



Vol. 19, No. 6
December 2007

ASSOCIATION OF STATE FLOODPLAIN MANAGERS, INC.

A VISION OF THE FUTURE How will we Manage our Floodplains in 2050?

Will the human adjustments to flooding that we use today, such as flood insurance, elevating buildings, and providing disaster relief, be effective decades from now, or should floodplain managers be working to implement different or additional measures? At “Floodplain Management 2050,” the second Assembly of the Gilbert F. White National Flood Policy Forum, held in Washington, D.C., November 13-14, about 80 invited experts in various aspects of floodplain management, water resources, economics, public policy, and other related fields considered the ways in which humans will need to be adjusting to flooding in the year 2050. The Forum was hosted by the ASFPM Foundation, in cooperation with George Washington University and many corporate sponsors, to inform policymaking and identify gaps in the scientific and other information needed to guide such policies.

The Forum began with presentations covering four main perspectives on future floodplain management. First, Arthur C. “Chris” Nelson of Virginia Tech-Alexandria Campus demonstrated to the Assembly the projected trends in population growth and urbanization that will forcefully shape the future. Next, William H. Hooke, American Meteorological Society, gave a briefing on the potential dangers of ecosystem degradation and climate change. G. Tracy Mehan III, The Cadmus Group, Inc., analyzed the interplay of our economic and political systems and how they may influence the way we address flooding and water resources in the coming decades. Finally, Colin Thorne, Professor of Physical Geography, University of Nottingham, shared the nationwide scenario-based planning that has been done in the United Kingdom as a basis for managing its flood risk and development—and accounting for possible sea level rise—through the year 2080.

With these insights as a foundation, in parallel small-group sessions the participants applied their experience and professional judgment to assess the overall usefulness of our broadest techniques for adjusting to floods, and to consider new adjustments and approaches that may be required for the future that we face.

There was vigorous agreement that the measures used up to now to minimize flood losses have been effective in many ways, but that our emphasis needs now to shift somewhat and also broaden to address factors that we now realize are closely integrated with successful floodplain management, such as ecosystem protection, educating the public about risk and resources, integrating and streamlining programs, taking advantage of and also protecting digital information technologies, and others.

A final report of the Forum’s discussion, including recommendation for research and action by the floodplain management community, will be released in early spring. ■

Inside

From the Chair	2	California Levees	12
NFIP and Flood Losses	3	FPM Law	13
Freeboard and I-Codes	8	Washington Report	23

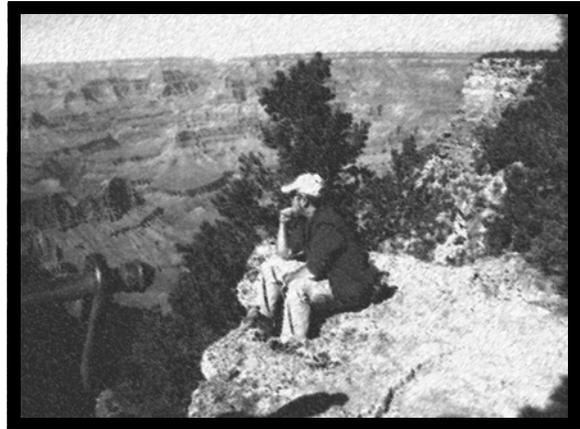
Musings from the Chair

Al W. Goodman, Jr., CFM

Report from the South Rim

The Grand Canyon—how can you gaze upon its wonder and not be inspired? After attending the 25th annual conference of the Arizona Floodplain Management Association, I was moved to ponder the evidence before me of the sheer power of water and time to transform rock and soil to their own design. Keeping this in mind, I profess that it must have been a combination of the almost total lack of oxygen at 7,010 feet and the warm afterglow of comradeship with my fellow floodplain managers that led to a bout of musing on the rim.

You know, I always have been keen on the idea of establishing a new discipline or school of thought. Let's discuss.....Quantum Floodplain Management, a discipline centered or focused on an infinite curiosity concerning excessive flows of water across normally dry surfaces of your neighborhood terra firma. Of course, it goes without saying that this school of thought's university would be built in that nirvana called "Floodplainland," which has no center, no real boundaries. The patron of this school would be Aristotle. Ever hear of pathos, ethos, and logos? *[If I understood Aristotle thoroughly, I would probably prefer the logos concept, which features a passionate and emotional delivery of subject.]* Keep those methods of rhetoric in mind as you peruse my theories concerning Quantum FPM found in the next few hundred pages.



[Insert the 251-page treatise on Quantum FPM here.]

If anyone has any questions after reading the above treatise, please contact my publicist, he has all the files. *[Great, now that the membership has read "Q FPM," I can have it submitted to the boys in Stockholm for one of those prizes they give out.]* Where should I take y'all today with this issue's column? Hmm, let's regroup and see if the clouds will suddenly part and reveal a subject of interest.

Aha..... please consider the passage by the House and Senate of, then the Presidential veto on November 2nd, followed by a November 8th override vote, and finally becoming law on the following day, the Water Resources Development Act of 2007 (WRDA). *[Never mind that this legislation should be passed biennially, in fact it was last signed into law in 2000. Hey, that emulates our latest National Flood Programs and Policies in Review update!]* This act, a real Duke's mixture,* is an authorization bill, whose main purpose is to deem water-related projects eligible for funding. However, there is beaucoup vetting of specific projects. The skinny is: proposed plans/projects will be studied for a year, be subjected to a 103-step feasibility process, and finally receive a "yes" or "no" determination as an optimum solution. However, WRDA *does* provide the authority for programs aimed at coastal-storm and flood damage, new navigation projects, ecosystem restoration, U.S. Army Corps of Engineer policies and procedures, etc..

Purely at random, I'll highlight just four sections of the act. *[A majestic California condor is circling above my head. Since there are less than 300 left in the world, it is great to see one. It's hard to believe that it's just a giant buzzard. Hey, why is it circling me; am I too close to the edge?]* Take Section 2032. It directs the President to report to Congress with an assessment of the country's vulnerability to flooding. Three items he must address are (1) the extent to which programs relating to flooding address flood risk reduction priorities; (2) the extent these programs may be encouraging development and economic activity in floodprone areas; and (3) how to improve these programs. *[Given that FEMA has already addressed some of these concerns wouldn't it be more efficient for Congress to authorize a council similar to the now defunct Water Resources Council, to supply the answers to this section's questions?]*

[continued on page 5]

*For those not from around here, the expression *Duke's mixture* means "a little bit of everything."

DOES THE NFIP REDUCE—OR INCREASE— FLOOD LOSSES IN THE UNITED STATES?

**French Wetmore
French & Associates, Ltd.**

*Editor's note: This article was prompted by Dr. Rutherford Platt's "On the Line" column that appears on pages 11-12 in the November issue of the **Natural Hazards Observer**. Access it at <http://www.colorado.edu/hazards/o/archives/2007/nov07/NovObserver07.pdf>.*

In his comments on the *NFIP Evaluation Final Report*, Dr. Rutherford H. Platt raises some excellent points that are overdue for attention. He uses the NFIP Evaluation as the setting for his questions but, for several reasons, the Evaluation did not turn out to be the vehicle to answer them. As Chair of the NFIP Evaluation's Final Report Working Group, I'd like to discuss his comments from the perspective of the Evaluation and then propose some next steps.

As a long-time friend and supporter of the Association of State Floodplain Managers, Rud rightfully challenges us to remember why we are in the business of floodplain management. In his article, Rud repeats Gilbert F. White's question, a question everyone should ask periodically, "Will the NFIP reduce or increase ... flood losses in the United States?" He notes that the success of the NFIP can only be assured if there are effective land use controls and full actuarial insurance rates for new construction. He raises three points that bring the effectiveness of existing land use controls into doubt. Let me comment on these three points.

- (1) *There is a "dwindling mandate" for land use control.* I strongly agree that we (meaning the Federal Emergency Management Agency and other agencies, the states, local governments, and the entire floodplain management profession) need to give far more attention to regulating new development in floodplains. The NFIP cannot do this by itself. For various reasons (summarized in Section 2.1 of the *Evaluation of the National Flood Insurance Program Final Report*) the NFIP only sets the base—minimum criteria for construction of new buildings. It is not really a land use program and Congress didn't intend for it to usurp state and local land use programs. It does not say what can or cannot be done in the floodplain—it says how buildings should be constructed if future flood damage to those buildings is to be minimized.

The fact that there has been a 1% average annual increase in the number of buildings in the floodplain (page 12 of the Final Report) does not necessarily mean that the NFIP has failed. The Evaluation found that 89% of those new buildings meet the essential flood protection standard—their lowest floors are at or above the base flood elevation (page 16). We should be doing more, though. We should be working for 100% compliance of all the flood protection standards and we should be encouraging state and local decision makers to address land uses. Every local official should be asked, "do you want to just meet the minimum federal rule for buildings or do you want to make your floodplains safer places for people and better places for your community?"

I would not recommend that we have the various federal agencies and programs decide what are appropriate uses in our communities' back yards. The *Final Report* notes this. It does call for stricter standards in the more hazardous areas and incentives to encourage communities to address land uses (pages 15–16 and 19–20).

- (2) *One measure of the lack of attention to strong regulations is that there have been few challenges and court rulings on "takings" in recent years.* I am not sure that the lack of litigation is a sign of failure. We have had some excellent guidance from researcher-attorneys like Jon A. Kusler, Edward A. Thomas, and Rud himself, on why communities win or lose takings cases. In most cases where the community lost a case, it did not closely correlate its restrictions on development to the flood hazard. For example, the courts would likely overrule a complete prohibition of development in an area subject to only one foot of slow-moving floodwater. Excellent summaries and discussions of the takings and liability issues as they concern floodplain management today have recently been featured

[continued on page 4]

The NFIP and Flood Losses (cont.)

in the *News & Views* [see, for example, August 2006, pp. 4-5;] and released by the ASFPM [see No Adverse Impact and the Courts at http://www.floods.org/PDF/ASFPM_NAI_Legal_Paper_1107.pdf].

I submit that the lack of litigation could be seen as a sign of success. Isn't it possible that we have read the research and have written better regulations? We have also coupled the regulatory stick with the mitigation carrot and have funded acquisition projects to clear and preserve the floodplain rather than expect land use controls to do so without compensation to the property owners. We have introduced other tools, such as transfers of development rights and planned unit developments, to reward developers who use their land to further the community objectives of preserving floodplain open space for a variety of purposes.

