

## **REQUEST FOR BOARD ACTION**

### **HENDERSON COUNTY BOARD OF COMMISSIONERS**

**Meeting Date:** June 2, 2008

**Subject:** New Countywide Flood Insurance Rate Maps (FIRMs): Setting the Public Hearing on Rezoning #R-2008-08 & Text Amendment #TX-2008-02

**Attachments:**

1. Staff Memorandum Regarding Requests #R-2008-08 and #TX-2008-02
2. R-2008-08 Flood Area Reduction Map
3. R-2008-08 Flood Area Expansion Map
4. PowerPoint Presentation Regarding New Countywide Flood Insurance Rate Maps (FIRMs)

#### **SUMMARY OF REQUEST:**

Rezoning Request #R-2008-08 and Text Amendment #TX-2008-02, which were initiated by Henderson County Planning Staff on April 2, 2008, request that the County adopt the finalized Flood Insurance Rate Maps (FIRMs) and make the necessary associated amendments to the flood damage prevention regulations of Chapter 200A, Land Development Code (See Attachment 3, Staff Memo, for additional information).

The Henderson County Technical Review Committee (TRC) considered rezoning request #R-2008-08 and text amendment TX-2008-02 at its meeting on May 6, 2008. The TRC voted 7 to 0 to provide a favorable recommendation on rezoning request #R-2008-08 and text amendment TX-2008-02, to adopt the FIRMs and necessary text revisions to the flood damage prevention regulations of the Chapter 200A, Land Development Code. The North Carolina Floodplain Management Branch has, since the TRC issued its initial recommendation, provided the County with its comments regarding the proposed text revisions. The NC Floodplain Management Branch requested a few minor changes to the text which were technical in nature. As a result, Planning Staff will be providing the revised text to the TRC for its review and recommendation at its regularly scheduled meeting on June 3, 2008.

The Henderson County Planning Board will undertake its first consideration of rezoning request #R-2008-08 and text amendment #TX-2008-02 at its regularly scheduled meeting on June 19, 2008.

Before taking action on the rezoning and text amendments, the Board of Commissioners must hold a public hearing. Staff proposes that the hearing be scheduled for Monday, July 7, 2008, at 7:00 P.M.

#### **BOARD ACTION REQUESTED:**

Planning Staff recommends that the Board of Commissioners schedule a public hearing on rezoning request #R-2008-08 and text amendment #TX-2008-02 for Monday, July 7, 2008, at 7:00 P.M., or schedule a special called meeting on or after that date.

#### **Suggested Motion:**

I move that the Board schedule a public hearing on rezoning request #R-2008-08 and text amendment #TX-2008-02 for Monday, July 7, 2008, at 7:00 P.M.

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**MEMORANDUM**

**TO: Henderson County Board of Commissioners**

**FROM: Anthony Starr, Planning Director**

**DATE: May 20, 2008**

**SUBJECT: Rezoning Request #R-2008-08 and Text Amendment #TX-2008-02**

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The State of North Carolina is designated a Cooperating Technical State by the Federal Emergency Management Agency (FEMA). The North Carolina Floodplain Mapping Program was established to produce, issue and maintain all North Carolina Flood Insurance Rate Maps (FIRMs) as required by FEMA under this partnership. Attached is a PowerPoint which provides an overview of the: (1) FIRM development process; (2) changes that result from the new FIRMs; and (3) adoption process (See Attachment 4, PowerPoint).

The development of new FIRMs is a multistep process that began for Henderson County in August 2005. These FIRMs were reviewed publicly and, following a formal appeals process, were finalized. On April 2, 2008 the County received the Letter of Final Determination for the FIRMs. In addition, the flood damage prevention regulations of the Land Development Code have been amended to reflect: (1) regulation changes associated with the new FIRMs, (2) changes made to the State Model Flood Damage Prevention Ordinance since the original adoption of the regulations in 2005, and (3) organization of regulations within Chapter 200A.

