



NJ FLOODPLAIN NEWS

June 2008
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New Jersey Beach Profile Network

By Dr. Stewart Farrell

In 1986 the New Jersey Department of Environmental Protection (NJDEP) authorized the formation of the New Jersey Beach Profile Network (NJBPN). To view the impact of two decades of research a report was written summarizing the changes to each of the four coastal counties in New Jersey with the goal to provide a document that gives a thorough overview with enough detail that the reader can understand the nature and trends seen since 1986. These observations on beach changes along the New Jersey coastline provide a means to determine both rapid seasonal changes and follow long-term trends in shoreline position or beach volume. The 100 sites extend from the lower Raritan Bay, along the four-oceanfront county shorelines and into Delaware Bay along the western shoreline of Cape May County.

Previous reports focused on the recent changes as told by the last four surveys at each of the 100 locations. The graphics and text displayed and discussed the seasonal and year to year changes observed since the previous report. This pattern of data presentation is followed on the website as well www.stockton.edu/crc To celebrate twenty years of research, the Coastal Research Center (CRC) has generated graphics intended to focus attention on the trends detected in beach sand volume and shoreline position. These trends are then grouped into averages for each county to show rather dramatically the impact of three significant causes for change.

Continued on page 5



COMMUNITY FLOOD MAPS: A Tale of Two NJ Cities

By Stephen Kempf, Regional Administrator, FEMA, Region II

For professional flood plain managers, Congress's Map Modernization program – the five-year, \$1 billion national initiative designed to produce new flood maps for 92% of the country – was long overdue.

Map Mod's goal is to provide accurate, state-of-the-art, site-specific data on flood risks. The new maps' digital format also serves other vital emergency management functions, such as the identification of viable evacuation routes, and safe sites for emergency shelters, as well as providing town planners with the crucial data they need for responsible zoning and development decisions. *Continued on page 2*

Inside

| | | |
|------------------------------------|---------------------|--|
| Annual Conference Update.....3 | News.....7 | Membership Info.....14 |
| CFM Corner.....4 | Publications.....12 | Board of Directors Contact Info.....15 |
| Legislative Committee Update.....4 | Calendar.....13 | Conference Registration Form.....16 |

(continued from page 1)

These are truly community maps, developed with state and local officials to serve as both community resources and as community emergency management tools. They provide an essential public service and serve the ‘greater good.’ But sometimes that ‘greater good’ is obscured by individual -- and heartbreaking -- hardship. Experiences from two New Jersey towns illustrate Mad Mod’s contrasting attributes.

When the new preliminary flood maps were sent to Monmouth County municipal offices in January, flood plain managers were impressed by the LIDAR technology that mapped elevations to within six inches. Likewise, FEMA’s determination that the earthen dunes -- which were characterized as “levees” on the 1982 maps -- provided inadequate protection from a flood with a 1% change of happening in any given year was widely applauded by flood plain professionals, who are ever mindful of New Orleans’ tragic experience of surviving a Category 3 hurricane only to be inundated when its’ levees breached.

But while the professionals congratulated us on our realistic and accurate assessment of the risks of flooding in Monmouth County, many residents (more than 3,680 structures have been added to the floodplain countywide) bemoaned that accuracy, as they knew they would now be required to pay flood insurance premiums commensurate with their risk.

At a public meeting in Middleton, where 1,820 structures will be added to the flood plain, residents were angry and suspicious. Some were retirees, living on fixed incomes. Others noted the flood plain was expanding just as the economy was contracting. One said she had been living in her home 25 years and never had a flood, not even after Hurricane Floyd in 1999. Municipal officials decried the timing, noting budgets for next year are already set, with no additional monies earmarked for new insurance.

FEMA experts offered guidance on how to lower the costs of insurance coverage: taking advantage of the National Flood Insurance Program’s “grandfather” option on policies; joining the Community Rating Program, which can lower a community’s premiums by 40%; undertaking individual mitigation efforts, including elevation of utilities and flood vents.

But it was a tough sell. Without a ‘greater good,’ big-picture context, residents naturally focused on their bottom line: these changes will cost me money. Unhappily, that’s true, but it is also true that the community as a whole will benefit. A more realistic assessment of risk ensures more viable emergency planning, as well as prompting both individual and community flood mitigation efforts.

In contrast, the new flood maps that took effect for Passaic County in September 2007 coincided with the completion the US Army Corp of Engineers’ flood damage reduction project along Molly Ann’s Brook. The new maps’ increased accuracy reflected those flood mitigation efforts, resulting in the removal of 56 homes and 6 commercial buildings from the flood plain in Paterson and Haledon. Those communities are now safer and, as a consequence, many homeowners there have been relieved of the mandatory requirement for flood insurance that is imposed by a federally backed mortgage.

In both cases, flood risk and the protection afforded by flood insurance are linked. This simple equation underpins the whole of the national Map Modernization project. And this is how it should be, for when people are aware of the risks they face, they can take steps to protect themselves and their property – either through insurance or site-specific mitigation efforts.



NJAFM ANNUAL CONFERENCE UPDATE!

"A Vision for the Future: Reducing Flood Impacts in the Garden State"

Tuesday - Wednesday, October 21-22, 2008

Crowne Plaza Hotel

2349 W. Marlton Pike (Route 70), Cherry Hill, NJ 08002

The NJAFM Annual Conference is an excellent opportunity to network and exchange ideas while acquiring the latest technical knowledge and regulatory information regarding floodplain management.