- (3) *The present levels of protection, i.e., the 100-year flood as mapped on Flood Insurance Rate Maps, "will prove inadequate in light of future changes in flood risk."* Again, I strongly agree. Rud cites four major sources of rising flood risk: upstream urbanization, coastal erosion, degradation of flood control structures, and climate change. Not one of them has been addressed adequately by FEMA's mapping criteria. Because of the recently initiated Map Modernization program, these sorts of mapping issues were not part of the Evaluation.

FEMA has realized that improvements are needed in many aspects of the NFIP's depiction of flood hazards. For example, FEMA has

- Launched a major effort to accurately map the effectiveness of levees,
- Provided credits through the Community Rating System to address these sources of risk in local mapping and regulatory efforts, and
- Included a review of the 1% flood standard as one of the 13 NFIP Evaluation studies.

The decision years ago to map floodplains based on existing conditions rather than on future upstream urbanization was not made summarily. A legal opinion was issued noting that federal regulatory standards and insurance rates could not be based on predictions; they needed to be based on actual conditions. It may be appropriate to revisit this opinion in light of the high price we are paying to remap floodplains in rapidly urbanizing areas. The other sources of rising risk, especially regulation of development in areas subject coastal erosion as a means to prevent or reduce flood insurance claims, should also be addressed by FEMA.

It can be seen that I agree with most of Rud's points. While we wished it would have, the NFIP Evaluation did not explicitly address Gilbert White's big question, "Will the NFIP reduce or increase ... flood losses in the United States?" However, it did address many smaller parts of the program in an effort to identify how they could be improved. The *Final Report* notes that

In general, the Evaluation has shown that the NFIP is moving towards achievement of its goals. Over a billion dollars in flood damage are being prevented each year, millions of dollars in federal expenditures are being saved annually, and millions of people have flood insurance protection for losses for which they would otherwise have been uncompensated (page 42).

That's not a bad finding. But we're not done, by a long shot. The *Final Report* further notes that "it appears that past strategies may well prove inadequate to the challenges posed by the increased losses expected in the future" (page 42). In other words, we should be doing some things differently. The 13 substudies to the Evaluation had approximately 200 recommendations on what should be done differently. We are told by David I. Maurstad, Assistant Administrator for Mitigation at FEMA, that he intends to pursue almost all of these recommendations. As a participant in a couple of FEMA programs, I have already seen staff begin to work on them.

I recommend that every floodplain manager read the *Final Report* of the Evaluation. It summarizes and simplifies the 13 substudies and their recommendations to FEMA. Some of the *Final Report's* summary recommendations (and therefore, the detailed recommendations of the substudies) go directly to some of Rud's concerns. It does call on FEMA to adopt some stronger standards, improve mapping, and take other appropriate program-specific actions. But beyond these, it strongly advocates several dramatic steps that would help bring about and complement the badly needed, stronger emphasis on land use. These "attitudinal

[continued on page 5]

The NFIP and Flood Losses (cont.)

changes” would move the NFIP to where we will feel more confident that it will really reduce flood losses and meet its other stated goals of appropriately spreading the burden of flood costs and protecting our shrinking riparian and coastal spaces and their resources. Among them:

- The NFIP and its stakeholders at all levels need to adopt a broader perspective. It is no longer sufficient to think only of a single program or only of achieving the minimum standards....
- Floodplain managers within and outside of FEMA need to move the NFIP from a program that specifies how to build in the floodplain to one that protects both buildings and floodplain functions by also discouraging inappropriate and hazardous development in the floodplain . . .
- The NFIP needs to exist and function as an integrated program if it is to fulfill its mission. FEMA and its staff also need to collaborate more closely with those outside the agency whose goals and programs are consistent with the NFIP (page 46).

One way to promote and steer such shifts in perspective is to institutionalize Gilbert’s desire to keep questioning the goals and direction of the program. A key first step recommended in the *Final Report* was the creation of “a stakeholders’ advisory council . . . to provide overall guidance on working towards the goals of the NFIP and monitor progress” (page 46). We have not heard whether Mr. Maurstad intends to pursue this recommendation. I think such a council would be very useful as our profession’s conscience because it would periodically ask Gilbert’s big question, “Does the NFIP reduce or increase . . . flood losses in the United States?”

>>> The *Final Report of the NFIP Evaluation* (and all the other reports) can be read and/or downloaded at <http://www.fema.gov/business/nfip/nfipeval.shtm>. Legal analyses of floodplain management regulations, takings, and no adverse impact standards can be found on the ASFPM website at <http://www.floods.org/>.

Musings from the Chair (cont.)

Section 2035 directs the Corps to ensure that design and construction projects related to hurricane and storm/flood damage reduction activities are reviewed by independent experts to assure public health, safety, and welfare on any project that meets specified criteria. *[I wonder how independent they will be...was that a herd of elk that just sauntered by?]*

These last two sections really caught my eye. Section 9003 establishes a committee on levee safety. This committee will consist of 16 members. Two are designated, the Chair (Secretary of the Army or designee) and the Administrator of FEMA (or designee). The remaining 14 members will consist of eight representatives of state levee safety agencies (one from each Corps district), two representatives of the private sector, two representatives of local and regional governmental agencies, and two representatives of Indian tribes. The ASFPM will submit nominations for committee members. The first action of this committee will be to recommend to Congress what a national levee safety program should look like and how it should be structured (180-day window to accomplish this.) The creation of such a committee was a recent ASFPM suggestion to the congressional staffers.

Last, but not least, Section 9004. This section directs the Secretary of the Army to establish an inventory of and conduct an inspection of all federally owned and operated levees; and establish an inventory of and conduct an inspection of all federally constructed levees that are non-federally operated and maintained as the original cost-share for the project.

In summary, it is interesting to note that WRDA 2007 recognizes the possible existence of federal programs that are in fact counter-productive at times and that flood/storm/levee residual risk hazards should be adequately addressed. *[Time for a swig of H2O; the ridiculously low humidity here is unreal. I do miss my natural habitat found at 312 feet msl and consisting of an atmosphere heavy with oxygen and enough humidity to bathe in.]*

Happy Holidays to you all, and may the New Year bring you good health and fortune. The ASFPM Ark cruises on toward the 2008 event horizon. ■

from the Director's Desk



Larry A. Larson
Executive Director, ASFPM

I'm often asked if the massive (unprecedented?) human suffering and damage from Hurricanes Katrina, Rita, and Wilma, along with the hurricanes of 2004, have resulted in much change in national flood policy from Congress or the Administration. The answer is "very little." A number of elements of national flood policy contributed to the devastation of Katrina, and a some of those matters are under discussion, but change is coming slowly, if at all. Many professionals are concerned at this point that the momentum for positive change is rapidly fading, and worse yet, that some of the changes being proposed now actually encourage more risk to property owners and push more costs to taxpayers.

An example is a number of amendments to the House version of the NFIP Reform bill for 2007. Some of these amendments actually exempt entire areas of land and many structures from having to buy flood insurance. Think about that for a minute. **Can you imagine a Congressperson proposing a bill that would exempt some of his or her constituents from buying fire insurance?** That Congressperson would be immediately and rightfully accused of putting his or her constituents at risk of great harm to life and safety. The backlash would be significant. Yet when it is proposed to exempt people from buying flood insurance, little outrage or acrimony surfaces. Apparently there is no understanding that floodplain residents are seven times more likely to be flooded than they are to have a fire. This makes going without flood insurance seem like the reckless idea that it is.

What is causing this lack of understanding, and what can we as flood risk management professionals do about it? A number of causes have been identified, most notably our inability to effectively communicate flood risk. Added to that are the numerous disincentives for doing the right thing. For example, the "who benefits vs. who pays" argument is a big factor. The people who benefit from development that is threatened by floods are not the people who will pay the cost of flooding when it happens.

Developers and real estate agents sell the property and are usually out of the picture by the time the flood waters rise. Local officials who believe community development is their primary mission because it brings in tax revenue to the community have a time horizon that extends only to the next election. Add to those disincentives the common situation in which the community leaders believe that they can shift much of the cost of their flooding to the federal taxpayers by claiming federal disaster relief and other federal subsidies, and we see the vicious circle that is creating tomorrow's disasters.

What can we do about it? In three words: educate, communicate, and mandate—all with regard to public safety and flood risk.

We need to educate communities and citizens so they understand risk. Show them how risk varies. Explain that all properties in the AE or A zone (or any zone) do not have the same risk, even though the flood map may show it that way. A structure in a zone subject to 15 feet of water in a 100-year flood is at a much higher risk than one in that same zone subject to 1 foot of water in a 100-year flood. The same is true in areas subject to coastal storm surge. Educated citizens will understand that risk is not just the probability of being flooded, but it is the probability multiplied by consequences if that flood happens. All of that should play into their decisions about buying flood insurance, building a house in the floodplain, etc.

Communicating flood risk is a difficult task, and one that we in the profession have not done well. If we had, those people living behind levees would understand that, although the levee provides some protection from some events (assuming it is properly built and maintained) there is still residual risk from the levee's failing or being overtopped in a flood larger than that anticipated

[continued on page 7]

The Director's Desk (cont.)

when the levee was built. They would understand that the levee “buys down” some of their risk, but that some risk still exists, and they can buy it down even further by purchasing and keeping flood insurance, elevating the structure, having a good evacuation plan during flooding, and other measures. Local and state governments would understand that public safety is their primary function, so that notifying people behind levees about their residual risk is naturally expected and is done routinely. Such tools as time-lapse computer visualizations can show how flooding happens if levees fail or are overtopped, and who in the community is affected if they do.

Mandating flood insurance in residual risk areas (those places protected by structures like levees and those places subject to storm surge) is a way to protect most people's largest investment—their home or business. Adequate operation and maintenance of flood control structures must be mandated so that the level of protection for which the community and its citizens (and the federal taxpayers) have paid is actually provided as the years go by. Mandating that communities have flood warning systems and evacuation plans in place and routinely exercised is how we protect the people who live in residual risk areas. Mandating the notification of all property owners and renters in a residual risk area is how we communicate the risk and educate people to plan for and account for the risk to protect their lives, property, and investments.

