

Suggested Provisions

Meeting the Minimum Requirements of
THE NATIONAL FLOOD INSURANCE PROGRAM

and the

PENNSYLVANIA FLOOD PLAIN
MANAGEMENT ACT (1978-166) |
SECTION 60.3 (d)

August 2013

> ready > set > succeed

Flood Plain Ordinance Update



Commonwealth of Pennsylvania
Tom Corbett, Governor
www.state.pa.us

Department of Community
& Economic Development
C. Alan Walker, Secretary

ncwPA.com

National Flood Insurance Program

- Created by the National Flood Insurance Act of 1968
- Participation is **voluntary**
 - Adopt and enforce regulations
 - Eligible for flood insurance
- **Benefits** of participation:
 - Flood insurance
 - Grants and loans
 - Disaster assistance
 - Federally-backed mortgages



NFIP Roles: Federal and State

- **Federal**

- National program oversight
- Risk Identification (mapping)
- Establish development/building standards
- Provide insurance coverage

- **State**

- State program oversight
- Establish development/building standards
- Provide technical assistance to local communities/agencies
- Evaluate and document floodplain management activities

NFIP Roles: Local

- **Local Officials and Floodplain Administrators**
 - Adopt and enforce floodplain management ordinance compliant with Federal/State laws
 - Issue or deny development
 - Inspect development and maintain records
 - Make substantial damage determinations
- Remember, development oversight is a **local responsibility**
- Our local regulations are located in the Zoning Ordinance
- Regulations apply to Special Flood Hazard Area (SFHA) on the Flood Insurance Rate Map (FIRM)

Ordinance Non-Compliance

- **Failure to adopt** a compliant ordinance by map effective date or having non-compliant ordinance = **easiest way to get suspended**
- **Serious ramifications:**
 - Suspension of NFIP eligibility
 - No mortgages or home equity loans in floodplain areas
 - No renewals of existing flood insurance policies
 - Loss of most forms of Disaster Assistance
 - No federal grants or loans
 - Loss of subsidized insurance for Pre-FIRM structures

FEMA Community Assist Visit (CAV)

- Reviewing the last 5 years of building permits issued in the flood plains and flood ways.
- Over 100 possible violations were discovered and additional documentation is required for full compliance with the regulations.
- Violations may lead to the City being placed on Probation, FEMA will report back shortly.
- Probation may result in a \$50 surcharge to policy holders.

ALL Development Requires a Permit

ALL development in the SFHA requires a permit

- Definition of development:
- means any man-made change to improved or unimproved real estate, **including but not limited** to the construction, reconstruction, renovation, repair, expansion, or alteration of buildings or other structures; the placement of manufactured homes; streets, and other paving; utilities; filling, grading and excavation; mining; dredging; drilling operations; storage of equipment or materials; and the subdivision of land.