If you are already firm in your commitment to attend this year's Annual Conference, please register (forms available at <http://www.njafm.org/>) and reserve any needed hotel rooms as soon as possible (call 856-665-6666). It would be a tremendous help to all involved in the planning of the conference and it would ensure that you receive the best pricing!

Agenda:

NJAFM is excited to announce that our 2008 conference will begin with an opening from Larry Larson, Executive Director of the ASFPM, followed by two days of jam packed, hands-on discussion of floodplain management. We are bringing in the best and brightest both locally and from around the country, including Margaret Davidson, Director, Coastal Services Center, NOAA as our keynote speaker.

We'd like to also highlight our Day 1 - Coastal Plenary Session, "Flood Vulnerability and Trends in the NJ Coastal Zone" which includes presentations by Stewart Farrell, Director of the Richard Stockton College Coastal Research Center; James Titus, USEPA, Global Warming Research Center; Mike Arabatzis, Chief of Planning, USACOE Philadelphia District; and moderator Tony MacDonald, Director, Urban Coast Institute, Monmouth University. More details on the rest of the agenda to come!

Conference Sponsors and Exhibitors:

Conference Sponsors and Exhibitors are a vital component of our conference! We rely on their involvement put on such a first-rate conference. NJAFM is pleased to announce that James Lee Witt Associates and Dewberry have signed on as our first Gold Sponsors. Other confirmed sponsors include Paulus, Sokolowski & Sartor (Silver) and Tetra Tech and One Rain (Bronze). Don't be left out, make sure your company is committed to either a sponsorship or exhibit space today! For detailed information on becoming a Conference Sponsor or Exhibitor please visit <http://www.njafm.org/AnnualConference.html> or call Margie Brown at (877) 441-8368.

Call for Presentations:

The Call for Presentations remains open until Monday, June 23rd. All interested can send descriptions to Adam Slutsky, NJAFM Secretary at slutsky@co.somerset.nj.us. For more detailed information, please visit <http://www.njafm.org/AnnualConference.html>.

Conference Reminders:

1. Did you submit your Conference Registration yet?
2. Have you reserved your hotel room?
3. Is your Company an exhibitor or sponsor?
4. Did you submit an abstract to present?
5. Have you helped us with outreach? Please notice your colleagues.

Thank You! We are looking forward to this year's Annual Conference in Cherry Hill. See you in October!



CFM Corner

By Cleighton Smith, P.E., CFM

The latest professional to join New Jersey's growing list of Certified Floodplain Managers is Jeepsi Patel of CMX. There are now 71 CFM professionals in New Jersey!!

News for Land Surveyors - The CFM review course has recently been certified to meet Continuing Competency for Professional Land Surveyors! The State Board of Professional Engineers and Land Surveyors have awarded 12 PDHs for the course.

We are currently planning the location of the September CFM Review Course. The exam will be held on the afternoon of October 22 at the NJAFM 4th Annual Conference in Cherry Hill. If you would like to be notified of the CFM Review Course date or for more information regarding the ASFPM and the CFM program, please contact Cleighton Smith at Cleighton.smith@dewberry.com or (856) 802-0843 x3107.



Legislative Committee Update

John A. Miller, P.E., CFM

There has been tremendous legislative activity both here at home in New Jersey and in Washington D.C. over the past half year. For the activities in the Capital, I encourage you to read the latest Association of State Floodplain Managers News & Views newsletter to get you up-to-date, see:

<http://www.floods.org/Newsletters/Default.asp>.

On to the New Jersey-centric news:

1. NJTTS funding - We are hearing unofficially that the New Jersey State Senate Budget and Appropriations Committee is working on language for the State Budget to fund the NJ Tide Telemetry System, see: <http://pubs.usgs.gov/fs/2007/3064/>. Too early for us to pop the cork, but we are encouraged to learn of this. Much thanks again go to Bill Dressel, Executive Director of the New Jersey League of Municipalities and to State Senator Bob Gordon for championing this cause with us. Also to Rick Kropp of the United States Geological Survey for his persistence on raising the awareness of the funding need and for highlighting the wide use of the system. We also thank our friends at the International Association of Emergency Managers for helping to make noise;

2. NJAFM legislative activity recognized - NJAFM was recognized by ASFPM at the annual conference in Nevada for commenting on Pre-Disaster Mitigation program earmarks, concern on wind in the National Flood Insurance Program and for working with NJ Congressional Delegation on the NFIP reform bills;

3. Coordination with FEMA Region II - NJAFM has been in touch with the FEMA Region II office in New York (covering NY, NJ, PR and VI) on a number of shared mission issues including the NJAFM/Monmouth University Coastal No Adverse Impact workshop, the Keansburg dune decertification in Monmouth County and others. We are always looking for ways to enhance coordination with the FEMA Regional office;

(continued from page 1) **New Jersey Beach Profile Network**

- The enormous positive impact of beach nourishment over the past 15 years.
- The beneficial results of the low incidence of serious storm events impacting the NJ coast.
- The enhanced shoreline protection benefits of 20 years of dune growth in height and width.