As flood risk professionals, we need to think carefully whenever we take an action that “takes people out of the flood zone,” and instead help them understand that flood risk is almost everywhere—it is simply a question of how much risk and how people adjust to it and protect themselves and their families. ■

AFTER MAP MOD, WHAT?

The Risk Analysis Division of the Federal Emergency Management Agency is considering what will be needed in terms of nationwide floodplain mapping activities and resources after the Map Modernization initiative is finished. Comments were invited on an early draft concept paper, “FEMA's Flood Map Modernization: Preparing for FY09 and Beyond,” which sets out tentative ideas and priorities. The ASFPM's Mapping and Engineering Committee responded via a letter sent to FEMA October 30, 2007. The letter commends FEMA for having a vision of the future of floodplain mapping and reinforces its willingness to continue to work with FEMA and other entities to shape that vision and make it a reality. Among the many suggestions made in the ASFPM letter:

- The bulk of the limited national resources available for floodplain scoping and mapping should be routed directly into mapping and updating maps, with only a small fraction of the effort invested in mitigation outreach, and with watershed-based risk assessments left to the state and local levels.
- Full integration of the “national map layer” delivered via the Mapping Information Platform and the digital data and maps delivered from the Map Service Center needs attention and should take priority over development of additional tools.
- Measures should be taken to engage communities in actively fulfilling their roles in keeping their maps up to date.
- Lists of flood hazard data needs should be developed in conjunction with the states.
- A long-term funding stream for maintenance and updating of flood maps will be necessary.

>>> Read the Mapping and Engineering Committee's thinking at http://www.floods.org/PDF/ASFPM_Comments_Map_Mod_FY09_Beyond_103007.pdf.

FREEBOARD AND THE INTERNATIONAL RESIDENTIAL CODE

John Ingargiola
Senior Engineer, Building Science Branch
FEMA Mitigation Directorate

Buried in the many pages of one of 13 reports issued as part of the Evaluation of the National Flood Insurance Program is an encouraging finding: “communities are generally successfully meeting the elevation requirements of the program . . . 89% of all buildings surveyed have their lowest floor at or above the [base flood elevation] BFE or within 6 inches of that elevation.” The report, based on a sample of buildings that were examined and surveyed, notes that some of those buildings may not fully comply with all NFIP requirements because of matters related to enclosures, as well as mechanical and utility equipment that is below BFE.

The NFIP Evaluation consisted of more than a dozen individual research studies that focused on subjects determined to be critical to assessment of the NFIP’s progress towards the program’s four major goals. [Download the reports at <http://www.fema.gov/business/nfip/nfipeval.shtm>.] The above finding is reported in *An Evaluation of Compliance with the National Flood Insurance Program Part B: Are Minimum Building Requirements Being Met?*

There are many factors that contribute to the finding that most post-FIRM buildings have their lowest floors at or above the BFE. Surely, careful attention to proper administration of local ordinances by state and local floodplain management officials is a significant factor.

For floodplain management purposes, freeboard is a factor of safety, usually expressed in feet above a flood level. Freeboard also compensates for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, constricting bridge openings, and the hydrological effect of urbanization of the watershed.

But there is another, less obvious influence—more than 60% of the communities that participate in the NFIP are subject to state-required freeboard or have elected to adopt freeboard.

At FEMA’s request, the Association of State Floodplain Managers recently asked all NFIP State Coordinators to confirm or update information about state-required freeboard that is reported in Table A18 in *Floodplain Management 2003: State and Local Programs* [see <http://www.floods.org/Publications/free.asp>]. A number of states responded that, although freeboard was not required, most communities had adopted freeboard. The results of the new data, as shown below, suggest that more than 60% of the NFIP’s communities that have mapped floodplains administer freeboard (required or voluntary). The actual number is higher because only a

few states gave estimates of the number of communities that have voluntarily adopted freeboard.

Yet another of the NFIP evaluation reports provides quantitative evidence of the benefits of freeboard. Benefits are measured in both long-term damage avoided and lower-cost premiums for NFIP flood insurance policies. Dig into the details of *Evaluation of the National Flood Insurance Program’s Building Standards* [at <http://www.fema.gov/business/nfip/nfipeval.shtm>.] to discover what we already know, but now have proof of from detailed analyses—the benefits of freeboard outweigh the added cost of elevating just one or two feet higher.

FEMA has long recognized and promoted the merits of elevating buildings so that the lowest floor is one or two feet above the BFE. Indeed, the Community Rating System offers up to 100 points for every foot of freeboard. More than 645 of the 1,080 communities that participate in the CRS get credit for freeboard. Notably, owners of buildings with freeboard can save as much as 40-50% on their NFIP policies over the cost of policies for buildings that are elevated just to the BFE.

The International Code Council periodically considers proposals to modify the family of building codes known as the International Code Series, which includes the International Building Code (IBC) and the International Residential Code (IRC). This year, FEMA has submitted a proposal to add one foot of freeboard to the IRC. The IBC already incorporates freeboard by reference to ASCE 24 Flood Resistant Design and Construction, except for one- and two-family dwellings and townhomes.

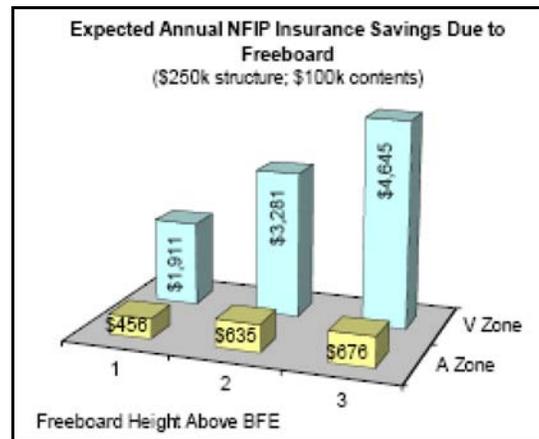
[continued on page 9]

Freeboard and the I-Codes (cont.)

A similar proposal to add freeboard to the IRC was voted down last year. The justification was based largely on concerns about increased costs and a misunderstanding by builders in Midwest states that homes with freeboard “would not receive the insurance discounts common in hurricane-prone regions that would make the elevation requirements more cost-effective.”

This year, FEMA is coordinating with the home building industry to share the results of the NFIP Evaluation study on freeboard, and to address questions in advance. Given that more than half of NFIP communities with mapped Special Flood Hazard Areas already require freeboard, it is hoped that there will be a favorable outcome for the 2009 edition of the IRC.

FEMA welcomes and appreciates the ASFPM’s offer to support the code change proposal to add freeboard to the IRC. The IRC code hearing is scheduled for February 18-20, in Palm Springs, California. To learn more about the proposal, including how to submit a supporting statement, please contact John Ingargiola at (202) 646-3452 or john.ingargiola@dhs.gov or Rebecca Quinn, FEMA Code Consultant, at (434) 296-1349 or rcquinn@earthlink.net.



Summary of State-Required Freeboard (Data collected by ASFPM, October 2007)

State	# of Communities ¹	Freeboard ²	State	# of Communities ¹	Freeboard ²
AL	300	0	MT	108	2
AZ	94	1	ND	197	1
CO	209	0	NE	303	1
CT	88	0	NJ ³	543	1 or 2
DC	1	1.5	NV	15	0
GA ³	412	1 or 3	NY ⁴	1,400	2
HI	4	1	OH	585	0
IA	477	1	OR	258	1
IL	707	0	PA	2,392	1.5
IN	328	2	PR	3	1
KS	270	1	RI ⁴	40	0
MD	124	1	TN	313	1
ME ³	263	1	VA	231	0
MI	634	1	WA	264	0
MN	408	1	WI	478	2
	4,319			7,130	

SUMMARY: A combined total of 11,449 communities with mapped SFHAs require freeboard. The NFIP has 18,632 communities with mapped SFHAs (and about 1,742 other communities participate even though they do not have a flood map).

¹ Communities with mapped Special Flood Hazard Areas (SFHA) having freeboard.

² A number indicates a state-required freeboard in feet above BFE. States noted "0" provided an estimate of communities that have adopted freeboard; freeboard may be voluntarily adopted in other states that did not provide estimates. States not shown do not require freeboard and did not report an estimate.

³ Georgia, the 16-county area around Atlanta has 3' freeboard; Maine requires freeboard only in coastal communities; New Jersey requires 1' in tidal areas and 1-3' in riverine areas.

⁴ New York is adopting 2' in the IRC; Rhode Island is proposing 1'.

Professional Opportunities

Massachusetts wants Flood Hazard Mapping Coordinator

The Massachusetts Department of Conservation and Recreation (DCR) seeks qualified applicants for the position of Regional Planner III (Flood Hazard Mapping Coordinator). The Flood Hazard Mapping Coordinator (FHMC) is the primary state-level liaison for flood hazard mapping activities in the Commonwealth and is responsible for coordinating the mapping activities of FEMA's Map Modernization Program with communities, state and federal agencies, and mapping contractors. Primary responsibilities include analyzing map revision needs to develop a prioritized list of flood map modernization activities; developing, coordinating, and implementing outreach strategies; and monitoring and coordinating activities of mapping contractors. The position is located at the DCR Boston office. Salary range is \$50,922 to \$67,850 annually.

>>> More details, minimum requirements, and application procedures can be found at https://jobs.hrd.state.ma.us/recruit/public/31100001/job/job_view.do?postingId=J12682, or by contacting Richard Zingarelli, Flood Hazard Program Manager, at (617) 626-1406.

ASFPM needs new IT Expert

The Association of State Floodplain Managers is looking for a Computer Information Technologist to be responsible for analysis, design, programming, administration, and configuration of computer hardware and software in a moderately complex microcomputer environment. This position will manage, maintain, and service the ASFPM's computer needs in areas such as web-based applications, cyber security, internet, operating systems, applications, database, and network administration.

This is a full-time position in the Executive Office in Madison, Wisconsin. Salary will be commensurate with experience and qualifications, and a standard benefits package is included. Applications must be received by December 21, 2007.

>>> More details, a list of qualifications, and application procedures can be found on the ASFPM website at http://www.floods.org/Files/ASFPM_CIT_Position_Annx_1207.pdf.

PERIShip Awards available Again

The Public Entity Risk Institute (PERI), the Natural Hazards Center, the National Science Foundation, and Swiss Re are accepting applications for dissertation fellowships for work in all aspects of natural and human-made hazards, risk, and disasters in all disciplines. The program aims to generate dissertations that will contribute to the body of knowledge in hazards research and foster the development of hazards scholars who will expand the research and practitioner communities.