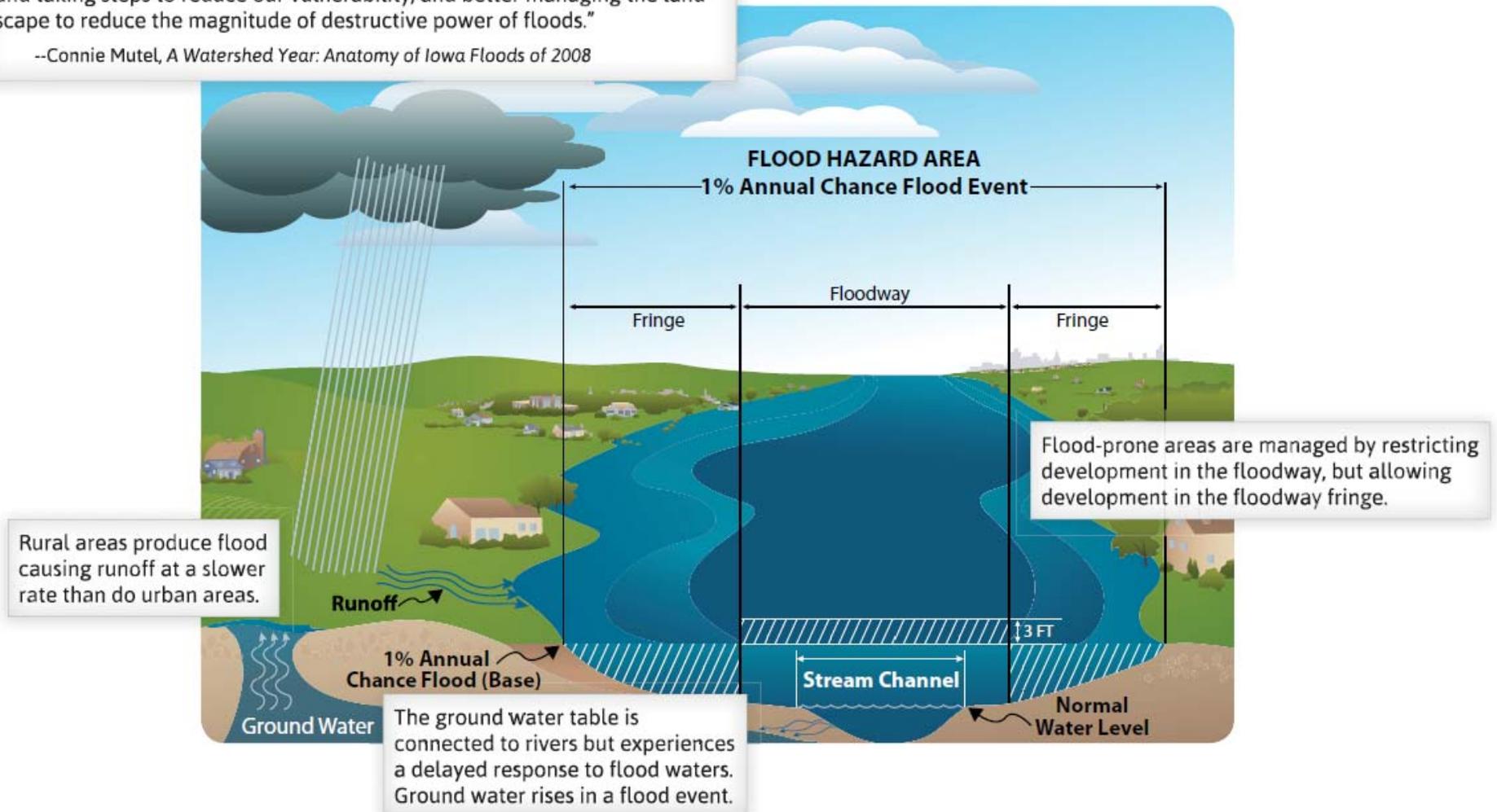
Definitions

- **Base Flood Elevation (BFE)** – Height of the water in a 1% annual chance flood
- **Regulatory Flood Elevation (RFE)** – 18” above Base Flood Elevation
- **AE** – Flood plain, area adjacent to the flood way
- **A** – Flood plain, areas where base flood elevations have not been identified, applicant can determine the elevation with engineering studies

What is the Special Flood Hazard Area?

"Living with floods involves two broad activities: better managing the risks and taking steps to reduce our vulnerability, and better managing the landscape to reduce the magnitude of destructive power of floods."

--Connie Mutel, *A Watershed Year: Anatomy of Iowa Floods of 2008*



Graphic courtesy of the City of Ames, Iowa

New Development/Substantial Improvement

- New Development and Substantial Improvement in the Flood Plain: Zones A and AE (906.02.F.2)
 - Residential buildings: lowest floor, including basement, **elevated to or above RFE**
 - Non-residential buildings: **elevated or floodproofed**
- New Development and Substantial Improvement in the Flood Way (906.02.E.2)
 - **No increase in BFE** for development within floodway
- Substantial Improvement = reconstruction, rehab or renovation that equals or exceeds 50 percent of the market value

Existing Structures (906.02.H)

- No trigger unless application for building/development permit.
- No **expansion or enlargement** in Floodway that **would increase BFE**.
- No **expansion or enlargement in A zone** that together with all other existing and anticipated development that would cause an **increase to the BFE or more than 1 foot**.
- Modification permitted up to 50 percent of market value of the structure.
- Building code requirements must also be met.

Historic Structures (906.02.F.2(d))

- Structure that is designated historic with the federal, state or local government, including those with a preliminary determination of contributing to historical significance of a district.
- Floodproofing not required if:
 - Would cause structure to be removed from National Register or State Inventory of Historic Places.
 - Must provide documentation from the Secretary of the Interior or the State Historic Preservation Officer.
 - Exemption from code requirements would be minimum necessary to preserve historic character and design.