Far and away the most impressive change seen along the NJ shoreline has been the construction of the New York District Corps of Engineers Monmouth County Storm Protection Project. Twenty one miles of beaches had between 210 and 350 cubic yards of sand pumped from offshore sources onto each foot of beachfront. The cost of \$210,000,000 was spread between 1994 and 2000 with only one renourishment completed in 2002 along the Sea Bright region, to address local erosional “hot spots”. The entire Monmouth County shoreline was not completed due to real estate and access issues arising from private ownership of the beach between Elberon, Deal and Allenhurst. The CRC program followed sand movement within and from the project beaches and has determined that the vast majority of the sand (over 17,000,000 cubic yards) remain in place as of the fall of 2006. Losses were documented at the ends of the project where sand moved north into the Sandy Hook National Seashore; south from the southern end of Long Branch, but little sand left Asbury Park to the north into Allenhurst or Deal. Manasquan Inlet dredging frequency and volume increased substantially due to the huge increase in sand volume present north of the inlet, but the dredged material is returned to the Manasquan shoreline as a matter of best practice. The research has shattered the shrill advance condemnation of this project as doomed to see the sand disappear within six months and require nearly constant pumping to be successful.

In stark contrast, the Ocean County shoreline remained reasonably stable without the vast influx of beach replenishment sands, mostly due to the lack of severe storms since December 1992. There was only one sizable beach restoration project undertaken in the county until the 2007 Surf City Federal project started on Long Beach Island. The State-sponsored fill in Harvey Cedars placed 465,000 cubic yards of sand trucked to the beach in 1994 and 1995. Too small a scale project to produce other than temporary improvement, the compiled data shows that the local beaches did conclude the interval with an increase in sand volume, but little advance in the shoreline position. The major exception was the change associated with the reconstruction of the south Barnegat Inlet jetty between 1988 and 1991 where immediately south of the jetty, the shoreline advanced over 2,400 feet seaward and all the sand surrounding the inlet ebb-tidal delta moved into an dry beach fillet tapering to the south to a point beyond the municipal limits of Barnegat Light Borough on Long Beach Island.

Multiple beach restoration efforts in Cape May and Atlantic Counties show sizable impacts in shoreline advances and sand volume improvements in both counties. Projects were completed in the municipalities of Brigantine, Atlantic City, Ventnor, Ocean City, Strathmere, Avalon, Stone Harbor and Cape May City extending south including the Cape May Meadows and the Borough of Cape May Point. Each project had a Federal (65%), State (26.25%), and a local (8.75%) financial component that provided a tremendous fiscal advantage to each local municipality in leveraging their local tax funding of large scale beach restoration projects. The 1985 and 2001 Strathmere beach projects were State and locally sponsored on a 75% State – 25% local funding basis. Avalon, Brigantine, Atlantic City, and Stone Harbor have conducted State – local beach projects prior to the Federal sponsorship during the past two decades. Sea Isle City cooperated with the State to nourish the local beach three times since 1978.



To the left is a view to the north from 103rd Street during the late spring of 1998, just prior to the 1998 Beach Nourishment in Stone Harbor. The right photograph shows the same view from February 21, 2007 nine years later following both a project initially funded by the State of New Jersey (75%) and Stone Harbor (25%) in 1998 and the Federal project completed in 2003 (65% Federal, 26.25% State, and 8.75% local).

The upsurge in real estate related issues has plagued both the Absecon Island and the Long Beach Island projects and is causing problems for the Northern Ocean County effort as well. The problem revolves around private ownership of the beach to the high tide line conflicting with the use of public funds to benefit private land without gaining public access to the beach built with public money. The refusal by many beachfront lot owners to grant access easements to the State and ACOE in perpetuity to manage the project and perform maintenance is the heart of the conflict. This conflict between some property owners and the public agencies must be solved before these projects can move forward. Suggestions have varied but have reached to the level of the State moving to condemn all private holdings seaward of the primary dune toe and declare all lands seaward of the seaward dune toe to be forever public. The rising resistance by Congress to fund large-scale shore protection efforts by the ACOE further complicates the drive to gain 100% coverage for the developed NJ shoreline under Federal project supervision.

The Cape May Point 227 experimental project assessed the performance of “reef” structures in preventing sand loss offshore along Cape May Point. The project compares the 6-foot high “Beachsaver” concrete units with the standardized “Double Tee” concrete parking garage floor-beam units, which are only about 30 inches tall. Both types of “reef” structures reduced erosion and consist of the only such ACOE project under the 227 program taken to construction and four years of performance monitoring. The reef modules were placed on the sea floor about 200 feet seaward of the low tide line and extend between rock groins spaced about 700 feet apart. Sand was pumped onto the beach in 2004 and monitored to determine residence time contrasted to that for sand placed in a similar groin cell without structures across the seafloor between them. The results appear to support this closed system retention of significant quantities of sand fill on the beach.

The fall 2005 hurricane season was one to remember for the Gulf coast as Hurricanes Katrina and Rita demolished entire resort shorelines for several blocks inland. Hurricane Wilma crossed the State of Florida and damaged both coasts. Fortunately the storms missed the Mid-Atlantic coastline, but 28 named tropical depressions, 15 hurricanes and 4 category five events made 2005 the most active Atlantic basin storm season in history and the most expensive in terms of damages (100 billion dollars and 2,280 deaths). After the last hurricane faded to a tropical depression (Tropical Storm Zeta, Jan. 6, 2006), the northeast storm season failed to develop any significant coastal storms sparing the Mid-Atlantic coast further damage following the mid-October events discussed above. In spite of top research organizations prediction for severe subsequent

hurricane seasons, the past two years have seen no serious damage to the US coastline and many fewer named storms in 2006 and 2007. As a matter of fact the past six months (to the end of October 2007) have been the absolute calmest in wind and wave intensity in many years.