The County has six (6) months in which to adopt the new FIRMs and text amendments (a deadline of October 2, 2008); however, FEMA recommends adoption within four (4) months (a deadline of August 4, 2008) in an effort to:

- Prevent suspension from the National Flood Insurance Program (NFIP),
- Allow Federal agencies to approve loans and grants within the 100-year floodplain,
- Make State and Federal disaster assistance available for flood-damaged structures, and
- Comply with the North Carolina Flood Act of 2000.

The adoption of the new FIRMs and text amendments will be under procedures outlined by FEMA, the State of North Carolina, and Chapter 200A, Land Development Code. The adoption is consistent with the Henderson County 2020 Comprehensive Plan which supports “minimizing the potential for damage to personal property, infrastructure, and life due to flooding” (2020 CCP, Pg. 75)

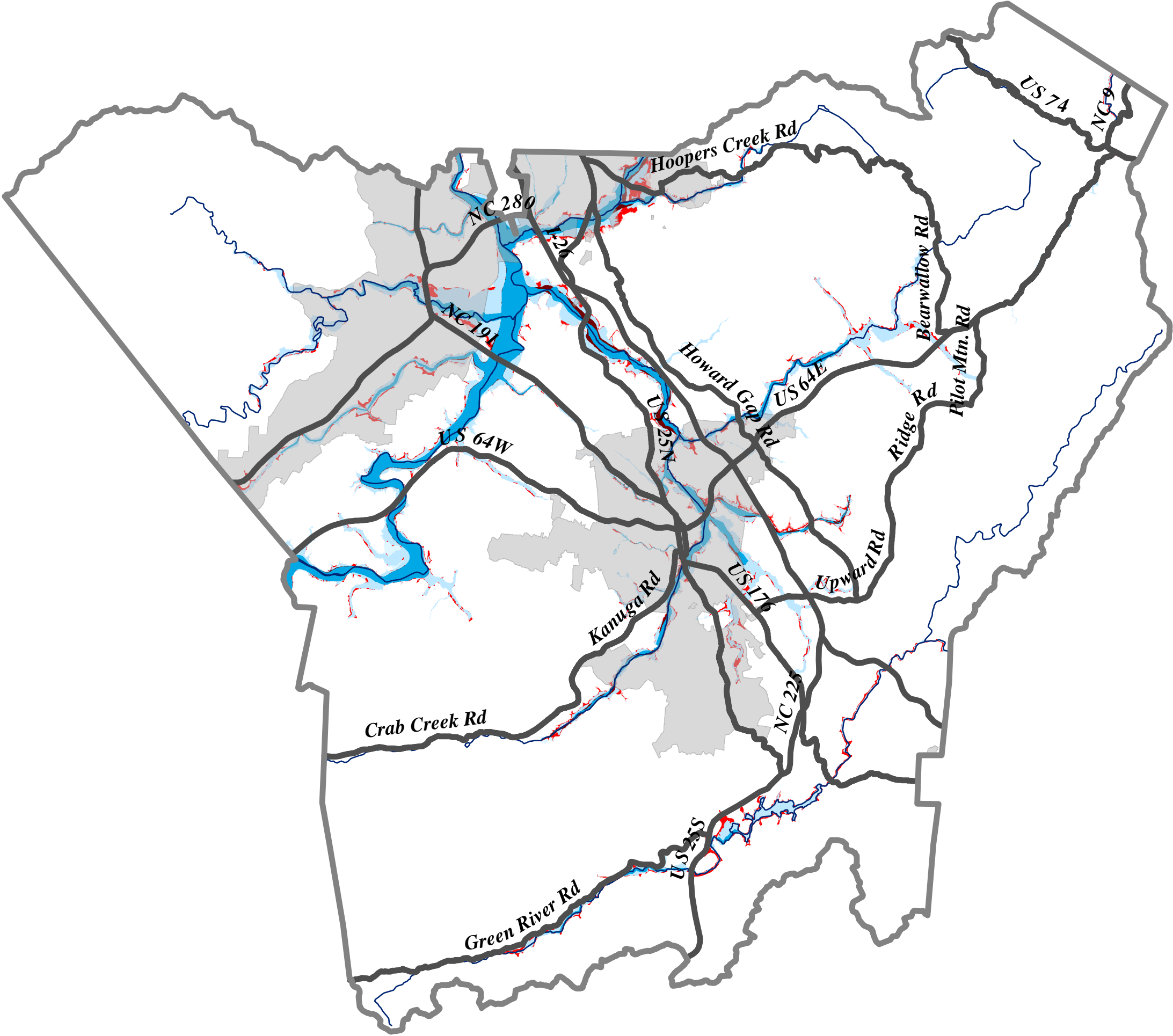
Attached for your review are maps showing where the FIRMs have resulted in a flood area reduction (Attachment 2, Flood Area Reduction Map) and where the FIRMs have resulted in a flood area expansion (Attachment 3, Flood Area Expansion Map). Flood Area Reduction and Expansion Maps which are divided into Quadrants are available at: [www.hcplanning.org](http://www.hcplanning.org). Preliminary FIRM panels may be reviewed in the office of the Floodplain Administrator or by visiting the North Carolina Floodplain Mapping Site (<http://www.ncfloodmaps.com/default.htm.asp#>). Table 1, below, provides a comparison of 1982 and 2008 floodplain and floodway acreage which fall within the County’s jurisdiction. Overall the regulated area will be reduced by over 32 acres.