Accessory Structures (906.02.F.2(e))

- Accessory Structures = structures not designed for human habitation but for storage or parking related to the primary use. Floor area not to exceed 200 square feet.
- Structure need **not be floodproofed or elevated**, as long as structure designed to meet other requirements of this section:
 - No sanitary facilities or fixed utility equipment such as furnaces.
 - Must be anchored and designed to allow for the entry and exit of floodwater to equalize hydrostatic forces.
- Powerlines, wiring and outlets must be elevated.

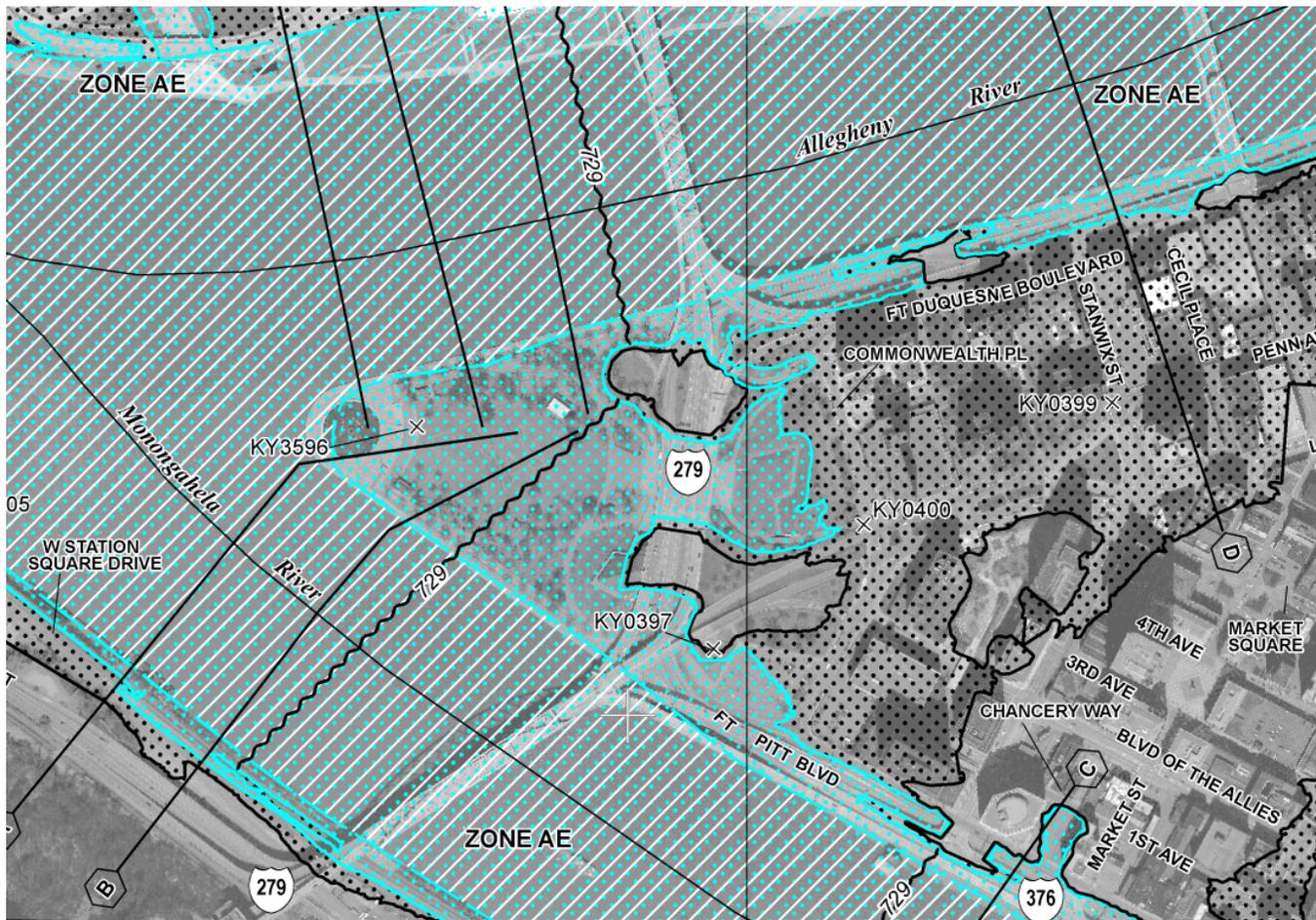
Design and Construction Standards (906.02.F.3)

- Standards need to be met for the addition of fill
- Standards need to be met for water and sanitary sewer facilities and systems
- New streets shall not be lower than 1 foot below the Regulatory Flood Elevation

Additional Provisions

- Higher requirements for manufacture or storage of hazardous materials (906.02.F.4)
- Special requirements for Subdivisions (906.02.F.5), Recreational Vehicles (906.02.F.7) and Manufactured Homes (906.02.F.6)
- Special Permits are required for hospitals, nursing homes, and correctional facilities (906.02.G.2):
 - Evacuation Plan
 - Additional engineering analysis
 - Planning Commission approval required
 - State review required

What Does a Flood Insurance Rate Map Look Like?



