

**Delaware Estuary Levee Organization (DELO)  
Minutes  
October 19, 2006**

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## Welcome and Introductions

Meeting began at 10:20 a.m. Ken Taaffe, Coordinator, South Jersey RC&D Council, welcomed attendees and asked each of them to introduce themselves and their affiliation.

## The National Flood Insurance Program (NFIP) and Flood Protection Systems

Ken Taaffe introduced Chris Markesich of FEMA. Chris noted that the Map Modernization Program will be resulting in the issuance of digital flood insurance maps for the entire country which will replace the old paper maps. He noted that Essex, Union, Hudson and Bergen Counties have been completed. These areas have the highest population density in the state. Jim Manski asked why it wouldn't make more sense to map developing areas. Chris responded that we should work with the FEMA Cooperative Technical Partner (CTP) which is NJDEP to get areas prioritized for this purpose. He noted that there is approximately \$10-12 million spent annually to map flood prone areas in the Region II area (NY, NJ, PR and VI). He suggested that we work with the counties during the scoping process for this. He noted that many would like to have complete re-studies done of the hydrology and hydraulics which may have changed for a variety of reasons including development. FEMA's goal is not to just convert the paper maps to digital maps but to, where funding will permit, improve the accuracy of the digitized map to reflect current conditions.

Ken DiMuzio asked whether there is a common standard when re-developing the maps such as the use of LIDR. Chris explained that FEMA will use LIDR where it is available. They try to use the best available data. He noted that FEMA does not have funding to do LIDR everywhere. He noted that FEMA tries to partner with others who have used LIDR or have LIDR data available.

Ken DiMuzio noted that DELO is about levees and wondered whether we would be above to do 3-dimensional images of these. Chris noted that FEMA does not certify levees and the responsibility for levee certification lies with the levee owners. He referred the group to the Provisionally Accredited Levees brochure (found at [http://www.fema.gov/plan/prevent/fhm/lv\\_gid43.shtm](http://www.fema.gov/plan/prevent/fhm/lv_gid43.shtm)) and to be placed on the DELO website at [www.sjrkd.org](http://www.sjrkd.org)) for further information. He noted that where the owners are known, levee owners will be notified and given up to two (2) years to obtain certification of their levee if they wish to have the flood insurance map to show their levee as providing sufficient flood protection. Letters would likely be sent by FEMA to the affected municipalities with the municipalities being responsible for identification and notification of the levee owners.

Ken DiMuzio asked what the impact of all this would be in terms of the National Flood Insurance Program. Chris noted that people who have federally-backed mortgages would go from a Zone AE (1% chance or 100 year event) to a higher risk zone with associated increases in the flood insurance premiums. Other zones are B or X zone which has a 0.2% or 500 year risk or an X or C zone which has a greater than 500 year risk (minimal risk). Where a levee is found **not** to be providing sufficient protection, premiums could jump from \$200 a year to over \$1500 a year. The maximum amount

from flood insurance which NFIP would provide would be \$250,000 for structural losses and \$100,000 for contents.

Ken DiMuzio asked what would happen if you're behind a levee but have no NFIP insurance due to lack of federally-backed mortgage or loan. Mark noted that in upstate NY (Binghamton area) the maximum available (without insurance) was \$10,800 under the I.A. (Individual Assistance) Program. The FEMA goal would be to have the dwelling be safe, sanitary and secure.

Bruce Rogers asked whether FEMA has a spreadsheet showing levees. Chris replied that FEMA has a levee system spreadsheet, which shows that 25% of the panels nationwide have a levee on them.

In reviewing the Provisionally Accredited Levees brochure, Mona Peterson noted that Scenario A covers a lot of South Jersey. Scenario A is the scenario that a levee is not in the US Army Corps of Engineer's Federal System (i.e., a non-Federal levee) and is shown on the effective flood map as providing protection from the 1-percent-annual-chance flood. These levees are defined to include the following:

- Levees not authorized by Congress or other Federal agency authority;
- Levees built by other (non-USACE) Federal agencies and not incorporated into the USACE Federal System;
- Local built and maintained levees built by a local community; and
- Privately built by non-public organization or individual and maintained by a local community

Michael Foley, FEMA, mentioned that there is potentially funding available to do a mitigation plan.

Mark Mihalasky noted that there is mapping available on HAZUS. There was mention that Temple University had done some flood mapping for FEMA. Chris noted that FEMA does partner with others. FEMA is currently having talks with the Susquehanna River Basin Commission on a similar effort. The Commission has been using LIDR for development of a flood recovery map following the major flooding of earlier this year.