Up to \$10,000 will be awarded to each of six individuals this year. Candidates may be from any discipline, including the natural and physical sciences, social and behavioral sciences, specialties in engineering, or interdisciplinary programs such as environmental studies, who are conducting research in hazards, risk, or disasters. Fellowship candidates must be all-but-dissertation status at a U.S. institution, with an approved dissertation proposal.

The PERIShip grant funds are to support dissertation work and can be used for data collection, travel for field work or for presentation of findings at meetings, purchase of software, data entry assistance, statistical analysis services, or a combination of these or other similar purposes (but not for stipends or tuition).

>>> Get full application information at <http://thunder1.cudenver.edu/periship/>.

TOWARD IMPLEMENTING CLIMATE CHANGE SCIENCE

In mid October the National Academy of Science's Committee on Strategic Advice to the U.S. Climate Change Science Program (CCSP) held a workshop with the intent of developing recommendations for the Program about gaps in climate change science and its application. In the persons of John A. Miller, CFM, the ASFPM's Region 2 Director; and ASFPM member Grant M. Smith of Dewberry, the Association of State Floodplain Managers was one of a handful of practitioner representatives in attendance.

The workshop showed that the staffs of the federal agencies are eager to ramp up climate science and move its products out to decision makers. The State of California is leading the way in regard to funding and initiatives at the state level. The CCSP is an executive body that has little profile and no budget authority, but oversees 13 federal agencies [see the abstract of a recent report on the CCSP on page 22]. However, there was a sense at the workshop that increased attention to and funding for climate change science and its implementation is inevitable eventually. Among the other observations made by the ASFPM participants are the following:

- The scientific community is unified that climate change is imminent and projections of temperature rise are solid, with regional variability. There was a strong sense that we are past the arguments about "if" and moving more into the "what do we do about it?" mode;
- Responses to climate change will be both mitigation (in this case, defined as measures like carbon sequestration to try to prevent worsening) and adaptation (the "it's going to happen" approach);
- There was full consensus that the CCSP remains under-funded and has a cumbersome structure. Both of these hinder communication of climate change science information and coordination;
- A local, user/decision maker viewpoint is needed to guide the development of actionable science data and get it into the hands of stakeholders; and
- Climate science now needs the incorporation of social science for decision support and models.

The ASFPM will continue working with the NAS committee and with other groups and agencies identified at the workshop to provide technical expertise about climate-related flood issues and about state and local needs and procedures for implementing adaptive and mitigation measures.

>>> A short report on the workshop, submitted by the ASFPM participants, is posted at http://www.floods.org/pdf/ASFPM_NAS_Climate_Change_Wrkshp_Summary_1007.pdf. It includes links to the workshop presentations and related materials.

A Living River Approach to Floodplain Management May 18–23, 2008 • Reno-Sparks, Nevada

The Association of State Floodplain Managers
32nd Annual Conference

Get details at

<http://www.floods.org/Conferences,%20Calendar/Reno-Sparks.asp>



CALIFORNIA OUT IN FRONT ON LEVEES

In mid October, California's Governor Arnold Schwarzenegger signed a package of bills that, taken together, will strengthen levee construction standards in the state, require more prudent planning by cities and counties, and overhaul the state's top flood-protection agency.

"Over the long-term these bills will have significant impacts on the patterns of development and the way we manage floods and floodplains," according to Jeffrey Mount, a geologist and flood expert at the University of California, Davis who was quoted in the October 11, 2007, *Contra Costa Times*. "This is the largest single advance in flood management in California in more than 40 years."

The new bills were the result of a difficult and lengthy process of negotiation and were finally passed with the support of the building industry, environmentalists, and local governments. Generally favorable editorials ran in the *Sacramento Bee*, the *Fresno Bee*, the *San Francisco Chronicle*, and other newspapers.

Among other provisions, the California package:

- Creates a nine-member Central Valley Flood Protection Board to replace the state Reclamation Board and thereby improve proficiency.
- Requires the state's Department of Water Resources (DWR) to provide cities and counties within the Central Valley with preliminary floodplain maps by 2008.
- Requires DWR and the new Central Valley Flood Protection Board to prepare and adopt a Flood Protection Plan for the Central Valley by 2012.
- Once the plan takes effect, requires 200-year flood protection for proposed projects in urban and urbanizing areas (10,000 residents or more);
- Once the state plan takes effect, prohibits cities and counties in the Central Valley from entering into development agreements, approving permits, entitlements, or subdivision maps in a flood zone unless there is an appropriate level of flood protection or the local flood management agency has determined that adequate progress towards that flood protection has been made;
- Authorizes cities and counties to develop and adopt local plans of flood protection that include a strategy to meet 200-year level of flood protection, an emergency response plan, and a long-term funding strategy for improvement, maintenance, and operation of flood protection facilities.
- Provides that a city or county may be required to contribute a fair and reasonable share of the increased flood liability caused by its unreasonable approval of development if a state flood control project fails. An appeals court four years ago had found the state liable for \$500 million in damages after a levee failed, inundating part of Yuba County in 1986. Since then, lawmakers have feared that that precedent could cost the state billions of dollars in future cases. This law requires localities to share that liability.

One aspect of the package that made it palatable to builders was that the growth management measures are phased in over time. The laws will restrict building for the next eight years in areas that lack 100-year flood protection in the Sacramento and San Joaquin River valley. After 2014, development would be prohibited in areas without 200-year flood protection. For neighborhoods already built, communities have until 2025 to strengthen surrounding levees to the 200-year level.

The new laws follow a \$4 million bond approved by California voters in May 2006 to fund urgent repairs and essential improvements of levees and other flood control facilities in the Central Valley and Sacramento-San Joaquin Delta.

>>> For more, see <http://gov.ca.gov/index.php?/print-version/press-release/7661/>.

FPM LAW

A Primer on the Public Trust Doctrine

A handy introduction to the legal doctrine that underlies the states' management of their navigable waters and shorelines can be found on the Coastal Services Center's website as an on-line training course. The "public trust doctrine" is based in common-law principles customized by each state, and is premised on the fact that such waters and shores have been used as common areas for food, travel, and commerce since time immemorial. In some states, public rights may also be exercised on private lands. The legal interest of the public is determined by balancing public and private rights and interests.

The on-line course consists of nine modules of concise, easy-to-understand lessons that include examples from different states and helpful and entertaining diagrams. It covers the full range of public trust doctrine topics that are of interest to state and local floodplain, resource, and other land managers, including the history of the public trust, its geographic scope, the trust responsibilities of states, riparian rights and takings, concurrent state and federal authority in the uses of lands and waters, and ways to administer and advocate the public trust.

>>> See the "Public Trust Doctrine On-line Course" at <http://www.csc.noaa.gov/ptd/>.

Nebraska Trial Court Rules on Use of "Best Available Data" in Reviewing Floodplain Building Permits

Edward A. Thomas Esq.
Michael Baker Jr., Inc.

In late September, the District Court of Lancaster County, Nebraska, issued a ruling in a case concerning the implementation of a local ordinance adopted to meet a standard of the National Flood Insurance Program regulations that has occasioned many questions over the years. That regulation states, at 44 *CFR* §60.3(b)(4), that communities that participate in the NFIP shall

Obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State, or other source.

The case arose in Lincoln, Nebraska. Development began to occur in a particular area of the city shown as a Special Flood Hazard Area on the Flood Insurance Rate Maps, without a specific flood elevation provided. This is an area commonly referred to as an "unnumbered A-Zone." The local government followed its own regulation implementing state law and requested that the Nebraska Department of Natural Resources provide an analysis of the flood potential. The state provided the requested analysis, flood map, and related information, but at some point later they went missing from the city's files. The plaintiff homeowners requested building permits for an area outside the

identified Special Flood Hazard Area but within the area that the state had identified as being floodprone. Not having the state's data at hand, the city did not inform the homeowners either of the existence of a flood hazard or of the state-calculated flood heights in the area.

The plaintiffs' property was flooded, and they found out that the city had been informed that
[continued on page 14]

The Association of State Floodplain Managers thanks Rebecca Quinn for bringing this case to our attention and Suzanne M. Kirkland, the Clerk of the District Court of Lancaster County, Nebraska, for graciously supplying a copy of the opinion without charge to the ASFPM, so that we could assist in our members' efforts to minimize the awful misery of floods.

FPM LAW (cont.)

the area in which their homes had been built had been identified by the state long ago as seriously prone to flooding.

In a well-written and thorough opinion, Lancaster County District Judge Steven D. Burns ruled that in the particular circumstances of applying both Nebraska State Law and City of Lincoln Ordinances to the facts of the case at hand, the City of Lincoln will be liable for damages to the plaintiffs in this case. The Judge emphasized that under the Lincoln ordinance, the municipality had a specific “duty to ‘reasonably utilize’ the data provided by the Department of Natural Resources” and that the “employees of the City negligently failed to reasonably utilize the Department Map.”

Next month a trial will be held to determine the exact amount of damages the city will owe the plaintiff homeowners. The local newspaper speculates that the damages may run into the millions and asks why nobody has yet been fired for this serious error.

This District Court ruling is limited to state and local laws and the facts of this specific case; it could be amended or even overturned on appeal. Nevertheless, we all can still take a few lessons from this situation:

- Failing to properly regulate in an especially floodprone area caused enormous misery to all involved, possibly including municipal officials whose jobs may be in peril.
- Unlike many other errors in permitting, which may never be found, errors in floodplain permits are often uncovered by the actions of Nature during and after floods.
- Courts are quite serious about the duty of public officials to be thorough in protecting the public from harm.
- The best way to win a court case is to not be taken to court. Following ordinances and regulations carefully, particularly when life and property damage may result, is very helpful in staying out of court.

Ed Thomas is a floodplain manager, disaster relief specialist, and an attorney. Michael Baker Inc. provided funding for the research and development of this pro bono article. The opinions expressed are the author's and do not reflect approval by any organization. This is an opinion piece based on general principles of law. It is not legal advice.