However, Katrina and Rita vividly demonstrated that for a coastal community to survive these catastrophic events they must be well prepared in advance for the possibility of severe events occurring during any given year. Beach nourishment projects remain the most efficient and effective means available to enhance the dune and beach system to resist storm damage and protect our oceanfront public infrastructure and private properties while ensuring the recreational use of our national shoreline treasures for future generations.

This research was funded by the State of New Jersey Department of Environmental Protection, Office of Engineering and Construction under the Shore Protection legislation authorizing the stable funding of coastal projects (NJ PL 93 Chap 155). The contract was awarded to the Richard Stockton Coastal Research Center, Dr. Stewart Farrell, Director.

NJAFM News

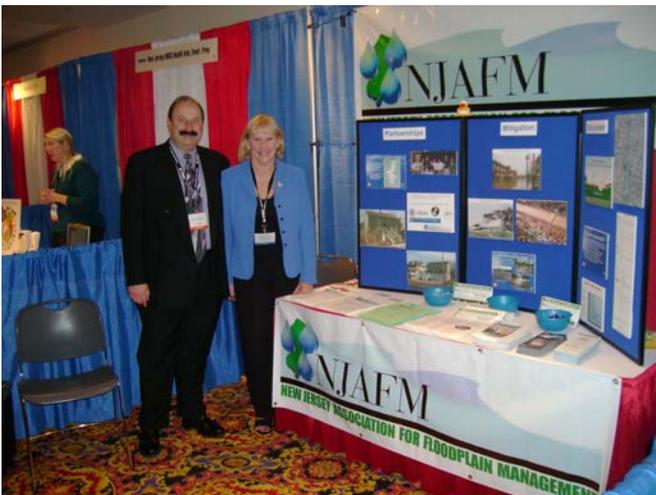


NJAFM at NJ Emergency Preparedness Association Conference

By Laura Tessieri, P.E., CFM

For the second year, NJAFM staffed a booth at the NJ Emergency Preparedness Association Conference on May 7 & 8th, 2008. We made some great contacts and are really making a name for NJAFM out there.

For events such as these NJAFM purchased an exhibit display board. Thanks to Adam Slutsky for collecting and mounting photos for the display. Thanks to Chris Theodos & Terry Ann Coleman for setting up the exhibit (photographed below), and Mike Graham and Margie Brown for managing the print order for the Conference Brochures! In addition, a huge thank you to Chris Theodos, Terry Ann Coleman and Jim DeAngelo for staffing the booth.





Coastal No Adverse Impact Course: Bringing NAI Principles to New Jersey

By Laura Tessieri, P.E., CFM

NJAFM partnered with the Monmouth University, Urban Coast Institute and the Association of State Floodplain Managers (ASFPM) to present a one-day workshop on May 1, 2008 entitled "Innovative Floodplain Strategies for Coastal Areas: Application of Coastal No Adverse Impact (NAI) Principles".

This workshop trained over 45 attendees participants on how NAI Tools can be used to mitigate coastal hazards without adversely impacting others or coastal natural resources. Attendees included consultants, regulators, planners, building groups, floodplain managers, local officials and environmental groups. The Coastal No Adverse Impact course is an ASFPM product that was been adapted for New Jersey.

The training included a discussion of the relationship of NAI to the community rating system (CRS), zoning and development standards related to coastal hazards, hazard identification and mapping and the legal basis for no adverse impact. Instructors included Alan Lulloff & Jeff Stone of ASFPM, Pam Pogue of URS and Chris Dolphin of NJDEP. In addition to these speakers, Geoffrey Schwartz, of Seaside Park (a CRS Community) presented attendees with an engaging conversation on how his community embraces CNAI principles, some of which are also known as "more than the minimum" activities by FEMA which additionally qualify for CRS credit. Thanks to all involved for a great one-day conference!



Region 2 2007-2008 Annual Report

ASFPM Annual Conference in Reno, Nevada, May 18-23, 2008

John A. Miller, P.E., CFM, Region 2 Director

State of the Region

Region 2 consists of the States of New York and New Jersey, the Commonwealth of Puerto Rico and the Virgin Islands territory. Since the ASFPM Conference in June of 2007 in Norfolk Virginia, New York State had two (2) localized Presidential Disaster Declarations related to severe storms and flooding. However, many communities are still recovering from the April 2007 Nor'easter that devastated many counties in New Jersey and New York. The coastal storm was the worst regional flood event since Tropical Storm Floyd in 1999.

The New York State Floodplain and Stormwater Managers Association and the New Jersey Association for Floodplain Management are Chapters of the Association of State Floodplain Managers within Region 2. According to the ASFPM website, **there are 111 Certified Floodplain Managers in the Region, an impressive 71-percent increase from one year ago.** This number is expected to continue to rise as there are strong Chapter initiatives in Region 2 to advance education and training. This training is boosting CFM registrations in neighboring states not included in the reported total for Region 2. Additional support to ASFPM has been the New Jersey and New York Chapter outreach to congressional representatives on concerns of Pre-Disaster Mitigation grant program earmarks¹ and amendments to the National Flood Insurance Program bill in

¹ <http://www.floods.org/NewUrgent/Mitigation.asp>

the US Senate². Chapter/ASFPM coordination on outreach to policy makers has played an important role, as legislative activity affecting the floodplain management community in the last couple years has been intense.