Ken DiMuzio noted that the benefit of Provisionally Accredited Levees (PAL) is that those people protected don't have to have flood insurance. Chris noted that it accurately addresses the risk. Ken DiMuzio noted that if the governing body doesn't work to get the levee accredited, then the governing body should inform the affected people to get flood insurance, otherwise they are assuming liability.

Chris Markesich suggested that communities look into participation in the Community Rating System (CRS). This approach helps communities to reduce their flood insurance premiums. One example of an activity that would help is a flood protection system. Mark Mihalasky noted that another way to reduce flood insurance rates is to develop a flood mitigation plan (similar to what Mantoloking has done).

Jim Manski asked how often the Provisionally Accredited Levees are reviewed and how long are the certifications good for. Chris replied that FEMA would issue a letter of map revision. Jim asked whether after 5-10 years there would be re-certification process. Mark answered that he did not know as this is dependent on future maintenance. Ken Taaffe asked whether there is any kind of inspection program. Mark replied that FEMA does not have one and that in New York State it is done by the State Department of Environmental Conservation (similar to NJDEP). Jim Manski noted that a sponsor of a PAL, when disaster happens, could be held liable. Chris noted that if the levee is certified then those behind it would have lower flood insurance premiums.

Greg Westfall, NRCS-NJ, noted that NRCS assisted local sponsors in building 5-6 levee projects. Many of these levee designs are based on the storm of record, March 1962. He asked whether that would be still considered sufficient for these to be PAL. Mark Mihalasky noted that subsequent data has shown that the March 1962 event was a 100 year event. Similarly, the 1991-1992 event is now down to a 15-20 year event. Chris Markesich stated that the more data we acquire the more these things can change depending on how many years of data we have with most gaging data records being less than 100 years.

Bruce Rogers asked what is a flood recovery map. Chris replied that USGS and private companies gather high water marks following a major flood event. Communities use this data to guide construction in the flood plain.

Ken DiMuzio noted that FEMA has no authority for the operation and maintenance of levees. He stated that the reason the DELO was formed was due to "orphaned" levees. Farmers have meadow companies and they can't afford maintenance of these structures. He felt that the State is going to have to take over this responsibility.

Chris Markesich asked how many homes are involved. Ken DiMuzio stated that Greenwich Township, Gloucester County has approximately 350 homes in the flood zone.

#### FEMA Mitigation Grants in Flood Prone Areas

Michael Foley, FEMA, reviewed the FEMA Mitigation Grant Programs Fact Sheet (see last pages of these minutes) provided to attendees.

Ken Taaffe noted that DELO needs an inventory and asked which of the programs would help with this. Mike Foley responded that the annual Flood Mitigation Assistance Program (FMA) funding could be used to inventory. He noted that in FY2006 it was funded nationally at \$50 million and that this would likely be going to \$100 million in FY2007. He thought that NJ may be receiving \$10 million in FY2007. The maximum amount per application is \$1 million with no more than 30 percent going for mapping. These maximum levels apply whether it's an individual municipality or an individual county. Jim Manski asked whether it would help to have counties to go together. Greg Westfall noted that the Delaware River Basin Commission recently received a grant to do flood mitigation planning in Hunterdon, Mercer, Sussex and Warren Counties. Michael Foley noted that there is a potential maximum of \$1 million in funding but that the needs to be a 25% local match.

Mark Mihalasky asked which Program FMA or Pre-Disaster Mitigation (PDM) is appropriate. Ken DiMuzio noted that the group has tried for assistance in the past but that conditions on repetitive flood losses have not helps. He asked whether there are conditions in PDM like the repetitive flood losses in the FMA. Michael Foley noted that FY2007 PDM guidance will be forthcoming on-line in the next three weeks. Ken DiMuzio asked whether we would not be limited to just the flooded areas. Michael Foley responded that the PDM mitigation plan would address multiple hazards including flooding. He said that include the type and degree of risks (flooding, windstorm, lightning, tornado, etc) as well as the fact that this group is an excellent example of “partnering” which would assist in the ranking of any application that this group might submit.

Ken DiMuzio asked how significant is the transportation infrastructure. Michael Foley will provide the scoring information used for ranking these applications.

### Proposed Levee Inventory

Mark Mihalasky, Stockton State College, reported that he had contacted a couple of LIDR companies. He has heard back from one – BAE Systems ADR (previously did 2001 black and white aerial photos). They would be able to provide fully processed data for \$900-\$985 per square mile. Our estimated study area is approximately 100 miles long by 1 mile inland which would result in a \$100,000 cost. Actually it is more likely that the study area would be 1-3 miles inland.