<b>Table 1. Floodway and Floodplain within Henderson County's Jurisdiction: Comparing Existing and New FIRMs</b>			
<b>Acreage in</b>	<b>Map Year</b>		<b>Change in Acreage</b>
	<b>1982</b>	<b>2008</b>	
Floodway	3,884.71	3,909.73	25.02
100 Year Floodplain	5,675.64	5,618.18	-57.46
500 Year Floodplain	655.52	689.26	33.74
Regulated Area (Floodway & 100 Year Floodplain)	9,560.35	9,527.91	-32.44

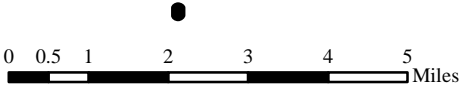
The associated revisions to Chapter 200A, Land Development Code text have been reviewed by the North Carolina Floodplain Management Branch to ensure compliance with the State model ordinance and enforcement of the provisions of the new FIRMs. The text amendments will be reviewed by the Technical Review Committee and Planning Board for comment and recommendation. The revisions are largely technical and administrative in nature except where substantive modifications were required as noted in the PowerPoint presentation (See Attachment 4).

# Floodway and Floodplain Reduction Map

Red Areas Indicate Reduction of Floodway or Floodplain



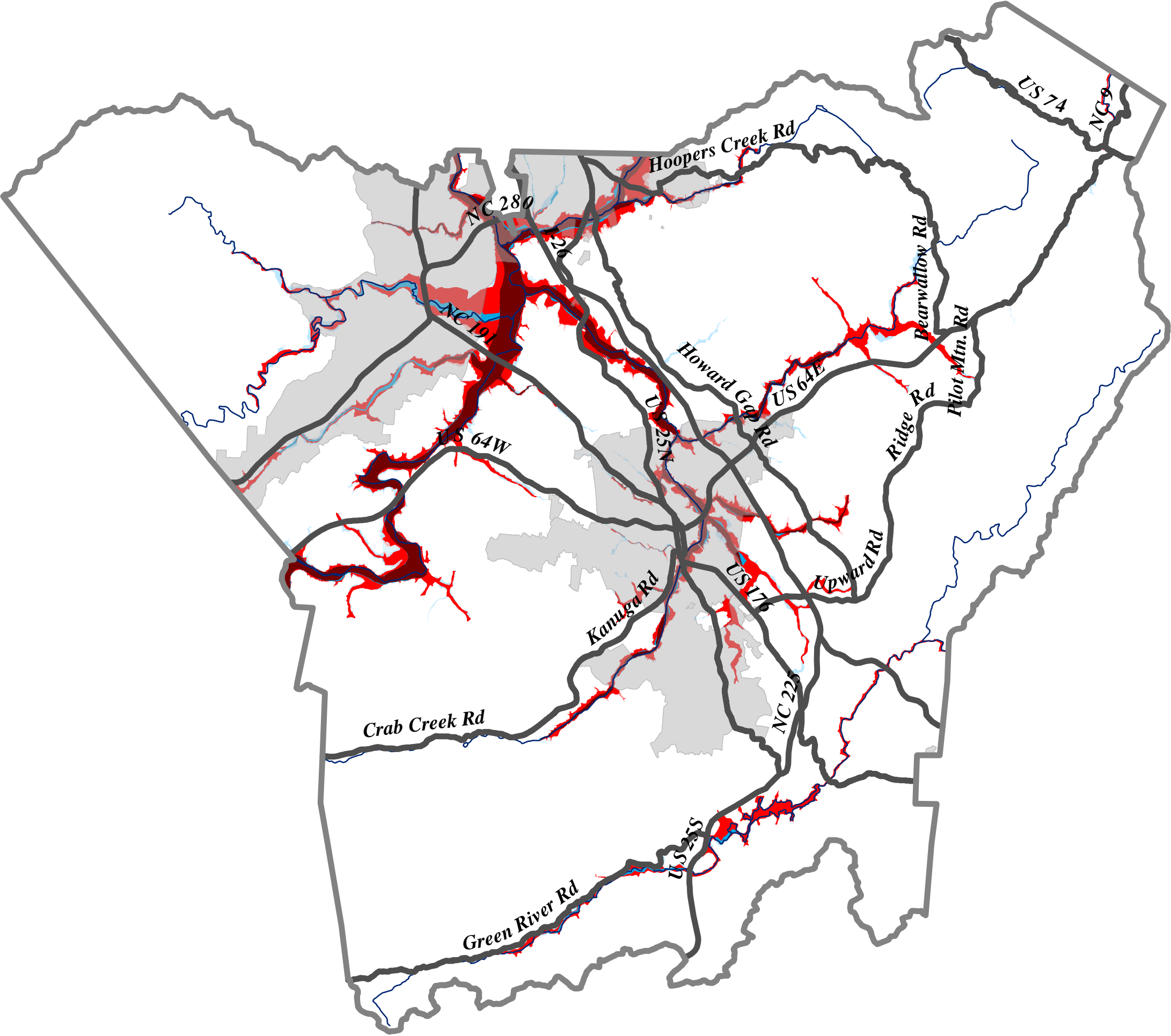
- Major Roads
- Major Streams
- Municipal Jurisdiction
- Floodway 2008
- Floodway 1982
- 100-Year Floodplain 2008
- 100-Year Floodplain 1982
- 500-Year Floodplain 2008
- 500-Year Floodplain 1982



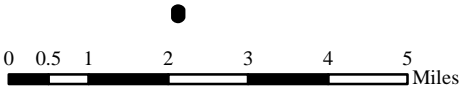
This map is prepared for the inventory of real property found within this jurisdiction, and is compiled from recorded deeds, plats, and other public records and data. Users of this map are hereby notified that the aforementioned public primary information sources should be consulted for verification of the information contained on this map. Henderson County and the mapping company assume no legal responsibility for the information contained on this map.

