Promoting FEMA’s Flood Risk Products in the Lower Levisa Watershed

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Agenda

• Study Background
• Flood Risk Product Overview
• AOMI and Mitigation Plan
• Flood Risk Product Rollout
• Conclusions
Lower Levisa Watershed

- Floyd County
- Johnson County
- Knott County
- Lawrence County
- Magoffin County
- Morgan County
- Pike County
Risk MAP Project Overview

- Detailed Studies – 82 miles
- Approximate Studies – 617 miles
- Redelineation – 207 miles

**Effective Date**

*September 16, 2015*
### Revised FIRM Panel Breakdown

<table>
<thead>
<tr>
<th>County</th>
<th>Number of Revised Panels</th>
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<tbody>
<tr>
<td>Floyd</td>
<td>49</td>
</tr>
<tr>
<td>Johnson</td>
<td>32</td>
</tr>
<tr>
<td>Knott</td>
<td>5</td>
</tr>
<tr>
<td>Lawrence</td>
<td>18</td>
</tr>
<tr>
<td>Magoffin</td>
<td>5</td>
</tr>
<tr>
<td>Morgan</td>
<td>4</td>
</tr>
<tr>
<td>Pike</td>
<td>31</td>
</tr>
</tbody>
</table>
Flood Risk Datasets and Products

- **Flood Risk Datasets**
  - Changes Since Last FIRM
  - Flood Depth & Analysis Grids
  - Flood Risk Assessment
  - Areas of Mitigation Interest

- **Flood Risk Products**
  - Flood Risk Database
  - Flood Risk Report
  - Flood Risk Map
Purpose of Flood Depth & Analysis Grids

• Show flood inundation as a function of an event’s magnitude or severity
• Show that flood risk varies within the floodplain
• Demonstrate the risks associated with different flood depths and probabilities
• Serve as key inputs to HAZUS Risk Assessment Analyses
• Can be used as pre-screening criteria for mitigation project potential
  – Benefit Cost Analysis in 1% annual chance floodplain
    • Acquisition of structures less than $276,000
    • Elevation of structures costing less than $175,000
1% Annual Chance Depth Grid
Percent Annual Chance Grid
Percent Chance of Flooding Over 30-Year Period Grid
## Potential Uses for Depth & Analysis Grids

<table>
<thead>
<tr>
<th>Use</th>
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</thead>
<tbody>
<tr>
<td>Informs decisions on risk reduction efforts</td>
</tr>
<tr>
<td>Zero in on your areas of greatest flood risk vulnerability</td>
</tr>
<tr>
<td>Clear depiction of high flood risk areas for future planning</td>
</tr>
<tr>
<td>Inform future development decisions</td>
</tr>
<tr>
<td>Understanding current and future risk</td>
</tr>
<tr>
<td>Multiple datasets help visualize a variety of flood risk elements for local stakeholders</td>
</tr>
<tr>
<td>Demonstrating higher flood vulnerability in specific areas</td>
</tr>
<tr>
<td>Accessible source of data for cost-effectiveness</td>
</tr>
<tr>
<td>Assists with advanced recovery planning and disaster preparedness</td>
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Flood Risk Assessment Datasets

- Flood Risk Assessment Data
  - 2010 HAZUS Average Annualized Loss (AAL) Study Data
  - Refined HAZUS and Other Risk Analyses Data
  - Composite Data
Flood Risk Assessment Data
Purpose and Uses

• Quantifies flood risk in dollars:
  – Residential Loss
  – Commercial Loss
  – Other Asset Loss

• Percent Damage
  – Evaluates Building Stock
  – Structure and Content Considerations

• Identifies areas of relative flood risk:
  – Floodprone areas
  – Vulnerable people and property

• Identification of Business Disruption:
  – Considers Total Occupancy Tables
  – Considers Lost Income and Wages

• Helps estimate potential losses (Risk, Very Low to Very High) due to flood risk:
  – Classification (Residential, Commercial, Other)
  – Average Value (buildings/census block)
  – Population
  – Total Loss
  – Building/Content Loss
Areas of Mitigation Interest

Sources of Data

- Community Provided Data
  - Interviews and questionnaire from Discovery Meeting
  - Mining of existing mitigation plans

- Engineering Data
  - Review of existing H&H models
  - Engineering data from other reports (USACE, DOT, etc.)