Mark noted that the Coastal Resources Center, Stockton State College, has the staff, equipment and expertise to do an engineering survey associated with the above. He noted that Dr. Penniciaro, economist at Cape May Community College, could look at the economic impact of flooding. He discussed the fact sheets.

Mark also noted that Delaware River Bridge Authority (DBRA) has mini-grants (\$3000) which may be enough to hire someone to put together bigger grants.

Rick Westergaard, Gloucester County Planning, noted they had request two proposals from the Corps of Engineers LIDR contractor for Gloucester County. Gloucester County covers 329 square miles. Estimates are coming in at \$1000 per square mile. They were working with a group of industrial companies and have requested an inventory of projects.

### Other Topics

Ken Taaffe asked the group what they would like to see in the future and whether we had met their expectations. Bruce Rogers noted that this is the first time he has specifically heard from the FEMA people on the subject of levees. Ken DiMuzio indicated that this had been one of the most informative meetings of DELO and that it certainly highlights the importance of the State of New Jersey getting involved with the levee issue. He also noted that he had learned that the National Flood Insurance Program (NFIP) provides more adequate disaster relief than under a disaster declaration. Chris Markesich noted that FEMA is currently looking at raising the maximum amounts (\$250,000 for structural losses, \$100,000 for content losses) under

the NFIP. Ken also noted that the Provisionally Accredited Levee (PAL) is very helpful in determining the level of risk. He asked is it three (3) feet of freeboard above the 100 year (1% annual chance) level of risk? Chris Markesich indicated that “yes” this is the FEMA standard. Chris also noted that 25% of all flood claims are outside of the flood zone. Ken also noted that if you have PAL, you could reduce (through the Community Rating System) flood insurance rate for all areas in a municipality. Chris Markesich noted that where flood policies purchased before the re-designation of a zone, the premium for current policyholders would remain the same. Brian Mulvenna asked what are the maximum amounts available under the NFIP to commercial properties. Mark indicated that maximum payments for commercial properties under NFIP are \$500,000 for the structure and \$250,000 for contents.

### Next Meeting

Ken noted that there were a number of things that need to be completed, including completion of a fact sheet on the levees and further exploration of options for funding a levee inventory, before a future meeting of the group. No date was set for a future meeting.

# FEMA Mitigation Grant Programs Fact Sheet

*FEMA's Mitigation Grant programs provide funding for eligible mitigation activities that reduce disaster losses and protect life and property from future disaster damages. Currently, FEMA administers the Hazard Mitigation Grant Program, the Flood Mitigation Assistance program, and the Pre-Disaster Mitigation program. Two additional mitigation programs will be added in FY 2006: the Repetitive Flood Claims program and the Severe Repetitive Loss program. These new grant programs are designed to reduce or eliminate the long-term risk of flooding to NFIP-insured structures, and thereby reduce the number of claims paid from the National Flood Insurance Fund (NFIF).*

## **Hazard Mitigation Grant Program (HMGP)**

[Hazard Mitigation Grant Program](#) funds are available following a Presidential disaster declaration. Eligible applicants include States, local governments, Indian Tribal governments, and some Private Non-Profit organizations. Communities may apply for HMGP assistance on behalf of affected individuals and businesses, and all funds must be used to reduce or eliminate losses from future disasters. Examples of projects include:

- Elevating flood-prone homes or businesses;
- Acquiring (and either demolishing or relocating) flood-prone homes from willing owners and returning the property to open space;
- Retrofitting buildings to minimize damage from high winds, flooding, earthquakes, and other hazards; and
- Implementing minor flood control projects to protect critical facilities.

HMGP provides up to 7.5 percent of total Disaster Assistance funds for mitigation measures to be implemented during the immediate recovery after a disaster. Grant applications are submitted to the State, which sets mitigation priorities and awards grants based on available funding and State criteria. FEMA conducts the final eligibility review to ensure that all projects are compliant with Federal regulations, including the Federal law that requires States and communities to have FEMA-approved mitigation plans in place prior to receipt of HMGP project funds. A mitigation plan must identify hazards, assess community needs, and describe a community-wide strategy for reducing risks associated with natural disasters.

# FEMA Mitigation Grant Programs Fact Sheet

## **Flood Mitigation Assistance (FMA)**

The [Flood Mitigation Assistance](#) program provides funding to States and communities for measures that reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insured under the National Flood Insurance Program (NFIP). The program provides grants for mitigation planning and projects with a goal of reducing claims under the NFIP.