# Floodway and Floodplain Expansion Map

Blue Areas Indicate Expansion of Floodway or Floodplain



- Major Roads
- Major Streams
- Municipal Jurisdiction
- Floodway 1982
- Floodway 2008
- 100-Year Floodplain 1982
- 100-Year Floodplain 2008
- 500-Year Floodplain 1982
- 500-Year Floodplain 2008

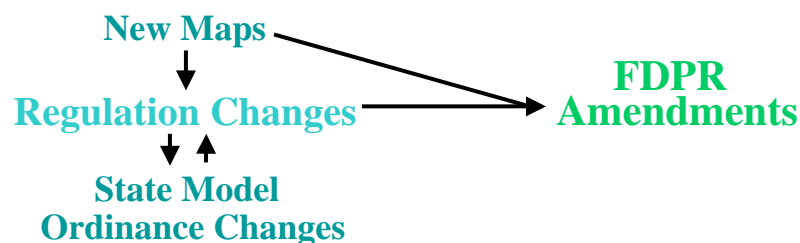


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# Henderson County Flood Damage Prevention

## Why New FIRMs & Amended FDPRs?

- Any change to Flood Insurance Rate Maps (FIRMs) requires amending Flood Damage Prevention Regulations (FDPRs)
- Ordinance amendments are required in each of the following situations:



- All map changes must be adopted by the Board of Commissioners by ordinance amendment

## **FIRMs and FDPRs Must be Amended**

- To prevent suspension from the NFIP
- To allow Federal agencies to approve loans/grants within 100-year floodplain
- To make State and Federal disaster assistance available for flood-damaged structures
- To comply with the NC Flood Act of 2000

## **Changes to Flood Damage Prevention Regulations (FDPRs)**

- 1. New Flood Insurance Rate Maps (FIRMs)**
- 2. Revised FDPR Text**

## **Part I. New Countywide FIRMs**

- NC designated “Cooperating Technical State”
  - Unique partnership with FEMA
  - Responsible for producing/issuing/maintaining all NC FIRMs
- NC Floodplain Mapping Program:
  - Acquires Data
  - Conducts Studies
  - Produces FIRMs

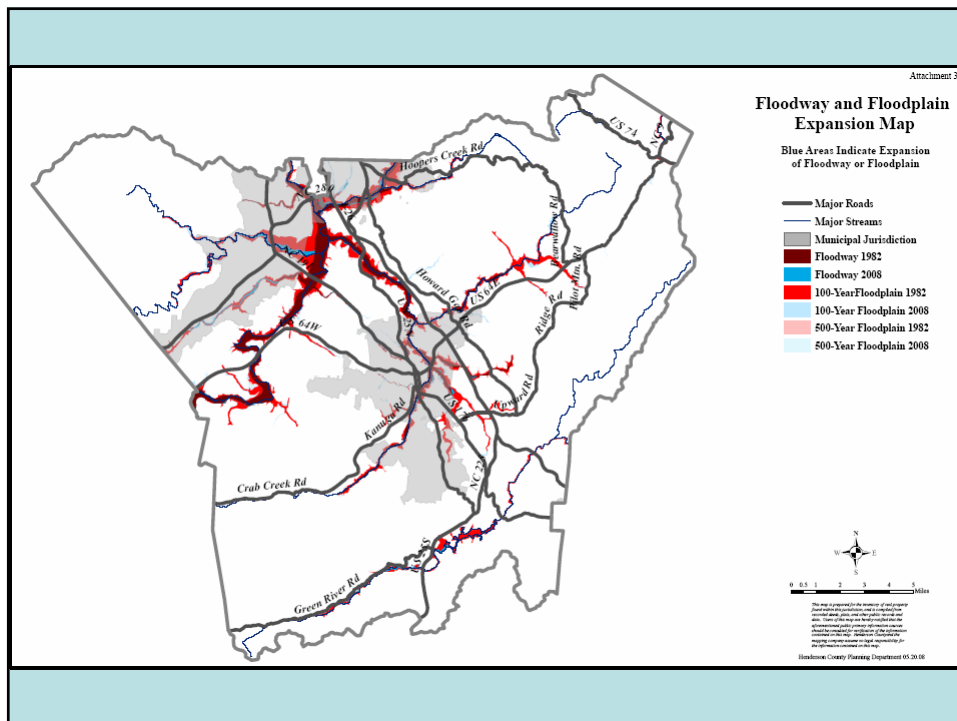
## **The Process for NC Floodplain Mapping**