As your representative on the ASFPM board, and on behalf of the New Jersey Association for Floodplain Management, I made two visits to Washington D.C. in April of 2007 and in January 2008, to meet with the New Jersey's delegation and Senator Schumer's staff (January 2008) on issues related to the National Flood Insurance Program reauthorization. The NFIP must be reauthorized before the end of September 2008 and a host of proposed program changes and expansion, including optional wind coverage, is under debate at the time this report was written. I also represented ASFPM in Washington D.C. at a three-day climate change workshop in October 2007 at the National Academies of Science.

I am advising the Nature Nurture Foundation on behalf of ASFPM with planning for a flood museum in a rehabilitated historic building in Easton, Pennsylvania. I met with staff at FEMA Regional headquarters in December 2007 to encourage coordination with FEMA Region II and the ASFPM Chapters. New York and New Jersey ASFPM Chapters will host Coastal NAI workshops in the spring of 2008, and as your Regional Director, I coordinated with FEMA on possible partial funding for these events. The Regional Administrator, Steven Kempf will not only speak at the New Jersey workshop, but will participate in the course.

Proposed Focus for 2008-2009

I am proposing the following initiatives for the ASFPM Region (if re-elected):

Facilitate the interaction between Region 2 ASFPM Chapters for the coordination on workshops and other activities;

- Encourage participation in ASFPM legislative efforts;
- Continue dialogue with FEMA Region II office;
- Support the increase of CFMs in the region;
- Act as a resource for ASFPM members in the region;
- Support FEMA Region II with DFIRM adoption process as requested.

New Jersey

New Jersey ranks number five in the nation for amount of flood insurance policies in force with a total of almost 225,000 flood insurance policies, or a 4.5% increase over last year. In New Jersey, floods have caused six of the eight disasters declared by the president over the past 10 years. New Jersey can also boast about the fact that 546 out of 566 existing municipalities, or over 96% of municipalities, participate in the National Flood Insurance Program (NFIP).

With our limited staff and 546 NFIP participating communities, it is difficult to reach out to each community every year. However, through technical assistance, workshops, CAV's and CAC's, we try to provide some type of assistance to at least 20% of the state's communities every year. During the CAP reporting period covering the 2007 federal fiscal year, NJDEP performed about 1200 technical assistance contacts, 15 CAVs and 131 CACs. About 43 participants attended two NFIP related workshops.

On November 5, 2007, the New Jersey Department of Environmental Protection (NJDEP) adopted new Flood Hazard Area Control Act rules (N.J.A.C. 7:13) to better protect the public from the hazards of flooding. The proposed new rules incorporate significantly more stringent design and construction standards for activities in flood hazard areas in order to reduce flood damage potential and prevent increases in flooding due to development.

² http://www.floods.org/PDF/NFIP_S.2284_Lautenberg_4-08.pdf

The NJDEP became the Federal Emergency Management Agency (FEMA) primary engineering consultant in 1976, completing 232 flood insurance studies under direct contract with FEMA and provided sufficient data to undertake 32 additional studies for a total of 264 or 55 percent of all studies for New Jersey municipalities. Utilizing the data and mapping produced for FEMA's Flood Insurance Studies (FISs), the NJDEP delineated floodways and the New Jersey Flood Hazard Areas (which are determined using flows 25 percent larger than the 100-year flood based on existing conditions, utilized for FISs in accordance with New Jersey statute N.J.S.A. 58:16A-52 et seq.). These delineations were adopted by the NJDEP and are used to regulate development in identified flood hazard areas under the New Jersey Flood Hazard Area Control Act. The Department has delineated over 2600 miles of streams in New Jersey.

Utilizing a portion of the funding provided through our FEMA Map Modernization Management Support (MMMS) grant, the NJ Flood Hazard Area maps and profiles have been scanned and digitized and will be available in the near future on i-MapNJ DEP, an interactive mapping application that allows users to utilize GIS functionality over the internet.

NJDEP continues to partner with FEMA under the Map Modernization Program, whereby all flood insurance studies are being converted to a digital, countywide format. In 2007, countywide DFIRMs were finalized for Passaic, Somerset, Essex and Camden Counties. Monmouth and Hunterdon County preliminary DFIRMs, as well as revisions to the Ocean and Camden County DFIRMs, have recently been completed and are about to enter their 90-day appeals/protest period. Burlington, Gloucester, Middlesex, Mercer, Sussex and Warren Counties are scheduled to enter the preliminary DFIRM phase later this year. Also, under our existing CTP with FEMA, we continue to work on the remapping of the Delaware River within Mercer, Hunterdon, Warren and Sussex Counties.

On April 26, 2007, the president declared a large portion of the state a federal disaster area after a Nor'easter struck New Jersey bringing record amounts of rainfall and high winds causing river and tidal flooding and coastal beach erosion. The results of this storm forced the evacuation of 3,022 people, significant power losses, closure of 70 segments of highways across the state and more than 14,000 homes were affected. As a result, the NJ State NFIP Coordinator's Office began contacting and scheduling meetings with local township officials. In the last week of April our office met with officials in Wayne, Cranford, Manville and Franklin Township. Notes from all of the meetings were entered into FEMA's Community Information System (CIS) website to identify community contacts.