- Other Government Agency Data
  - Claims data (RL, SRL, etc.)
  - CNMS data
  - Flood control structures
Areas of Mitigation Interest

Examples that may have an impact on the identified flood hazards or flood risks:

- Dams / Levees
- Stream flow constriction
- Past claims hot spots
- Essential facilities
Purpose of Areas of Mitigation Interest

• Provides input to local mitigation plans
• Identifies areas that may be affecting flood risk that would benefit from raised local awareness
• Raises awareness of local stakeholders within and upstream of the watershed that may be contributing to flood risk
Hazard Mitigation Plans

THE BIG SANDY AREA DEVELOPMENT DISTRICT
REGIONAL MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

Including the Jurisdictions of:

Floyd/Cities of Allen, Martin, Prestonsburg, Wayland, & Wheelwright;
Johnson County/City of Paintsville;
Magoffin County/City of Salyersville;
Martin County/Cities of Inez & Warfield;
Pike County/Cities of Coal Run Village, Elkhorn City, & Pikeville
Mitigation Goals from the Big Sandy ADD Hazard Mitigation Plan

1. Increase understanding and awareness of natural hazards
2. Identify and prioritize most vulnerable areas
3. Implement regulatory actions and policies for prevention
4. Protect critical facilities
5. Maximize partnerships to improve coordination and communication
6. Develop time frames and cost estimates for implementing mitigation actions including funding mechanisms
Lower Levisa
Specific Products

Structures in the 10% annual chance floodplain…

*Over 3900 identified!*
Lower Levisa Specific Products

- Stream constrictions or “pinch points”
- Structure Inventory
Resilience Meetings

– Paintsville, KY
– Prestonsburg, KY
– Pikeville, KY

August 13-14, 2014
Reducing Your Flood Risk

Develop a strategy…

– Identify needs
– What types of projects does your community need?
  • Flood hazard reduction
  • Flood risk reduction
  • Policy
– Prioritize your needs
  • Cost
  • Schedule
– Identify partners
– Find a “champion”
Taking Action

Hazard Reduction

- Bridge
- Culvert
- Dams
- Debris
- Drainage Improvements
- Levees
- Forest or Vegetation Management
- Natural Systems Restoration
- Soil Stabilization or Erosion Control

Risk Reduction

- Acquisition
- Elevation
  - Structure
  - Utilities
- Retrofit
- Safe Room Construction
- Underground Utilities

Policy

- Floodplain Management
- Open Space Preservation
- Stormwater Management
- Subdivision Ordinance
- Zoning
- Building and Residential Codes
- Community Rating System (CRS)
- Natural Hazards Planning
- Firewise
- NFIP
### Community Rating System

- **Saving Lives**
- **Preventing Property Damage**
- **Reducing the Cost of Flood Insurance**

<table>
<thead>
<tr>
<th>Community</th>
<th>CRS Rating</th>
<th>Policy Discount</th>
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<tbody>
<tr>
<td>Pike County</td>
<td>9</td>
<td>5%</td>
</tr>
<tr>
<td>City of Pikeville</td>
<td>9</td>
<td>5%</td>
</tr>
<tr>
<td>City of Paintsville</td>
<td>9</td>
<td>5%</td>
</tr>
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FEMA Funding Opportunities

• Hazard Mitigation Assistance includes both post-disaster and pre-disaster grants

HMGP is a post-disaster grant program.

PDM and FMA are available annually, subject to Congressional appropriations.

• Mitigation Plan Requirement
• Local/State Cost Share
• States Manage Programs and Set Funding Priorities
• State Hazard Mitigation Officer (SHMO) is contact
Other Federal Agency Programs
Coal Run Village
Unique Challenges in the Lower Levisa Watershed that Required Further Coordination

- Floyd County was not updated during Map Modernization and was being studied up to the 1 square mile drainage area for the first time
- The City of Prestonsburg was largely moving from a high risk zone to a moderate risk zone; many rural areas moving from low risk zone to moderate risk zone
- Some communities needed special attention and/or follow-up meetings to integrate digital data into GIS platform
- Changes in the political environment initially impacted product buy-in
Additional Outreach in Floyd County – Open House Meetings
Open House Meeting Setup
Understand Your Flood Risk, Floyd County:
Information for Citizens Identified in a High Risk Zone