- Planning grants are used to assess flood risks and develop Flood Mitigation Plans to reduce the risks; and
- Project grants are used to implement mitigation activities that reduce flood losses to NFIP-insured properties by elevating, acquiring, and demolishing or relocating NFIP-insured buildings. Project grants are available to NFIP-participating communities that have a Flood Mitigation Plan in place.

Reducing the number of repetitive loss structures insured by the NFIP is a key priority for the FMA program. Repetitive loss structures are those that have sustained two or more flood losses within a period of ten years, with each loss resulting in a flood insurance claim payment exceeding \$1000.

## **Pre-Disaster Mitigation (PDM) Program**

The [Pre-Disaster Mitigation \(PDM\) Program](#) assists States, Indian Tribal governments, and local governments with cost-effective hazard mitigation activities that complement a comprehensive mitigation program. The program provides Applicants with an opportunity to raise risk awareness and reduce disaster losses before disasters strike through planning grants and project grants. PDM grants are awarded on a nationally competitive basis. Communities and States must have FEMA-approved mitigation plans in order to receive project grant funds.

Eligible PDM activities include:

- Elevation of existing public or private structures;
- Localized flood control projects that are designed specifically to protect critical facilities;
- Protective measures for utilities;
- Relocation of public or private structures;
- Storm water management projects;
- Structural and non-structural retrofitting; and,
- Voluntary acquisition of real property.

# FEMA Mitigation Grant Programs Fact Sheet

## **Repetitive Flood Claims (RFC) Grant Program**

The [Repetitive Flood Claims \(RFC\) grant program](#) is designed to reduce or eliminate the long-term risk of flood damage to structures that are insured under the National Flood Insurance Program (NFIP) and have had one or more claim payment(s) for flood damages. RFC funds may only be used to mitigate structures located within a State or community that is participating in the NFIP and cannot meet the requirements of the Flood Mitigation Assistance (FMA) program due to lack of cost share or lack of capacity to manage the activities.

The goal of the RFC grant program is to reduce or eliminate long-term flood risks through mitigation activities that are in the best interest of the National Flood Insurance Fund. The RFC grants are awarded to Applicants on a nationwide basis without reference to State allocations, quotas, or other formula-based allocations. All grants are eligible for up to 100 percent Federal assistance in FY 2006.

In FY 2006, the priority is to fund the acquisition of severe repetitive loss properties as defined in the Flood Insurance Reform Act of 2004 (FIRA 2004), as well as non-residential properties that meet the same flood insurance claims thresholds as severe repetitive loss properties, defined as either:

- Four or more flood insurance claim payments that each exceeded \$5,000, with at least two of the payments occurring within a 10-year period; or
- Two or more flood insurance claim payments that cumulatively exceeded the value of the property.

Awards will be further prioritized to fund acquisitions that create the greatest amount of savings to the NFIF based on a benefit-cost analysis. A FEMA-approved State/Tribal standard or enhanced hazard mitigation plan is required for eligibility; however, a local plan is not required.

# FEMA Mitigation Grant Programs Fact Sheet

## **Severe Repetitive Loss (SRL) Pilot Program**

The [Severe Repetitive Loss \(SRL\) Pilot Program](#) provides funds to assist States, Indian Tribal governments, and local governments participating in the NFIP in reducing or eliminating the long-term flood risks to severe repetitive loss properties, thus reducing outlays from the NFIF. Severe repetitive loss was defined by the FIRA 2004. For a property to be designated SRL, it must:

- Be a residential property currently insured under the National Flood Insurance Program;
- Have incurred flood losses that resulted in either (1) four or more flood insurance claims payments that each exceeded \$5,000 with at least two of the payments occurring within a 10-year period, or (2) two or more flood insurance claims payments that cumulatively exceeded the value of the property.

SRL funds will be allocated annually to States, Territories, and Tribes based on the number of severe repetitive loss properties in their respective jurisdictions.

Eligible SRL activities include:

- Elevation, relocation, or demolition of existing residential properties;
- Floodproofing measures for residential properties;
- Minor physical localized flood control projects; and,
- Demolition and rebuilding of properties to at least Base Flood Elevation (BFE) or greater if required by any local ordinance.

Grants are eligible for up to a 75 percent Federal cost share. The non-Federal cost share may be adjusted to 10 percent if the Applicant has a FEMA-approved State mitigation plan that also addresses how the State has and will continue to reduce the number of severe repetitive loss properties.