In September 2004, April 2005, and June 2006, the Delaware River experienced major flooding in a span of less than two years; repeatedly damaging property and disrupting lives. These were the worst floods to occur on the main stem of the Delaware River since 1955. As a result, the governors of the four basin states – New Jersey, New York, Pennsylvania and Delaware – directed the Delaware River Basin Commission (DRBC) to convene an Interstate Flood Task Force. In July 2007, the DRBC forwarded a report to the basin governors which included 45 consensus Interstate Task Force recommendations that illustrate a more proactive and systematic approach to future flood mitigation within the Delaware River Basin. Also, the NJ governor Flood Mitigation Task Force which was assembled in 2005 had presented 37 similar flood damage reduction recommendations in their report dated August 2006. The NJDEP continues to address recommendation from both flood task force reports; updates on progress can be viewed at www.njflood.org.

The New Jersey Association for Floodplain Management (NJAFM) held its third annual conference in October 2007. The conference was a great success with over 300 participants attending. Currently, NJAFM has over 175 members.



NFIP Quick Facts

FEMA Region II's Mary Colvin shared this important Quick Facts with NJDEP staff in a May 6, 2008 e-mail and her message gave us her permission to share them. Mary told us that "These are national stats put out by our HQ insurance group. Note that the average cost of a flood insurance policy is \$504 nationally, but it is somewhat higher in both New York and New Jersey because property values are higher than in many parts of the country and there are large numbers of older pre-FIRM structures where cost of policy is higher than for newer elevated buildings."
National Flood Insurance Program (as of February 29, 2008)

- ◆ Flood policies in force: **5,584,763**
- ◆ Top 5 states:

| | | | |
|-----------------|-----------|------------------|---------|
| Florida | 2,198,626 | California | 270,409 |
| Texas | 670,670 | New Jersey | 225,171 |
| Louisiana | 503,227 | | |
- ◆ Loss and Loss Adjustment Expenses to date in FY 2008: \$244 million
 Loss and Loss Adjustment Expenses in FY 2007: \$1.2 billion
 Loss and Loss Adjustment Expenses since 1969: \$35.6 billion
- ◆ Outstanding Treasury borrowing: \$17.360 billion as of April 30, 2008.
 Most Recent borrowing: \$50 million on April 1, 2008
- ◆ Flood insurance is available in **20,519** participating communities nationwide.
 Regular Program: 19,885 Emergency Program: 634
- ◆ There are 1,079 communities participating in the Community Rating System (CRS) accounting for 66% of policies in force. The number of communities for each level of discount follows:

| | | | | | | | | | |
|-----------|-----|-----------|-----|----------|-----|---------|-----|---------|-----|
| 285 | 5% | 224 | 15% | 40 | 25% | 0 | 35% | 1 | 45% |
| 448 | 10% | 78 | 20% | 1 | 30% | 2 | 40% | | |
- ◆ 85 Insurance Companies writing flood insurance.
 WYO policies: 97% Direct-side policies: 3%
- ◆ 118 Insurance Agent seminars for 4,375 agents to date in FY 2008.
 30 Lender workshops for 1,013 lenders to date in FY 2008.
- ◆ Authorized Staffing: 307 FTE (Insurance: 75 FTE; Floodplain Management: 232)
 (Headquarters: 140 FTE; Regions: 167 FTE)
- ◆ FY 2008 Financial Highlights (*as of February 29, 2008*):

| | |
|-----------------------------|---------------------|
| Insurance in Force | \$1,132,441,070,300 |
| Written Premium | \$2,845,804,873 |
| Average Premium | \$506 |
| Average Coverage | \$202,773 |
| Number of Losses Paid | 2,960 |
| Average Paid Loss | \$24,920 |

Publications



FEMA Subgrade Crawlspace Update

On April 25, 2008 the U. S. Department of Homeland Security issued the following memorandum (W-08025)

April 25, 2008

MEMORANDUM TO: Write Your Own (WYO Program Principal Coordinators)

FROM: Risk Insurance Division

SUBJECT: CRS Discounts for Buildings with Subgrade Crawlspaces

Effective May 1, 2008, flood insurance policies for buildings that are rated as having the lowest floor one foot or more below the base flood elevation (BFE) will no longer be eligible for the community's CRS discount. It has already been clarified that this does not apply to properties in V Zones that have unfinished enclosures with breakaway walls that are used only for building access, storage, and/or parking.

This memo is to clarify that buildings with subgrade crawlspaces are eligible for the community's CRS discount provided that they have a letter from a community official certifying that the subgrade crawlspace is built in compliance with the NFIP requirements for crawlspace construction, as outlined on pages three through five in Technical Bulletin 11-01, *Crawlspace Construction for Buildings Located in Special Flood Hazard Areas*.

In addition to meeting the NFIP requirements applicable to all crawlspace construction in Special Flood Hazard Areas (SFHAs), buildings with subgrade crawlspaces must also meet special requirements for subgrade crawlspaces. These additional requirements are briefly summarized as follows:

- The interior grade of a crawlspace below the BFE must not be more than 2 feet below the lowest adjacent exterior grade (LAG).
- The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall, must not exceed 4 feet at any point.
- There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event.
- The velocity of flood waters at the site should not exceed 5 feet per second for any crawlspace.