LEGEND

 SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

 FLOODWAY AREAS IN ZONE AE
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

 OTHER FLOOD AREAS
ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

 OTHER AREAS
ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

PANEL 0334H

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

ALLEGHENY COUNTY,
PENNSYLVANIA
(ALL JURISDICTIONS)

PANEL 334 OF 558
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
PITTSBURGH, CITY OF	42003	0334	H

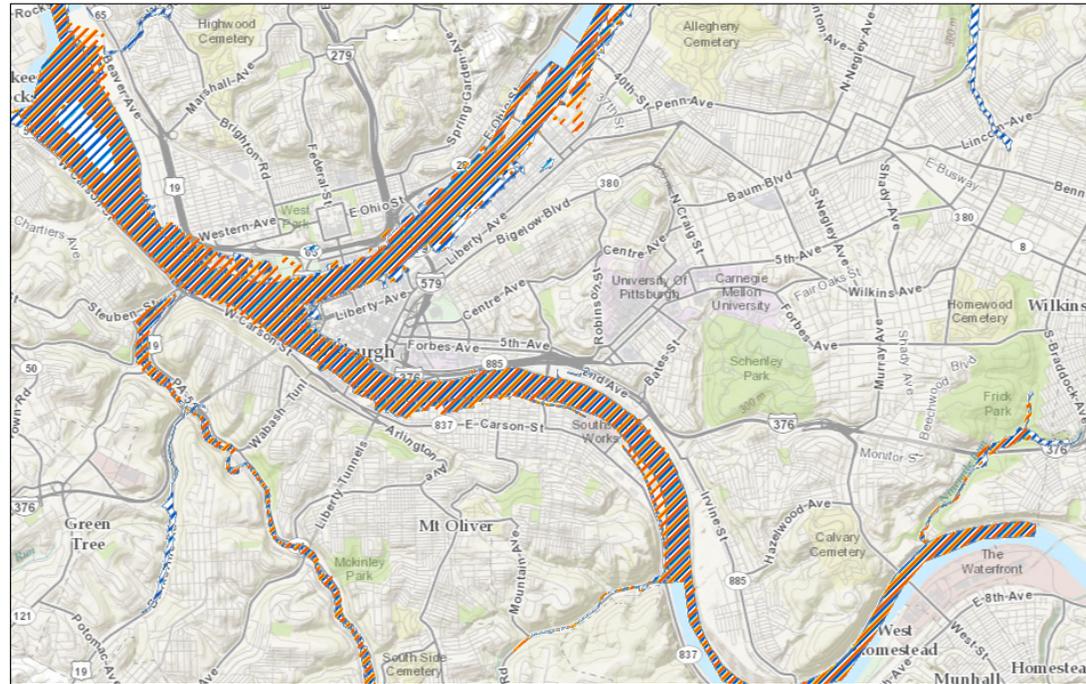
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
42003C0334H

MAP REVISED
SEPTEMBER 26, 2014

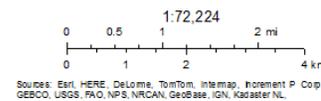
Federal Emergency Management Agency

How are Pittsburgh's Floodplain Maps Changing?



July 2, 2014

-  FEMA 1 Percent Chance Annual Flood
-  FEMA_2014_A_AE



To compare the current Flood Insurance Rate Map to the new map which will become effective September 26, 2014, visit:

<http://gis.pittsburghpa.gov/zoning/>

How are Pittsburgh's Floodplain Maps Changing?

- Significant new areas in 1% chance annual flood
 - Washington Boulevard
 - Lower Woods Run
 - Banksville Road
 - Glass Run
 - Strip District (approx. 16th Street through 28th)
- Significant removed areas in 1% chance annual flood
 - Lower Lawrenceville
 - West of South Water Street
- Changes to Chartiers Creek

For more detailed information about Flood Risk, visit FEMA's Risk Map Portal

<http://maps.riskmap3.com/pa/allegHENY/>