STATES TO SEE TIGHTER FISCAL CONDITIONS

Although states experienced stable finances in 2007, overall revenue growth has slowed and tighter fiscal conditions are expected in 2008, according to the National Governors Association and the National Association of State Budget Officers. Their report, issued last week and based on figures collected during fall 2007, found that while most states experienced healthy revenue growth during fiscal 2007, some states already have seen significant deterioration of their fiscal conditions and expect revenue and expenditure growth to slow significantly in fiscal 2008. States expect continued expenditure pressures from a variety of sources, including increased funding demands related to health care (which accounted for nearly one-third of all state spending in 2007) and to long-term challenges such as demographic shifts, employee pensions, and infrastructure. In addition, most states will feel the pinch of the nation's weakening housing market, both directly from lower sales tax revenues and indirectly as local governments struggle with declining property values and decreasing property tax revenues.

>>> Read *The Fiscal Survey of States* at <http://www.nga.org/Files/pdf/FSS0712.pdf>.

State & Local Report

HAWAII RESIDENTS USE ON-LINE TSUNAMI MAPS

An on-line tsunami awareness tool is successfully reaching out to residents of the Hawaiian islands. On August 15, 2007, when a magnitude 7.5 earthquake hit Peru, the website received almost 2,000 hits. The new site is a collaborative effort of the state of Hawaii's technical tsunami working group and the National Oceanic and Atmospheric Administration's Pacific Services Center. It was developed mainly to provide a flexible mapping function to better inform the general public about tsunami evacuation zones. Before this, the maps were found only in phone books.

Under a contract with NOAA, Dewberry developed the map interface, basing it on Google Maps because of their user-friendly application and the general public's familiarity with that format. The tsunami maps now can be updated quickly and from a central location.

At the new website, the Tsunami Map Viewer immediately returns a map of tsunami evacuation zones based on a street address or other locational information entered by the user, in either a road map view or satellite image, along with instructions for interpreting the maps and evacuating properly. The page has links to other information such as lists of hurricane shelters, household disaster preparedness tips, weather on the islands and throughout the Pacific, and data on other local natural hazards.

>>> Check it out at <http://www.scd.state.hi.us/>.

[excerpted from Dewberry's Dimensions (September-October 2007), pp. 2-3]

NORTH CAROLINA INUNDATION MAPS ON WEB

Users from a handful of locations in North Carolina now can go online to see flood inundation maps for forecast river levels ranging from minor flooding through the largest observed flood on record. The inundation maps are the product of collaboration by the National Weather Service, the Coastal Services Center, the Federal Emergency Management Agency, the U.S. Geological Survey, and the North Carolina Floodplain Mapping Program. The latter agency, as floodplain managers well know, has been a leader for the last decade in creating up-to-date, seamless statewide digital Flood Insurance Rate Maps based on current flood hazard data, new topographic data, and aerial imagery.

The inundation maps are available for 17 areas in North Carolina. A user selects a location and, by clicking on different flood levels, can see how the inundated areas grow, shrink, and shift. Combined with river observations and forecasts, inundation maps like these should provide decision makers with information to better mitigate flood impacts. An added benefit is that the maps can illustrate to the public how the water in a drainage basin moves to cover different areas in response to a higher discharge upstream, something that many people have trouble visualizing. The National Weather Service is creating additional flood inundation map libraries at 35 locations along the Gulf Coast.

>>> Be sure to check out the flood inundation map libraries for North Carolina at <http://www.weather.gov/ahps/inundation.php>.

[excerpted from Aware (October 2007) pp. 11-12]

HOUSTON, TEXAS, FLOODWAY RESTRICTIONS CHANGE LAND VALUES

Several lawsuits have been filed by property owners whose land in the vicinity of White Oak Bayou has fallen under the jurisdiction of a new Houston city ordinance that prohibits construction on vacant lots in floodways. The ordinance, adopted unanimously by the City Council on August 30, 2006, affects almost 10,000 developed or vacant properties in the city, including 2,400 single-family houses. The property owners claim that the city is taking their property without just compensation, based on the recent appraised value of some lots, which has fallen dramatically. The new ordinance essentially eliminates an exception provided for in the previous ordinance (in force since the mid-1960s), which allowed development of floodway lots if an engineering study showed that upstream water levels would not be raised by more than a fraction of an inch.

City Councilwoman Ada Edwards was quoted in the *Houston Chronicle* as saying that Houstonians are paying a price for decades of lenient development rules that permitted too much concrete and asphalt to

[continued on page 16]

State & Local Report (cont.)

cover water-absorbing soil. In the past few years, as city officials felt increasing pressure to tighten restrictions on development that contributed to flooding, the city's Public Works Department decided to review the floodway regulations, ultimately recommending to the City Council that almost all the exceptions should be eliminated, and the development only of "facilities to protect the health, safety and welfare of the general public" should be permitted.

The new ordinance coincided with the conclusion of a massive project by the Harris County Flood Control District to draw new maps of floodplains and floodways for the county's 22 watersheds. The greatest floodway changes were along White Oak Bayou.

The first lawsuit is set to go to trial in January.

>>> The full story is at http://www.chron.com/CDA/archives/archive.mpl?id=2007_4446549.

[excerpted from the Houston Chronicle Online, October 25, 2007]

MARYLAND'S FLOODPLAIN MANAGERS SHARE EXPERIENCES

Floodplain and stormwater managers of Maryland and beyond gathered in late October for the third annual conference of the Maryland Association of Floodplain and Stormwater Managers. Techniques, case studies, and innovative ideas pertaining to the landscape, climate, and socio-economic characteristics of the state were explored, including

- A study of the extent to which headwater streams are "buried" in human-made conduits in the Gunpowder-Patapsco watershed (which includes Baltimore), and how urbanization encourages this pattern. The study concluded that, within the watershed, 22% of all such streams are buried and 66% of those within the city of Baltimore;
- Activities of the Maryland Hydrology Panel, which since 1996 has been continually reviewing standard hydrological analytical techniques and revising or modifying them to better apply to Maryland locales; and
- A pioneering study of possible inundation of parts of Dorchester County under different scenarios of sea level rise.

Coastal plains outfalls in Anne Arundel County were showcased on the technical field tour. The participants begin at the Arlington Echo Nature Preserve and then viewed a series of engineered ponds with stone weirs that were placed to help restore deeply eroded streams and their floodplains to a more natural condition. This technique also provides infiltration of runoff for stormwater management and prevents erosion in the receiving stream. Each site illustrated different sized projects and conditions, from steep narrow outfall areas to fairly flat and wide stream valleys.

>>> The conference presentations (and photos) are posted at <http://www.mafsm.org>.

Washington Report

CHANGES TO LEVEE RISK WARNING PROPOSED

In response to a request from the Federal Emergency Management Agency, in a November 20 letter the ASFPM commented on proposed changes to the note FEMA places on the Flood Insurance Rate Maps to describe the residual risk in areas protected by levees. In the letter, the ASFPM commends FEMA for taking steps to communicate the residual risk to people with language on new flood maps and strongly encourages FEMA to continue to do so. In the ASFPM's judgment, however, the proposed language is weaker and more confusing than the language in the current note, which came from Revised Procedural Memorandum 43. ASFPM suggests that the existing language not be revised, but continue to be used on updated flood maps.

>>> Read the ASFPM's letter at http://www.floods.org/PDF/ASFPM_Letter_FEMA_Levee_Notice_Support_112007.pdf.

[continued on page 17]

Washington Report (cont.)

SAVINGS FROM PRE-DISASTER MITIGATION PROGRAM NOTED BY CONGRESSIONAL BUDGET OFFICE

A recent report from the Congressional Budget Office validates earlier work by the Multi-hazard Mitigation Council and the Government Accountability Office that quantified the cost-effectiveness of projects undertaken to mitigate losses from natural hazards. The CBO report was limited to mitigation projects funded under FEMA's Pre-Disaster Mitigation program and used some estimates from the MMC study but recalculated the benefit-cost ratios using different methods for converting future effects into discounted present value and for extrapolating results from a sample of projects to the full set. It concluded that, on average, PDM projects funded so far will reduce future natural disaster losses by about \$3 for every \$1 spent on those projects. The cost-effectiveness ratio for floods and coastal storms was higher: about \$4.60 in loss reduction for each dollar spent.

>>> Download the report, *Potential Cost Savings from the Pre-Disaster Mitigation Program*, Congressional Budget Office Publication No. 2926, 2007, 20 pp., from <http://www.cbo.gov/ftpdocs/86xx/doc8653/09-28-Disaster.pdf>.

FLOOD INSURANCE RATE CHANGES PLANNED

A bulletin recently issued by the Federal Emergency Management Agency defines the rate changes for the National Flood Insurance Program, effective May 1, 2008. Overall, the rates are planned to increase by 8% (last May's was 6%). This consists of premium increases in Preferred Risk Policies of 8.0% and Standard X zone policies of 10%, pre- and post-FIRM V zone policies increasing 10%, and A zone policies increasing between 6% and 10%. The Federal Policy Fee, which has been the same for several years, is increasing from \$30 to \$35 and the Increased Cost of Compliance premium for PRP policyholders will go from \$1 to \$6. In addition, FEMA has expanded the coverage options offered for non-residential PRPs.

Also, the Community Rating System discount will be eliminated for structures whose lowest floor elevation used for rating is at least 1 foot or more below the base flood elevation, with the exception of post-FIRM V-zone buildings with more than 300 square feet of unfinished lower area enclosed by breakaway walls (these will be addressed at a later date).

>>> Review the proposed changes at <http://bsa.nfipstat.com/wyobull/w-07065.pdf>.

LEGISLATIVE REPORT

Legislation and Budgets up in the Air

As Congress begins the last three weeks of this session, much significant legislation is in very active status, but not yet finalized, and appropriations for all of the federal government except the Department of Defense remain incomplete and stalemated by Presidential veto threats. Caught up in this scenario are the bills dealing with flood insurance reform, catastrophe insurance, climate change, and other issues of interest to floodplain managers.

The primary focus for the remainder of the session will be on how to handle the federal government's budget for FY 2008. At present, the government is operating under a second Continuing Resolution (CR), this one set to expire on December 14th. Given numerous veto threats from the White House, progress has stalled on many appropriations bills. The Energy and Water Appropriations bill (H.R. 2641 and S. 1751) passed the House in July while the Senate bill, which was reported out of committee in June, has not yet been voted on in the Senate. The Department of Homeland Security Appropriations bill (H.R. 2638 and S. 1644) passed the House in June and the Senate in July, but the differences have not yet been resolved. Interior and Environment Appropriations (H.R. 2643 and S. 1696) passed the House in June and were voted out of the Senate committee in June as well, but have not yet been brought to the Senate floor.

