### THE FIRST STATE WATERMARK



## Delaware's Floodplain Management Newsletter

May 2013 Volume 19, Number 1

#### **NEW FLOOD MAPS ARE COMING!**

The Delaware Department of Natural Resources and Environmental Control (DNREC) has been working with the Federal Emergency Management Agency (FEMA) to produce new flood risk maps for Delaware's coastline and many streams in all three Counties. There are two main outcomes of these studies. First, to update the coastal flood risk maps in Delaware along the Atlantic Ocean, Delaware Bay and Inland Second, these studies will create Bavs. detailed flood risk maps on a few streams with approximate A Zones, where a detailed study has never been done. These Zone A areas will now be Zone AE areas with base flood elevations established.

### **Preliminary Maps**

Preliminary maps for the coastal study and inland studies were released on:

Kent County - 8/30/2012 New Castle County - 5/10/2013 (revised) Sussex County - 5/17/2013 (revised)

These preliminary maps are tentatively scheduled to go effective on:

Kent County – 3/3/2014 Sussex County – 7/7/2014 New Castle County – 10/2/2014

We want to make it abundantly clear that <u>every</u> municipality in the state will be required to have their floodplain regulations reviewed. A FEMA approved set of regulations must be adopted prior to the effective date of the map

listed above. Seeing that it takes approximately three months for regulations to be adopted at the local level we suggest municipalities start looking at their regulations now!

Go to www.rampp-team.com/de.htm to view the preliminary maps (as if you were looking at the paper maps). Open the Preliminary Interactive Flood Map Index, and click on a blue highlighted panel to view the changes. If you have any questions about this study. please contact Mike Powell at (302)739-9921 or email him at michael.powell@state.de.us A flood study was conducted for the Appoquinimink watershed in New Castle County, as well as Red Clay, White Clay, Mill Creek and Belltown Run. The Murderkill watershed in Kent County had its upper most reaches studied. Portions of Western Sussex County were also studied. these inland studies are included on the prelimary maps.

You may also go to the Kent County and Sussex County information portals set up by FEMA to view a detailed map with side-by-side comparisons of the effective floodplain boundary and the preliminary floodplain boundary. These maps are an ESRI© product with aerial photographs. Go to: <a href="http://maps.riskmap3.com/DE/Kent/">http://maps.riskmap3.com/DE/Kent/</a> or <a href="http://maps.riskmap3.com/DE/sussex/">http://maps.riskmap3.com/DE/sussex/</a>

You can view <u>both</u> the preliminary floodplain layers and the effective floodplain layer for all three Counties on DNREC's mapping website:

http://maps.dnrec.delaware.gov/navmap/

### **Delaware Coastal Study**

The FEMA Region III office in Philadelphia is the lead agency on the coastal study, which includes the Atlantic Ocean, the Chesapeake and Delaware Bays, the Inland Bays, and their tributaries. The coastal study was performed in two phases. The first phase of the study was a storm surge analysis conducted by the United States Army Corp of Engineer's (USACE) Engineer Research and Development Center (ERDC). The storm surge analysis, determined new stillwater elevations for the 10-, 50-, 100-, and 500year return periods, utilized the Advanced Circulation Model of Oceanic, Coastal, and Estuarine Waters (ADCIRC). The storm surge stillwater elevations have been calculated. FEMA has completed the second phase of the study, which utilizes the storm surge stillwater elevation results to conduct the coastal hazard analyses using Wave Height Analysis for Flood Insurance Studies (WHAFIS). DNREC has been engaged with FEMA and its contractors on the data and methodology used in both phases of the coastal study. The results of the storm surge and wave height analyses are used to generate floodplain boundaries, and coastal high hazard areas (V-Zones) for the coastal and tidally influenced areas of the state. **FEMA** has mapped these floodplain boundaries onto new preliminary Digital Flood Insurance Rate Maps (DFIRMs) for the coastal areas and will prepare new Flood Insurance Studies (FISs) for each of the three counties. Check www.r3coastal.com/ for more info and also subscribe to the mailing list to get emails out updates and meeting dates.