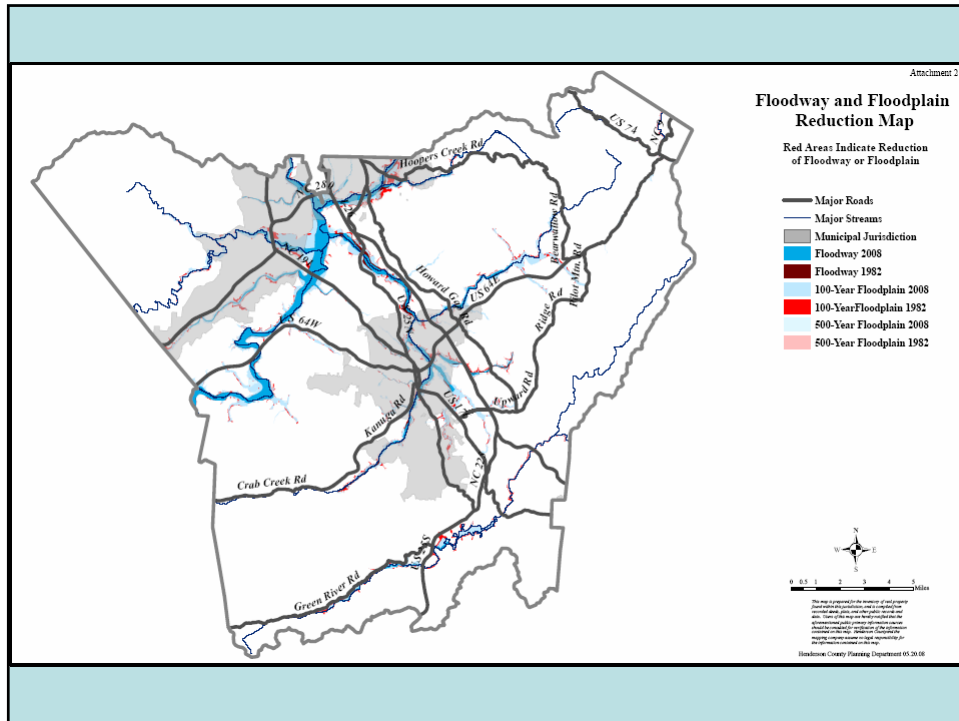
- Meetings with County officials
- Acquiring Base Maps
- Gather Digital Elevation Data (LIDAR Data)
- Map Production
  - Detailed Study;
  - Limited Detailed Study; and
  - Redelineation



## NC Floodplain Mapping Timeline

- Preliminary Panels Issued May 21, 2007
- End Appeals/Protest Period September 2, 2007
- Resolution of Appeals and Protests
- Letter of Final Determination April 2, 2008