Washington is full of speculation about how the budget will be handled. Cumulatively, the bills total \$22 billion above the President's budget requests. A Democratic leadership plan to bundle the bills into an

[continued on page 18]

Washington Report (cont.)

omnibus appropriations bill with an overall figure that would cut that difference in half to \$11 billion has not met with Republican approval. Few seem to favor a year-long CR, but the impasse presents timing and scheduling problems if carried over into the second session of the 110th Congress, since the President's budget for FY 2009 will be announced in early February.

One Finalized Piece of Legislation—WRDA!

One completed piece of business is the Water Resources Development Act (WRDA), which had sufficient bipartisan support that the Congress overrode the President's veto in November. This was H.R. 1495 with accompanying Conference Report H.Rept. 110-80. The measure is now Public Law 110-114. Although largely a bill to authorize Corps of Engineers projects, it does contain significant policy provisions.

Title II, General Provisions, includes language (Section 2031) amending the Corps' *Principles and Guidelines* (P&G). The language states that U.S. policy requires all water resources projects to reflect national priorities, encourage economic development, and protect the environment by (1) seeking to maximize sustainable economic development; (2) seeking to avoid the unwise use of floodplains and flood-prone areas and minimizing adverse impacts and vulnerabilities where such areas must be used; and (3) protecting and restoring the functions of, and mitigating unavoidable damage to, natural systems.

Section 2033 requires feasibility reports for flood damage reduction projects to include in the benefit/cost calculations (1) residual risk of flooding, of loss of human life and human safety factors; (2) any upstream or downstream impacts; and (3) ensuring that benefits and costs associated with structural and nonstructural alternatives are evaluated in an equitable manner. Section 2034 requires peer review of project studies by an independent panel of experts if (1) the project has an estimated cost of over \$45 million including mitigation costs; (2) the review is requested by a governor of an affected state, or (3) the Chief of Engineers determines the project to be controversial.

Title IX, National Levee Safety Program, establishes (Sec. 9003) a Committee on Levee Safety to make recommendations to the Congress in six months for a national levee safety program. It also requires the Corps to establish (Sec. 9004) an inventory of the nation's levees and to conduct inspection of all federally owned and operated levees as well as of all federally constructed, non-federally operated and maintained levees (at the original cost share for the project).

Pending Legislation

Since the next Congressional session will be the second session of the 110th Congress, all legislation that is in play during the first session will be carried over when the second session begins in January.

Flood Insurance Reform

The National Flood Insurance Program is authorized through September 2008, making the flood insurance reform legislation a likely candidate for being carried over.

The House bill (H.R. 3121; H. Rept. 110-340) was passed on September 27th. After a hearing on October 2nd, the Senate Banking Committee reported out its bill (S. 2284; S. Rept. 110-214) on November 1st. Several Senators, led by David Vitter (R-LA) have placed "holds" on the bill, which makes it more complicated to bring the bill to the floor.

Vitter's statement indicated that his hold was because he would like the bill to contain more of the additional optional coverages, such as those included in the House bill. Additionally, Mel Martinez (R-FL) and Charles E. Schumer (D-NY) have indicated they want to offer an amendment on the Senate floor to add the optional wind and flood policy (included in the House bill).

House Bill Summary—The House bill

- significantly expands optional flood insurance coverages to be available at actuarial rates and raises the maximum available to \$335,000 residential, \$135,000 contents, and \$670,000 for commercial;
- reauthorizes the NFIP for 5 years, but does not forgive the debt, instead requiring FEMA to report to the Congress on how it will repay the U.S. Treasury within 10 years;
- phases out subsidies for pre-FIRM non-residential and non-primary residential properties;
- requires first-class-mail notice to property owners if a property is affected by map changes;

[continued on page 19]

Washington Report (cont.)

- like the Senate bill, authorizes an on-going program for mapping areas behind levees, below dams, and in the 500-year floodplain; provides for inclusion of other risk information from other federal mapping sources (like coastal inundation, coastal erosion, streamflows, land subsidence); and re-establishes the Technical Map Advisory Council;
- increases penalties for lender non-compliance and requires FEMA participation in non-binding state mediation of claims disputes;
- extends the Severe Repetitive Loss Pilot program and clarifies that the FEMA Director may work directly with such property owners on mitigation offers when states or localities do not;
- requires notification of flood insurance availability outside of SFHAs during real estate transactions, requires FEMA notification to landlords of contents insurance availability for tenants, encourages them to notify tenants, and creates a competitive grant program for communities to encourage purchase of flood insurance, especially outside of SFHAs;
- creates an independent staff position of the Flood Insurance Advocate, tasked with reporting to Congress in one year on steps to address policyholder issues including possible establishment of a permanent Office of the Advocate;
- alters the warning language on flood maps for areas mapped as behind flood control structures (weakening it and noting that flood insurance is not required in these areas);
- requires no rate changes pursuant to updated map issuance until all maps in a given Corps of Engineers District are issued; and
- clarifies that “demolish and rebuild” is an allowable activity under FMA and removes the per state and per community caps.

Senate Bill Summary—The Senate bill

- does not expand coverages, does not raise the maximum insurance available, and does not include an optional wind and flood policy;
- reauthorizes the NFIP for 5 years and does forgive the debt to the Treasury;
- phases out subsidies for pre-FIRM structures, not only non-residential and non-primary residences, but also for severe repetitive loss properties and those where flood losses have exceeded property value;
- requires that any new flood insurance policy for an SFHA property not covered at the date of enactment of the reform bill be issued at an actuarial rate, and increases minimum deductibles;
- authorizes an on-going mapping program tasked with mapping areas behind levees, below dams, and in the 500-year floodplain. Like the House bill, it provides for inclusion of other risk information and re-establishes the Technical Map Advisory Council;
- prohibits the current NFIP practice of “grandfathering” properties remapped into the 100-year floodplain to pay at rates reflecting their prior risk level. A two- year phase-in is provided for those with existing flood insurance policies;
- removes limits on state contributions for updating flood maps; requires federal agencies to improve coordination of mapping and mapping budgets; and requires a study of such interagency coordination and of means to establish joint funding mechanisms with federal, state, and local agencies to share collection and use of data for mapping;
- extends the Severe Repetitive Loss Pilot program;
- establishes a large Office of the Flood Insurance Advocate to assist policyholders with issues and claims problems (in the Senate version, the Advocate may establish offices in the FEMA Regional offices and temporary local offices after a flood);
- increases penalties for lender non-compliance and requires state-chartered lending institutions to comply with the mandatory purchase requirements of the NFIP;
- requires escrow of flood insurance payments and extension to state-chartered lenders and, as in the House, requires FEMA participation in non-binding state mediation of claims disputes;
- requires notification of flood insurance availability outside of SFHAs during real estate transactions, but does not require landlords to notify tenants about contents insurance availability;
- requires consideration of catastrophic loss years in the calculation of average loss years; establishes a catastrophic reserve fund of 1% of risk exposure, requiring that an amount equal to 7.5% of the

[continued on page 20]

Washington Report (cont.)

reserve target be paid in annually, although it does allow the FEMA Director to report to Congress if making the payment in a given year would have serious negative effects on the NFIP.

Other Flood Insurance and Mapping Bills

H.R. 3959 would require movement toward actuarial rates at the time of sale of pre-FIRM properties valued at \$600,000 or more. Introduced by Scott Garrett (R-NJ), it was favorably reported out of the House Financial Services Committee on October 31st.

H.R. 4050 directs FEMA to develop a process similar to the Provisionally Accredited Levee (PAL) process for consideration of protective features of certain levee-like structures. Introduced by Gabrielle Giffords (D-AZ), it was favorably reported out of the House Financial Services Committee on November 7th. This measure was scheduled for House floor consideration on December 4th, but action was postponed indefinitely since FEMA had confirmed to the Chairman its intent to issue guidance to its regional offices to address flood risk data associated with levee-like structures.

Catastrophe Insurance

H.R. 3355, legislation to provide a federal backstop for state catastrophe insurance funds, was passed by the House on November 8th by a vote of 258-155. The measure had been introduced by Ron Klein (D-FL) and Tim Mahony (D-FL). Known as the "Homeowners Defense Act of 2007," it moved quickly through the legislative process after being introduced August 3rd. It establishes a consortium of state-sponsored insurance funds that would pool their risk and issue bonds to finance themselves. The measure also creates a federal direct loan program to back up the state insurance funds.

During a hearing, mark-up, and House floor consideration, the initial scant reference to mitigation in the bill was somewhat strengthened. It was heartening that a number of Members of Congress from both sides of the political aisle expressed concern about the limited reference to mitigation. Interestingly, support for the bill is mixed in the insurance community. The measure has now moved to the Senate, where it has been referred to the Senate Banking Committee.

S. 2310, similar to H.R. 3355, was introduced by Hillary Clinton (D-NY) and Bill Nelson (D-FL) on November 6th.

Catastrophic Risk and Insurance

On November 1st, the Senate Banking Committee reported out S. 2286 to establish a nonpartisan commission on natural catastrophe risk management and insurance, which would be required to report back to the Congress in one year. The commission would examine natural catastrophe risks, means for mitigation of those risks, and ways to pay for losses.

Climate Change

There has been significant movement on climate legislation at the close of this Congressional session. The session itself has included numerous hearings on related matters and the establishment of a Select Committee on Energy Independence and Global Warming in the House.

Perhaps not coincidentally, two Senate committees reported out several related pieces of legislation in the past week, as the United Nations Framework Convention on Climate Change convened in Bali, Indonesia. On December 6th, the Environment and Public Works Committee reported out S. 2191, the Climate Security Act of 2007. The bill, cosponsored by Joe Lieberman (I-CT) and John Warner (R-VA), sets mandatory limits on greenhouse gas emissions (70% of 2005 emissions by 2050) from the transportation, power, and manufacturing sectors. Because support for the bill was predominantly from Democrats despite the leadership of Republican Senator Warner, it is expected that the measure will be controversial when brought to the Senate floor.

The Senate Committee on Commerce, Science and Transportation on December 4th reported out S. 2307, the Global Climate Change Research Improvement Act, which is to enhance basic research and the products developed by the federal government on climate change and its impacts. It was cosponsored by John F. Kerry (D-MA) and Olympia J. Snowe (R-ME). That committee also reported out S. 2355, the Climate

[continued on page 21]

Washington Report (cont.)