Why Is My Flood Risk Changing?
The Kentucky Division of Water (KDW) in cooperation with the Federal Emergency Management Agency (FEMA) is performing a flood map (also known as Flood Insurance Rate Map - FIRM and Flood Insurance Study - FIS) update for Floyd County. The maps depict high, moderate and low flood risk zones for the entire county. In some instances high risk flood zones were identified and mapped for the first time or revised to reflect updated topographic data or engineering methods. If you have been identified in a high risk flood zone (Zone A or Zone AE), when the FIRM/FIS update becomes effective, flood insurance will be required if you have a federally backed mortgage. The effective date is projected to be September or October 2015. Please contact your local floodplain administrator for more information.

What Do I Need To Know About a High Risk Flood Zone?
If you move from a low or moderate risk flood zone to a high risk flood zone, your mortgage company may require you to carry flood insurance. If you are newly mapped into a high risk flood zone and purchase flood insurance at least 30 days before the effective date you may be eligible for a Preferred Risk Policy (PRP). If you do not take action before this time, you may miss out on an opportunity for significant savings on your flood insurance policy. Contact your insurance agent today to learn more about a Preferred risk Policy and to see if a PRP is the best option for you.
Additional Outreach in Floyd County - Handouts

When a building has been mapped into a moderate- to low-risk area, the Federal mandatory purchase requirement is removed (although a lender can still require it). Keep in mind that the risk has not been eliminated; it only has been reduced. Flood insurance is now available at a significantly lower price. Converting an existing policy to a Preferred Risk Policy is easy and does not require additional costs; in fact, you will get a refund while still maintaining coverage. In addition, that policy will automatically include contents coverage (40 percent of the building coverage). Consequently, it is much less expensive and you stay continuously covered.

Preferred Risk Policy premiums are the lowest premiums available through the NFIP, offering building and contents coverage for one low price. Homes and businesses may qualify for the low-cost Preferred Risk Policy, with premiums starting as low as $129 for a home and its contents and $643 for a commercial building and its contents.* If you don’t qualify for a Preferred Risk Policy, a standard rated policy is still available.

*$129 residential annual premium provides $20,000 building and $8,000 contents coverage. $643 commercial annual premium provides $50,000 building and $50,000 contents coverage.

Source: FloodSmart.gov

Preliminary flood insurance zones near Prestonsburg. High risk flood zones are identified in blue and moderate risk flood zones are identified in orange.
Additional Outreach in Floyd County - Training

**Basic Insurance Agent Workshop on the National Flood Insurance Program (FIRA)**
*Tuesday, January 27, 2015 – 3:00 pm – 5:00 pm EST (Part 1)*  
*Wednesday, January 28, 2015 – 3:00 pm – 5:00 pm EST (Part 2)*

This course addresses basic flood insurance issues as well as some more advanced components. At the conclusion of both sessions, attendees with little or no prior NFIP experience will understand how to build a flood insurance policy from the ground up. More experienced attendees will develop an even better understanding of: • Biggert-Waters Reform Act of 2012 • A Standard Flood Insurance Policy’s major coverage areas • FEMA’s Elevation certificate • Increased Cost of Compliance coverage • And much more!

**FEMA Mapping Changes**  
*Wednesday, January 28, 2015 – 11:00 am – 1:00 pm EST*

As a result of initiatives such as FEMA Map Modernization and FEMA Risk MAP, communities throughout the country have been experiencing flood map changes over the past few years — and there are more still to come. Learn how to better service insureds and borrowers by understanding how mapping changes affect rates, premiums, and the mandatory purchase of flood insurance. Know how to best help your clients both before and after map changes.
Lessons Learned, Challenges, Recommendations

- Identify watershed-specific issues and concerns
- Develop a strategy for risk awareness and mitigation actions
- Continued coordination with watershed stakeholders
- Our work doesn’t end with effective maps
- Involvement with the next HMP Update
- Making sure communities understand Flood Risk Product benefits and how to use them as tools
- Continued education on CRS and higher standards in order to reduce risk and flood insurance premium costs
Questions?

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