## Limited Detailed Studies

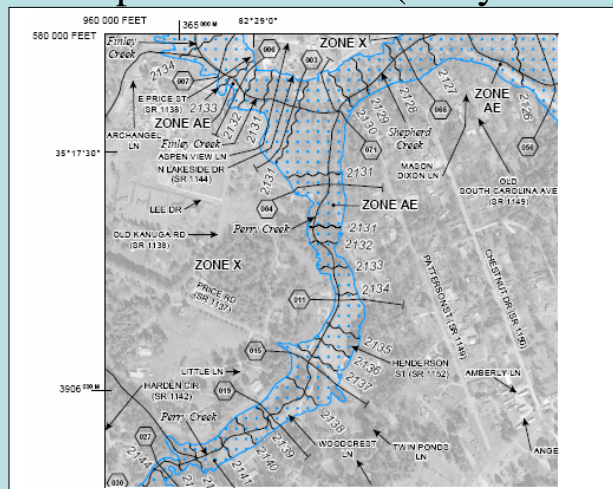
- Elimination of Unnumbered A Zones
- In Unnumbered A Zone applicants were required to:
  - Conduct engineering study; or
  - Setback from the stream bank 20 feet or a distance equivalent to 5 times width of the stream (top of bank)
- Non-encroachment area replaces Unnumbered A Zones
- Use LIDAR to identify Non-encroachment Areas
- Non-encroachment areas are not floodway; however, no encroachment or development is allowed in these areas

## Floodplain Administrator and Non-encroachment Area Determination

- Non-encroachment Area widths provided:
  - In FIS Limited Detailed Flood Hazard Data Tables
  - For each cross section
- Floodplain Administrator anticipates using the **conservative method** of determination
- Applicant can conduct an engineering study
- Better insurance rates result from non-encroachment approach

## Floodplain Administrator and Non-encroachment Area Determination

### Example: Panel 9567 (Perry Creek)



# Floodplain Administrator and Non-encroachment Area Determination

## Limited Detailed Flood Hazard Data

Cross Section <sup>1</sup>	Stream Station <sup>2</sup>	Flood Discharge (cfs)	1% Annual Chance Water- Surface Elevation (feet NAVD 88)	Non- Encroachment Width <sup>3</sup> (feet)
PERRY CREEK				
001	96	990	2,130.7 <sup>4</sup>	84 / 11
004	407	990	2,130.7 <sup>4</sup>	110 / 10
007	736	990	2,131.3	14 / 20
011	1,113	990	2,134.3	12 / 61
013	1,294	990	2,135.1	11 / 93
014	1,435	990	2,135.9	29 / 66
015	1,496	990	2,137.5	101 / 170

Perry Creek: Between Cross Section 11 and 4 Non-encroachment Area would be determined to be 110 feet on left side and 61 feet on right side of stream.

## Part II. FDPR Text Revisions

### New Language is Required:

- To incorporate and use new FIRMs
- To comply with Model Ordinance (previously used '05 model revised to new '07 model).
- To prevent suspension from the NFIP
- To reflect regulation changes (specifically Non-encroachment Area)

## FDPR Substantive Text Revisions

- Standards for (§200A-203.1):
  - Structures partially within the SFHA or with multiple BFEs
  - Recreational Vehicles (RVs)
  - Additional accessory structure use limitation
- Standards for determination of BFE in Floodplains without established BFEs (§200A-203.4)
- Additional standards for Floodway or Non-encroachment Areas (§200A-203.6)
- Provisions for Floodplain Administrator Inspections (§200A-275)

## FDPR Administrative Text Revisions

- Additional Cross-referencing
- Amendments to provide similar wording between State Model Ordinance and County regulations
- Amendments to §200A-323 (Special Fill Permits) to clarify that the Flood Damage Prevention Board is responsible for approving special fill permits (quasi-judicial)

## **Moving Forward**

- **April 2, 2008:** Letter of Final Determination from FEMA (Anticipated)
- **May 6, 2008:** TRC Reviews R-2008-08
- **June 3, 2008:** TRC Reviews TX-2008-02
- **June 19, 2008:** Planning Board Review of R-2008-02 and TX-2008-02
- **July 7, 2008:** Board of Commissioners Public Hearing

## **Moving Forward**

- Adoption Required on or by **August 4, 2008**
- Map and Text Amendment Effective Date: **On or Before October 2, 2008**
- FEMA Review of Ordinance (**Aug./Sept.**)
- Changes on new FIRMs will not effect flood insurance policies until after the effective date

# **Henderson County Flood Damage Prevention**

Questions?