Change Adaptation Act, which calls for the federal government to develop a strategic plan for dealing with the effects of climate change. This bill was introduced by Maria Cantwell (D-WA). According to Maria Honeycutt (an ASFPM member who is a AAAS Congressional Fellow this year), the bill has a number of interesting elements. It would require that the National Oceanic and Atmospheric Administration, in consultation with state and local governments, support development of coastal vulnerability assessments and tasks NOAA with the federal lead on identification, targeting, and development of strategies to address impacts, including NFIP changes, mitigation incentives, land and property owner education, and “coastal hazards protocols to reduce the risk of damage to lives and property.” The bill would also set up a grant program (under the Coastal Zone Management program) for development of coastal and ocean adaptation plans. NOAA is to provide planning assistance in coordination with other hazard mitigation programs and state hazard mitigation plans.

Farm Bill

The Senate version of the farm bill (S. 2302) is expected to be considered on the Senate floor during the week of December 10th. Although the bill was reported out of the Senate Agriculture Committee in October, Senate floor consideration was delayed by disagreements over how to handle the many amendments filed, some of which did not directly relate to farm bill programs. A compromise agreement was reached during the first week of December to allow the bill to move forward. The previous Farm bill expired as of October 1st; this bill would continue most conservation programs at about the same funding levels but would increase funding for the Comprehensive Stewardship Program.

Dam Safety

H.R. 3224, the Dam Rehabilitation and Repair Act, was passed by the House on October 29th. A similar bill, S. 2238, was introduced in the Senate on October 25th and is awaiting consideration by the Committee on Environment and Public Works.

H.R. 1662, a bill to amend the Reclamation Safety of Dams Act, passed the House on December 4th by voice vote. It was referred to the Senate Committee on Energy and Natural Resources. Its Subcommittee on Water and Power held a hearing on a similar bill, S. 1258, on July 26th, but has taken no further action.

Building Codes

Doris Matsui (D-CA) introduced a bill on October 22nd, H.R. 3926, entitled the “Safe Building Code Incentive Act.” It has been referred to the House Committee on Transportation and Infrastructure. It would amend the Stafford Act to allow use of Pre-Disaster Mitigation funds to “enhance existing programs providing mitigation assistance by encouraging States to adopt and actively enforce State building codes.”

Coalitions

The ASFPM joins with other organizations in coalitions focused on matters of mutual interest. Recent activities in some of the coalitions include:

Map Coalition—FEMA regularly provides the coalition with briefings on the status of the Map Modernization initiative and considers it an important stakeholder group for briefings and consultations. The group met most recently on October 25th at the offices of the National Association of Realtors and had an extensive briefing and discussion with FEMA and NSP representatives. The Map Coalition recently sent a strong letter of support for the FY ‘08 mapping budget to the House and Senate Appropriations Committees. A letter to the Office of Management and Budget is now being prepared, urging continued funding for mapping in FY ‘09. The coalition is planning meetings with Office of Management and Budget officials and Department of Homeland Security officials to emphasize the need for ongoing mapping and funding for it.

Stafford Coalition—The Stafford Coalition focuses primarily on issues associated with the Stafford Act (Disaster Relief, Pre-Disaster Mitigation, Hazard Mitigation Grant Program, etc.), but is broadly interested in natural hazards issues. The Coalition recently met with two representatives of FEMA’s Office of Intergovernmental Affairs at the Washington office of the Council of State Governments and National Emergency Management Association. At the next meeting, scheduled for December 14th at the office of the

[continued on page 22]

Washington Report (cont.)

National Association of Counties, the group will meet with House and Senate committee staff working on the flood insurance reform legislation.

Streamgage Coalition—The Streamgage Coalition is led by the Interstate Council for Water Policy. It has met regularly with officials of the U.S. Geological Survey and the Department of the Interior to keep visible the need for strong stream gage programs. Most recently, a representative group of about 8 organizations spent most of one day meeting with a Deputy Assistant Secretary of Interior, the USGS Budget Examiner at OMB, and House Appropriations staff. The group supports both the federally funded network of stream gages (National Streamflow Information Program) and the partially federally funded cooperative stream gage program.

—*Meredith R. Inderfurth, Washington Liaison*
Rebecca Quinn, CFM, Legislative Officer

☞ All referenced legislation and committee reports can be viewed at <http://thomas.loc.gov>. ☞

Publications, Software, AV & the Web

■ The *Proceedings of Coastal Zone '07* have been posted on the National Oceanic and Atmospheric Administration's Coastal Services Center website, and make for interesting reading for floodplain managers. Short papers/extended abstracts are included for dozens of presentations made at that meeting, which took place July 22-27, 2007, and involved almost a thousand coastal managers from multiple disciplines. A sample of the topics covered by the papers include Working Waterways & Waterfronts; Tsunami Inundation Modeling; Innovative Approaches and Tools for Creating Liveable Coastal Communities; Funding at the Local Level; The Intersection of Property Rights and the Public Trust Doctrine in Coastal Management; Why are our Beaches Eroding?; Risk and Vulnerability Assessment of Coastal Hazards; and Science in Coastal Decision-making. Go to http://www.csc.noaa.gov/cz/2007/Coastal_Zone_07_Proceedings/Main_Menu.pdf.

■ The National Oceanic and Atmospheric Administration (NOAA) has announced that audio from many NOAA WeatherRadio channels is now available online, either as streaming audio or as MP3s and podcasts. Although National Weather Service (NWS) offices are not hosting live streaming audio, many third parties do so, and the NWS maintains a list of streams at <http://www.weather.gov/nwr/streamaudio.htm>. In addition, a few dozen NWS offices are uploading audio files of weather radio messages to their websites, either as MP3 files or as podcasts. The audio files available vary by site, but typically contain routine messages such as forecasts, hourly weather roundups, and climate summaries. For the list of sites with downloadable audio, go to <http://www.weather.gov/nwr/streamaudio-d.htm>.

[excerpted from the October 2007 issue of Aware, p. 5]

■ *The Role of Coastal Zone Management Programs in Adaptation to Climate Change* was prepared by a work group of the Coastal States Organization explore the current and future roles of state coastal zone management programs in addressing the increasing impacts of climate change on the coastal zone. It discusses the role of state coastal zone management programs in addressing climate change; emphasizes the importance of reauthorizing the Coastal Zone Management Act; lists the key research, information, and policy needs; and provides information on exchange among coastal states and territories. Available at <http://www.coastalstates.org/documents/CSO%20Climate%20Change%20Final%20Report.pdf>

■ *Evaluating Progress of the U.S. Climate Change Science Program: Methods And Preliminary Results*, a report of a National Academy of Sciences (NAS) committee, warns that that the progress of the Bush administration's climate research program is threatened by a lack of strong leadership and budgetary authority and by the Administration's plan to reduce the number of satellites and other instruments used to monitor

the climate. The program has helped scientists clarify some basic facts about global warming, but has done little to provide much-needed information about how society might mitigate or adapt to the changing climate, says the independent panel. Although the program has contributed to better understanding and improved predictions of climate change at the global and continental level, it has not provided much insight at regional and local scales, information that is vital for state and local resource managers and policymakers. Committee on Strategic Advice on the U.S. Climate Change Science Program, National Research Council, 2007. ISBN-10: 0-309-10826-8. 170 pp. \$38.25 from The National Academies Press. Also available for free download or reading at http://books.nap.edu/catalog.php?record_id=11934.

■ *The U.S. Economic Impacts of Climate Change and the Costs of Inaction* pulls together and analyzes previous economic research on climate change, along with other relevant data, in order to develop a more complete estimate of costs. The authors say that the total economic cost of climate change in the United States will be major and nationwide in scope, but remains uncounted, unplanned for, and largely hidden in public debate. Climate change will affect all sectors of the national economy, especially agriculture, energy, and transportation, says the report. It will also damage or stress essential infrastructure, much of it locally maintained, such as water supply and treatment. Climate change will also damage ecosystems. The specific effects will vary across the regions of the United States, and the report highlights some predicted regional and localized economic impacts. Center for Integrative Environmental Research, University of Maryland. 2007. 52 pp. Available at <http://www.cier.umd.edu/climateadaptation/>.

Calendar

See more flood-related meetings, conferences, and training at
<http://www.floods.org/Conferences,%20Calendar/calendar.asp>.

January 29–20, 2008: EMERGENCY ACTION PLANNING FOR DAM SAFETY, San Diego, California. West Region Technical Seminar of the Federal Emergency Management Agency and the Association of State Dam Safety Officials. See <http://www.damsafety.org>.

February 7–9, 2008: BUILDING SAFE, HEALTHY, AND LIVABLE COMMUNITIES: 7TH ANNUAL NEW PARTNERS FOR SMART GROWTH CONFERENCE, Washington, D.C. Hosted by the Local Government Commission with dozens of sponsors. See <http://www.newpartners.org/sponsors.html>.

February 25–28, 2008: NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY RATING SYSTEM (E278), Emergency Management Institute, Emmitsburg, Maryland. Contact (800) 238-3358 or see <http://www.training.fema.gov/EMIweb/>.

February 26–29, 2008: 48TH ANNUAL FLOODPLAIN MANAGEMENT CONFERENCE, Wollongong, New South Wales, Australia. Sponsored by the Floodplain Management Authority and others. See <http://www.iceaustralia.com/fmawollongong/>.

March 2008: EARTHQUAKE ENGINEERING FOR DAM SAFETY, St. Louis, Missouri. Midwest Region Technical Seminar of the Federal Emergency Management Agency and the Association of State Dam Safety Officials. See <http://www.damsafety.org>.

March 5–7, 2008: THIRD TECHNICAL CONFERENCE OF THE GEORGIA ASSOCIATION OF FLOODPLAIN MANAGEMENT, Decatur, Georgia. See <http://www.gafloods.org/>.

March 5–7, 2008: SUSTAINING THE NEXT 100 MILLION: 17TH ANNUAL LAND USE CONFERENCE, Denver, Colorado. Hosted by the Rocky Mountain Land Use Institute, University of Denver Sturm College of Law, with numerous sponsors. See <http://www.law.du.edu/rmlui/>.

