The Stafford Act is riddled with inequity. B/C ratios benefit communities with higher numerators – wealthy, have more stuff…
- Examples / case studies:
    - The City of Monroe Washington is basically requiring the communities to design infrastructure to take life expectancy into account, along with climate change.
    - San Francisco is taking sea level rise into account for their infrastructure. The City contracted to develop scenarios for sea level rise in 30 years, in 50 years. 30 years seem to be all the maximum San Francisco's city of San Francisco is willing to consider
    - Massachusetts has just developed a climate resilience tool expect that all state agency construction will use in order to analyze climate change impacts on their new construction projects and the administration and finance. Capital Improvement lists. They are going to begin as soon as the tool is a beta tested. Which is the next step, they're going to begin to insist that everything that any agency brings to the capital improvement plan for the state has gone through that climate design. We have no idea what we will do if the resulting costs are too expensive. But, it is a start.
    - In Chile developers have a 10 year period of responsibility for projects that they develop and as a result, you know, they had a couple years ago there was a huge earthquake, off, off of Chile and there was relatively little damage compared to the size of the quake and it was because the developers themselves know that they're on the hook. Should a building be damaged or destroyed from a predictable hazard.

    - There is a lot of variance in Florida as to regulations and implementation. Beyond State requirements. In Tampa density increases are restricted on vulnerable coastal lands and redevelopment areas have been established outside of these areas.
    - There are a lot of regulations in the US. This is not the case in The Netherlands where responsibility is place on elected water boards and not individual entities.
- Odds and ends
    - B/Cs must reflect 50 year time horizon or the design life of the built with SLR in mind.
    - Maybe trade groups can require the use of best available data regardless of the attitude of the contracting community. A builder, planner, engineer, architect, landscape architect could lose their certification if they ignore science. Losing their license is another concern.
    - Regulation should address both Climate Mitigation and Hazards Mitigation.
    - A lot of ASFPM members do not believe in androgenic climate change. This is extremely important for a lot of different reasons. This should be a huge concern.
    - If we do get a new administration, we need to really be ready to jump in on policy and federal policy. Things are going to be flying and we're going to need all the help we can get to make up for all of this last time.

Mapping:

- Do we even need regulatory maps? Especially with "precise" edges.
- Maps could illustrate risk tolerances or useful life of the floodplain occupation
- Maps could reflect, changes in pool levels, erosion rates….

Insurance:

- Community insurance has been batted around for a while where the government entity would hold the insurance and we get the benefits of a CRS program. This approach may give greater incentives to local governments to implement mitigation measures.
- Require infrastructure to be insurance, or even debris management.
- We should take a better look at our discount rates when evaluating projects. In B/C analyses. The same with a project design life. There are often under estimated.

Next Steps: ASFPM structure to address Climate Change.

Alternative for creating a more formal structure to address climate change will be discussed at the Co-chairs retreat. Those on the zoom call felt that after discussing the organizational alternatives mentioned below, Bob Freitag would represent the Climate Change Working Group's and present their recommendation at the Retreat. The key recommendation was to request that ASFMP create a climate change Task Force. The Task Force would among other things:

- Address both climate mitigation and adaptation (hazards mitigation)
- Have representation from other committees or pods
- Be apart from other committees
- Recognize that there will be overlap, but that this may be a strength.
- Assure there is a unified approach to the extent possible.

Other alternatives discussed:

- Standing committee
    - This may be a possible at some point but not at the moment
- Ad hoc committing
    - Mentioned but not much discussion
    - Working groups and Taskforces would be Ad hoc.
- Combining Social Justice with Climate Change
    - Thought important and a natural fit, but to broad.
- Working Group
    - A working group has merit but maybe too vague

Next meeting:

Our Next meeting will be at 9am PT, on Friday October 23rd Friday where we will discuss the results of the Co-chair's retreat and future directions of his discussion group.