# MODEL FLOOD DAMAGE REDUCTION ORDINANCE

DNREC has developed a model floodplain ordinance to assist municipalities in revising their floodplain ordinances to make sure they meet the NFIP minimum requirements. The purpose of the model is to make a municipality's ordinance language clearer and

stronger. The model also includes more stringent requirements to help reduce property owners risk from flood damage. This reduces their insurance premiums. It also benefits the town with reduced costs in post flood mitigation. The most recent **Version 1.9** of the Flood Damage Reduction Ordinance can be found on DNREC's website at: <a href="https://www.swc.dnrec.delaware.gov/Drainage/Pages/Flooding.aspx">www.swc.dnrec.delaware.gov/Drainage/Pages/Flooding.aspx</a>

# UPCOMING TRAINING OPPORTUNITIES

#### **FEMA - EMI COURSES**

http://training.fema.gov/EMI/

- E273 Managing Floodplain Development through the NFIP June 24-27, 2013 and September 9-12, 2013.
- E278 NFIP/Community Rating System July 29 Aug. 1, 2013.
- E 194 Advanced Floodplain Management Concepts August 26-29, 2013.
- E282 Advanced Floodplain Management Concepts II –
- E284 Advanced Floodplain Management Concepts III – July 8 – 11, 2013.
- NJ Association for Floodplain Management <a href="https://www.njafm.org/Default.aspx?pageId=1200513">www.njafm.org/Default.aspx?pageId=1200513</a> Annual Conference: October 16, 2013, in Atlantic City, NJ.

MD Association of Floodplain and Stormwater Managers <a href="www.mafsm.org/index.php">www.mafsm.org/index.php</a>
Annual Conference: October 17, 2013, in Linthicum, MD.

#### **DNREC TRAINING**

If you are interested in taking the Certified Floodplain Manager (CFM) exam, please contact Greg Williams at Gregory.Williams@state.de.us. We will

schedule a time to proctor exam again once we have several people interested. The exam and a preparatory class can also be taken at either the NJ or MD conferences listed above.

## HURRICANE SEASON STARTS JUNE 1<sup>st</sup>

The 2013 Atlantic hurricane season lasts from June 1 to November 30. Meteorologists at the National Oceanic and Atmospheric Administration have predicted six major hurricanes during the 2013 season. NOAA forecasters predict there will be 13 to 20 Tropical storms. Seven to 11 of those could evolve into hurricanes. And three to six of those hurricanes could intensify into major storms.

- Tropical Storm winds are at least 39 miles per hour.
- Hurricanes have winds of at least 74 miles per hour.
- Major storms (Category 3, 4, or 5) have winds exceeding 110 miles per hour.

An average hurricane season sees about 12 named storms and six hurricanes, with only one or two becoming major storms.

This week is National Hurricane Preparedness Week. Go to NOAA's website to learn more: www.nhc.noaa.gov/prepare/

#### CRS

The National Flood Insurance Program's Community Rating System (CRS) manual has been updated and has been released. For more info go to: <a href="https://www.CRS2012.org">www.CRS2012.org</a>.

Wendy Carey with the University of Delaware Sea Grant Program will be working with DNREC and FEMA to host a Delaware Users Group for current CRS communities and those interested in finding our more about the program. If you were not able to attend the first meeting, but if you are a community interested in future meetings please contact DNREC.

Congratulations to New Castle County. They became the first County in Delaware to join the CRS program on May 1, 2013. Through the hard work of the Office of Emergency Management and the Department of Land Use they were able to join as a Class 8 community. Their higher floodplain standards resulted in a 10% reduction in flood insurance premiums for the 1,870 policy holders. This will save each policy holder more than \$70 per year.

#### FEMA LIBRARY REFERENCES

Here is a link to FEMA's guidance document Zone A Manual: Managing Floodplain Development in Approximate Zone A Areas <a href="https://www.fema.gov/plan/prevent/fhm/dl\_zonea.shtm">www.fema.gov/plan/prevent/fhm/dl\_zonea.shtm</a>

Here is a link to FEMA's guidance document FEMA 348 entitled: **Protecting Building Utilities from Flood Damage**<a href="https://www.fema.gov/library/viewRecord.do?id=1750">www.fema.gov/library/viewRecord.do?id=1750</a>

Here is a link to FEMA's guidance document P-738 entitled: **Substantial Improvement/ Substantial Damage Desk Reference**<a href="https://www.fema.gov/library/viewRecord.do?id=4160">www.fema.gov/library/viewRecord.do?id=4160</a>

#### **DNREC WEBSITE:**

Please check out the Division of Watershed Stewardship's website to learn more about the National Flood Insurance Program, FEMA, and other important reference material: <a href="https://www.dnrec.delaware.gov/swc/Drainage/Pages/Flooding.aspx">www.dnrec.delaware.gov/swc/Drainage/Pages/Flooding.aspx</a>

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