- March 12–13, 2008:** ANNUAL CONFERENCE OF THE ILLINOIS ASSOCIATION FOR FLOODPLAIN AND STORMWATER MANAGEMENT, Tinley Park, Illinois. See <http://www.illinoisfloods.org/>.
- March 12–14, 2008:** ANNUAL CONFERENCE OF THE SOUTH CAROLINA ASSOCIATION FOR HAZARD MITIGATION, Myrtle Beach, South Carolina. See <http://www.scahm.kk5.org/>.
- March 17–20, 2008:** ANNUAL CONFERENCE OF THE ASSOCIATION OF MONTANA FLOODPLAIN MANAGERS, Missoula, Montana. See <http://www.mtfloods.org>.
- March 18–21, 2008:** ANNUAL CONFERENCE OF THE MICHIGAN STORMWATER-FLOODPLAIN ASSOCIATION, Grand Rapids, Michigan. See <http://mi.floods.org/>.
- March 31—April 2, 2008:** URBAN WATER MANAGEMENT, Louisville, Kentucky. Sponsored by PennWell, WaterWorld, and others. See <http://uwm08.events.pennnet.com/fl/index.cfm>.
- April 7–9, 2008:** ANNUAL CONFERENCE OF THE MISSOURI FLOODPLAIN AND STORMWATER MANAGERS ASSOCIATION, Osage Beach, Missouri. See <http://www.mfsma.com/>.
- April 7–11, 2008:** ANNUAL CONFERENCE OF THE KENTUCKY ASSOCIATION OF MITIGATION MANAGERS, General Butler State Park, Kentucky. See <http://www.kymitigation.org/>.
- April 13–16, 2008:** SOLUTIONS TO COASTAL DISASTERS, Oahu, Hawaii. Sponsored by the Coasts, Oceans, Ports, and Rivers Institute, American Society of Civil Engineers. See <http://content.asce.org/conferences/cd2008/>.
- April 17–18, 2008:** SPRING WORKSHOP OF THE ARKANSAS FLOODPLAIN MANAGEMENT ASSOCIATION, Jacksonville, Arkansas. Contact Conrad Battreal at (501) 225-7779 or see <http://www.arkansasfloods.org/afma/>
- April 27–30, 2008:** ANNUAL CONFERENCE OF THE NORTH CAROLINA ASSOCIATION OF FLOODPLAIN MANAGERS, Wrightsville Beach, North Carolina. See <http://www.ncafpm.org/>.
- April 27—May 1, 2008:** SPRING CONFERENCE OF THE TEXAS FLOODPLAIN MANAGEMENT ASSOCIATION, League City, Texas. See <http://www.tfma.org/displayconvention.cfm>.
- April 29—May 3, 2008:** FIFTH ANNUAL MEETING OF THE FLORIDA FLOODPLAIN MANAGERS ASSOCIATION, Tampa, Florida. See <http://www.ffma.net/>.
- April 30—May 2, 2008:** BUILDING RESILIENCE: ACHIEVING EFFECTIVE POST-DISASTER RECONSTRUCTION: FOURTH INTERNATIONAL CONFERENCE, Christchurch, New Zealand. Sponsored by i-Rec (International Group for Information on Post-Disaster Reconstruction). See <http://www.resorgs.org.nz/irec2008/>.
- May 2–5, 2008:** RIVER RALLY 2008, Huron, Ohio. Sponsored by the River Network. See <http://www.rivernet.org/news.php?NewsID=39>.

Flood risk managers, levee owners, and colleagues are urged to participate in a

National Flood Risk Management / Levee Safety Summit

February 26-27, 2008

St. Louis, Missouri

Hosted by the
Association of State Floodplain Managers
and the
National Association of Flood and Stormwater
Management Agencies

This meeting will solicit broad feedback from and provide updates to local, state, regional, and federal officials and the private sector on vital national flood risk management policies currently being considered at the federal level, particularly by the U.S. Army Corps of Engineers and the Federal Emergency Management Agency. The summit will address levee certification/decertification, levee operations and maintenance, vegetation management, flood insurance and mapping issues related to levees, and residual flood risk in levee-protected areas. A technical field tour of nearby flood loss reduction projects will be offered.

>>> Access registration forms, more information, and the agenda at
<http://www.floods.org/leveesafety>.

- May 14–16, 2008:** FOURTH INTERNATIONAL SYMPOSIUM ON FLOOD DEFENSE, Toronto, Ontario, Canada. Sponsored by the Institute for Catastrophic Loss Reduction and many others. See <http://www.flood2008.org/flood/>.
- May 18–23, 2008:** A LIVING RIVER APPROACH TO FLOODPLAIN MANAGEMENT: 31ST ANNUAL CONFERENCE OF THE ASSOCIATION OF STATE FLOODPLAIN MANAGERS, Reno, Nevada. See <http://www.floods.org>.
- May 19–21, 2008:** PROGRESS THROUGH PARTNERSHIPS: COLLABORATING TO PROTECT OUR WATERSHEDS, Mystic, Connecticut. Sponsored by the New England Interstate Water Pollution Control Commission and partners. See <http://www.neiwpcc.org/npsconference/>.
- June 16–18, 2008:** ADVANCED FLOODPLAIN MANAGEMENT CONCEPTS (E194), Emergency Management Institute, Emmitsburg, Maryland. Contact (800) 238-3358 or see <http://www.training.fema.gov/EMIweb/>.
- June 23–26, 2008:** MANAGING FLOODPLAIN DEVELOPMENT THROUGH THE NATIONAL FLOOD INSURANCE PROGRAM (E273), Emergency Management Institute, Emmitsburg, Maryland. Contact EMI at (800) 238-3358 or see <http://www.training.fema.gov/EMIweb/>.
- June 29–July 2, 2008:** COASTAL FOOTPRINTS: MINIMIZING HUMAN IMPACTS, MAXIMIZING STEWARDSHIP, Los Angeles, California. 21st Biennial International Conference of The Coastal Society. See <http://www.thecoastalsociety.org/conference/tcs21/call.html>.
- July 7–10, 2008:** RESIDENTIAL COASTAL CONSTRUCTION (E386), Emergency Management Institute, Emmitsburg, Maryland. Contact EMI at (800) 238-3358 or see <http://www.training.fema.gov/EMIweb/>.
- July 7–10, 2008:** RETROFITTING FLOOD-PRONE RESIDENTIAL BUILDINGS (E279), Emergency Management Institute, Emmitsburg, Maryland. Contact (800) 238-3358 or see <http://www.training.fema.gov/EMIweb/>.
- August 11–14, 2008:** NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY RATING SYSTEM (E278), Emergency Management Institute, Emmitsburg, Maryland. Contact (800) 238-3358 or see <http://www.training.fema.gov/EMIweb/>.
- August 18–21, 2008:** ADVANCED FLOODPLAIN MANAGEMENT CONCEPTS (E194), Emergency Management Institute, Emmitsburg, Maryland. Contact (800) 238-3358 or see <http://www.training.fema.gov/EMIweb/>.
- September 15–18, 2008:** WETLANDS AND GLOBAL CLIMATE CHANGE, Portland, Oregon. Sponsored by the Association of State Wetland Managers. See <http://www.aswm.org>.
- September 15–18, 2008:** NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY RATING SYSTEM (E278), Emergency Management Institute, Emmitsburg, Maryland. Contact (800) 238-3358 or see <http://www.training.fema.gov/EMIweb/>.
- October 11–15, 2008:** CREATING SOLUTIONS THROUGH COLLABORATIVE PARTNERSHIPS: FOURTH ANNUAL COASTAL AND ESTUARINE HABITAT RESTORATION CONFERENCE, Providence, Rhode Island. Sponsored by Restore America's Estuaries. Abstracts are due January 31, 2008. See <http://www.estuaries.org/?id=4>.
- June 7–12, 2009:** THIRTY-THIRD ANNUAL CONFERENCE OF THE ASSOCIATION OF STATE FLOODPLAIN MANAGERS, Orlando, Florida. Contact the ASFPM Executive Office at (608) 274-0123 or see <http://www.floods.org>.
- July 19–23, 2009:** COASTAL ZONE '09, Boston, Massachusetts. Hosted by the National Oceanic and Atmospheric Administration's Coastal Services Center, with numerous sponsors. See <http://www.csc.noaa.gov/cz/>.



ASSOCIATION of STATE FLOODPLAIN MANAGERS

2809 Fish Hatchery Road, Suite 204

Madison, WI 53713

(608) 274-0123 fax: (608) 274-0696

asfpm@floods.org <http://www.floods.org>

News & Views is published six times each year by the Association of State Floodplain Managers, Inc., and is paid for by member dues.

Copyright ©2007 by the ASFPM. Reproduction with credit permitted.

Information and opinions contained herein do not necessarily reflect the views of the Board of Directors.

Items for publication and other editorial matters should be directed to:

Jacquelyn L. Monday

Editor, *News & Views*

1026 So. Johnson St.

Lakewood, CO 80226

(303) 985-3141 fax: 303-985-5181

jacki.JLM@comcast.net

Deadline is the 18th day of odd-numbered months.

For address changes and member services, contact the ASFPM Executive Office at the address in the box above.

**ASSOCIATION OF STATE FLOODPLAIN MANAGERS
BOARD OF DIRECTORS**

CHAIR

Al W. Goodman, Jr., CFM
State Floodplain Manager
Mississippi Emergency Management Agency
P.O. Box 5644
Pearl, MS 39208
(601) 933-6884 fax: 601-933-6805
agoodman@mema.ms.gov

VICE CHAIR

Greg Main, CFM
State Floodplain Manager
Indiana Department of Natural Resources
402 W. Washington St., Rm. W264
Indianapolis, IN 46204
(317) 234-1107 fax: 317-233-4579
gmain@dnr.in.gov

SECRETARY

Collis O. Brown, CFM
State Floodplain Manager
Georgia Department of Natural Resources
7 Martin Luther King Dr., Ste. 440
Atlanta, GA 30334
(404) 656-6382 fax: 404-656-6383
collis_brown@dnr.state.ga.us

TREASURER

Kevin Houck, CFM
Colorado Water Conservation Board
1313 Sherman St., Rm. 721
Denver, CO 80203
(303) 866-4805 fax: 303-866-4474
kevin.houck@state.co.us

EXECUTIVE DIRECTOR

Larry Larson, CFM
ASFPM Executive Office
larry@floods.org