The full text of the NFIP requirements for subgrade crawlspace construction can be found in Technical Bulletin 11-01, which is available online at <http://www.fema.gov/pdf/fima/tb1101.pdf>.

- Transaction Record Reporting and Processing (TRRP) Plan requirements are to be modified to add two new obstruction codes to report whether or not an elevation-rated building with a subgrade crawlspace has certification from the community that the subgrade crawlspace is constructed in compliance with the requirements in Technical Bulletin 11-01.
- Because of the late date (relative to the May 1, 2008, effective date) that this bulletin is being issued, companies are not expected to have completed this reporting modification by May 1, 2008. The modification is, however, to be completed when submitting • the July 2008 TRRP Plan data to the NFIP Bureau. Related changes and clarifications to the TRRP Plan and the WYO Edit Specifications are addressed in the memorandum W-08023 dated April 22, 2008, titled May 2008 TRRP Changes (Change 12) and Edit Specifications Updates (Change 5).
- Please make sure that policies issued or renewed effective on or after May 1, 2008, for elevation-rated buildings with subgrade crawlspaces, rated without the application of the CRS discount, are endorsed effective the beginning of the policy term to include the CRS discount when the community's certification of compliance for the subgrade crawlspace is received.
- If you have any questions, please contact your WYO Business Analyst.



Flood Predictions

From Larry A. Larson, P.E., CFM, Executive Director Association of State Floodplain Managers and the US Geological Survey

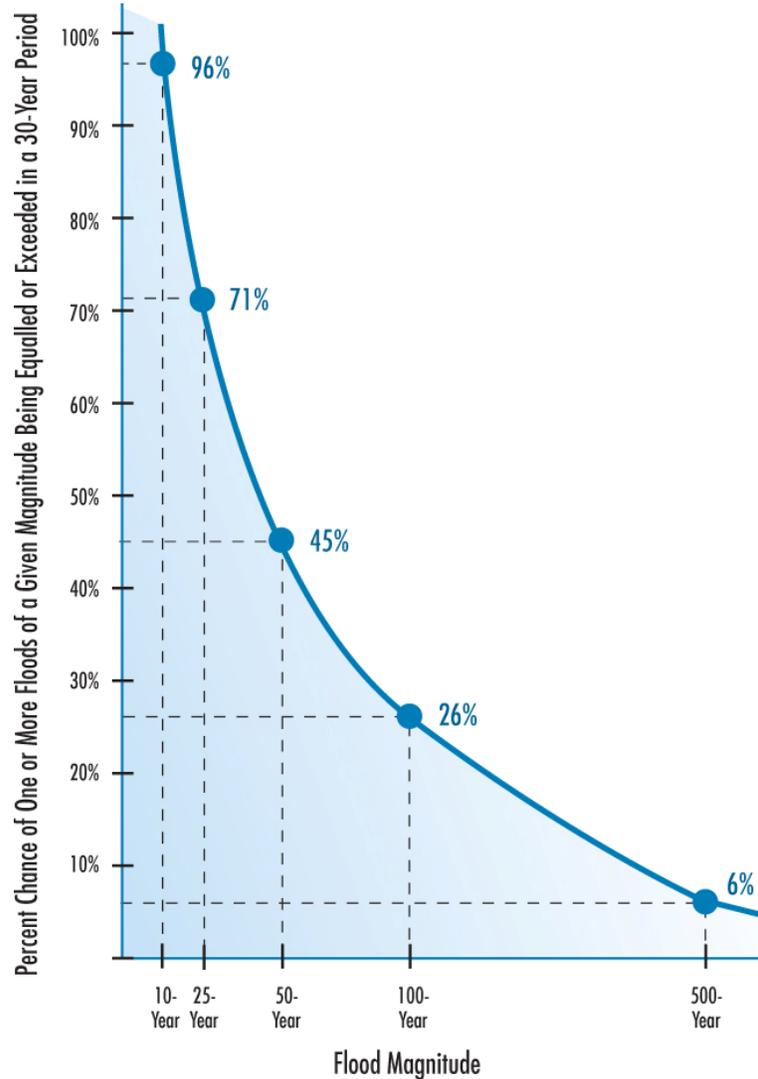
What are the odds of a flood?

The term 100-year flood has caused much confusion for people not familiar with statistics. Another way of looking at it is to think of the odds that a base flood will happen sometime during the life of a 30-year mortgage (26% chance).

Chance of Flooding over a Period of Years

| Time Period | Flood Size | | | |
|-------------|------------|---------|---------|----------|
| | 10-year | 25-year | 50-year | 100-year |
| 1 year | 10% | 4% | 2% | 1% |
| 10 years | 65% | 34% | 18% | 10% |
| 20 years | 88% | 56% | 33% | 18% |
| 30 years | 96% | 71% | 45% | 26% |
| 50 years | 99% | 87% | 64% | 39% |

Even these numbers do not convey the true flood risk because they focus on the larger, less frequent, floods. If a house is low enough, it may be subject to the 10- or 25-year flood. During the proverbial 30-year mortgage, it may have a 26% chance of being hit by the 100-year flood, but the odds are 96% (nearly guaranteed) that a 10-year flood will occur during the 30 year period. Compare those odds to the only 5% chance that the house will catch fire during the same 30-year mortgage.



SOURCE: U.S. Geological Survey, Guidelines for Determining Flood Flow Frequency, Bulletin 17B (Appendix D).

Calendar



October 16, 2008 - Third Passaic River Symposium

The Third Passaic River Symposium will feature the "Lower Passaic River Restoration Project" (www.ourpassaic.org) along with projects and issues in the upper River and tributary watersheds. The event is organized by the Passaic River Institute of Montclair State University and will be held at the University Conference Center, Montclair, New Jersey. Held in conjunction with the 25th annual conference of the Geological Association of New Jersey on October 17 and 18 <http://www.ganj.org>. Symposium web site: www.csam.montclair.edu/pri/symposium2008



October 21 & 22, 2008 – 4th Annual NJAFM Conference & CFM Exam Crowne Plaza - Cherry Hill – REGISTER NOW!

To accommodate our growing number of conference attendees and exhibitors, and based on NJAFM's desire to improve your conference experience, the two day event will be held at the **Crowne Plaza in Cherry Hill**. There will be a full day of plenary and concurrent sessions on **Tuesday, October 21st**, followed by the very popular evening Exhibit Social. On day two, **Wednesday, October 22nd**, presentations will continue throughout the day with opportunities to participate in training workshops. In addition, after lunch on Wednesday, NJAFM will award New Jersey's outstanding floodplain managers and announce the results of the 2009 Board of Directors elections. Exhibitor displays will be up through lunch time on the 22nd and the CFM Exam will be proctored that afternoon.

Continuing education credits will be available for Construction Code Officials, Certified Floodplain Managers, Certified Public Works Managers and NJ Professional Land Surveyors. More details will be announced by e-mail. If you would like to participate on NJAFM's Conference Committee please contact Mike Graham, Mike@smartvent.com

Membership Information

The New Jersey Association for Floodplain Management (NJAFM) is dedicated to reducing loss of life and property damage resulting from floods and promoting sound floodplain management at all levels of government. NJAFM seeks to accomplish this goal through education, outreach, training and coordination of flood mitigation activities between state and federal governmental agencies, municipal officials, property owners and private sector professionals. NJAFM is the NJ State Chapter of the Association for State Floodplain Managers (ASFPM), headquartered in Madison, WI. ASFPM's mission is to mitigate the losses, costs and human suffering caused by flooding and to promote wise use of the natural and beneficial functions of floodplains. ASFPM is the premier voice in floodplain management practice and policy throughout the nation.



Individual Membership – Is only \$25!!

NJAFM can provide contacts, technical assistance, share information and mitigation success stories, facilitate training and education of local floodplain managers, provide assistance in navigating regulatory agencies and support local land use planning. For information on next year's conference and other training opportunities, or to become a member, please visit www.njafm.org.



Corporate Membership - Is available at a reduced rate of \$200 for 9 employees. This registration form is at

<http://www.njafm.org/membership.html>

NJ Floodplain News

NJ Floodplain News will be published January 15 and June 15 of each year. As our volunteer base grows, with your participation, we hope to publish issues more frequently. We welcome your suggestions, comments and submissions for articles and news items. We encourage you to share NJ Floodplain News with others, and to reproduce our articles.

Please send your suggestions, comments submissions and questions to:

Helen Owens

helen.owens@dep.state.nj.us

New Jersey Association for Floodplain Management

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Trenton, New Jersey 08607

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New Jersey Association for Floodplain Management - 2008 Conference

4th Annual Conference

"A Vision for the Future: Reducing Flood Impacts in the Garden State"

Tuesday - Wednesday, October 21-22, 2008
Crown Plaza Hotel
2349 W. Marlton Pike (Route 70), Cherry Hill, NJ 08002

This two-day conference will cover information important for floodplain managers, emergency managers, building code officials and other professionals involved in floodplain management. Speakers from FEMA, NJ State agencies, other Federal agencies, municipalities, and the private sector will cover topics of importance to floodplain management in New Jersey.

The combination of plenary sessions and educational breakouts are planned to give you the tools to educate and advance floodplain management in your community. Topics will include: FEMA Activity in NJ, NJDEP regulatory issues, NFIP/CRS, Local Case Studies, Hazard Mitigation, Building Codes, Map Modernization, DMA 2000, Repetitive Loss Properties, the Certified Floodplain Managers program and more.

Registration Form
NJAFM Fourth Annual Conference
Crowne Plaza Hotel, Cherry Hill, New Jersey

Name _____

Name to appear on your badge _____

Title _____ Organization _____

Address _____

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Phone (____) _____ Fax (____) _____

Registration Fee: \$175 Before September 1, 2008
 \$200 After

Check enclosed Vouchers are accepted **Please make checks payable to NJAFM.**

Mail registration form and payment to:
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PO Box 1326
Trenton, NJ 08607

For additional information:
Helen Owens, Treasurer
helen.owens@dep.state.nj.us
(609) 984-3661
www.NJAFM.org

PLEASE FAX A COPY OF YOUR REGISTRATION FORM TO: Helen Owens at 609-633-0750

Our conference location for 2008 is the Crowne Plaza Hotel located in Cherry Hill, New Jersey. It is an excellent conference location - you will not be disappointed! **A limited number of discounted rate overnight accommodations are available at \$139. Make your reservation now** by calling (856) 665-6666 and saying you're with NJAFM.