# Lock's Creek Flood Study

June 7, 2021





#### BACKGROUND

#### Summary of Past Complaints – June 2020





#### Localized Flooding





#### L. A. Dunham Drive

Bombay Drive



#### BACKGROUND

#### • Sought CDBG-MIT funding

- Lock's Creek Flood Questionnaire Fall 2020
- Applied for grant through NC Office of Recovery & Resiliency
- Area did not meet the Low to Moderate Income thresholds



Invitation to Participate in Survey	Survey	Survey Continued
Dear Homeowner, Your property has been identified in a flood hazard zone, and based on previous experience with post disasters, we are conducting a survey to assess your experiences as we advocate for potential solutions for impacted citizens in this community. To better serve our citizens, we need your feedback. Please assists thy completing the following survey that will help us advocate for you, and return in the enclosed prepaid envelope. For added convenience, his survey can also be completed online at https://arog.is/Tbt/SW, or by using a smartphone and scanning the CR code below.	Are you the homeowner? Yes No What is your address?	Were you able to exit your community safely if you evacuated?
	Telephone: Email: Describe your experience with flooding during Matthew:	Were you able to receive/access necessary care o supplies during this time? Yes No Are you on a fixed income such as retired, disabilit
	Describe your experience with flooding during Florence:	you be interested or consider moving?
	Any other experiences with flooding?	



#### **Current FEMA Mapping**



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### PURPOSE OF FLOOD STUDY



<u>**Phase I**</u>: Develop preliminary floodway & floodplain mapping for City review & consideration, to include identifying impacted parcels and structures

**Phase II** (if desired): Prepare a Federal Emergency Management Agency (FEMA) Letter of Map Revision (LOMR) or Physical Map Revision (PMR) application package





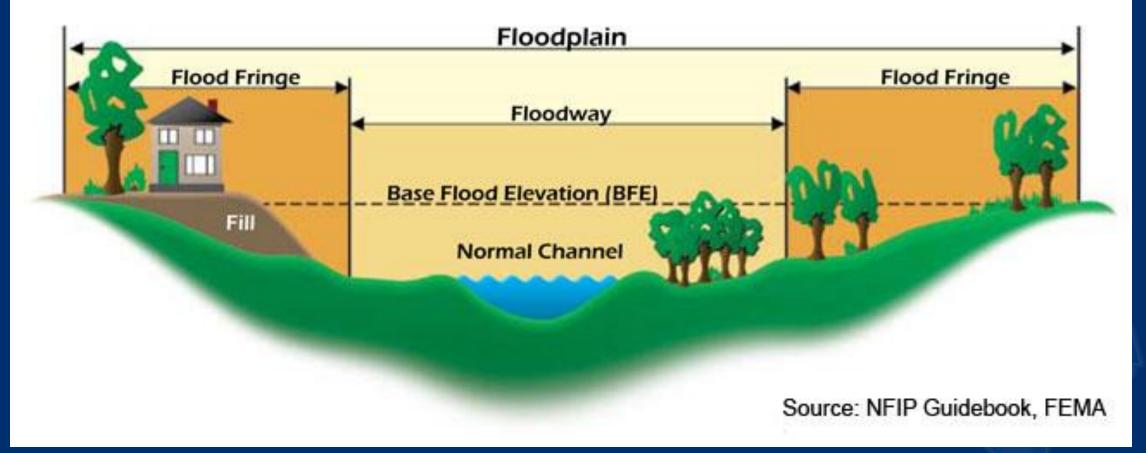
- Watershed Study Cape Fear 2 Drainage Basin
  - Developed HEC-RAS model as part of watershed study

- Flood Study
  - Extend the Lock's Creek portion of the model downstream as recommended by the North Carolina Floodplain Mapping Program (NCFMP)

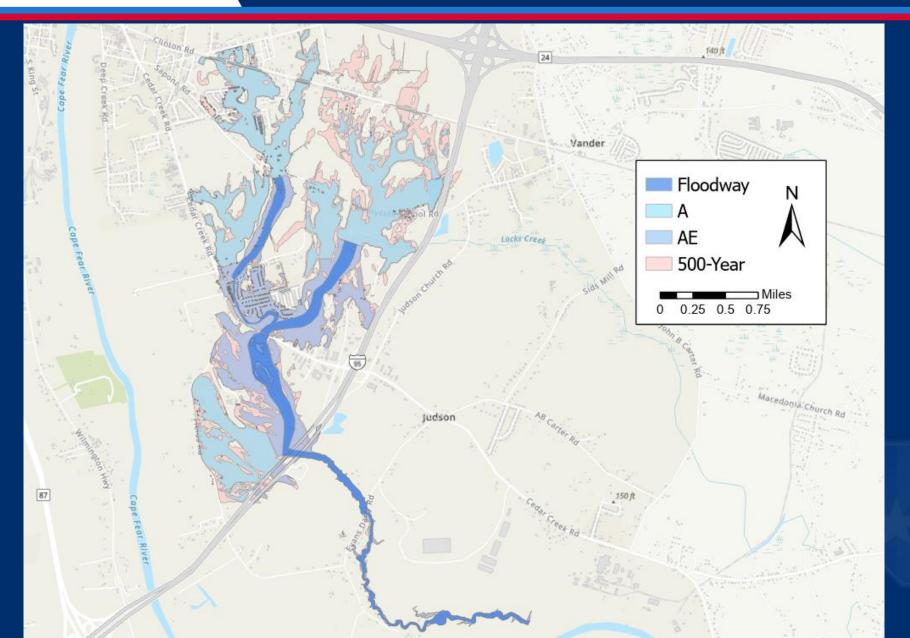


#### DEFINITIONS

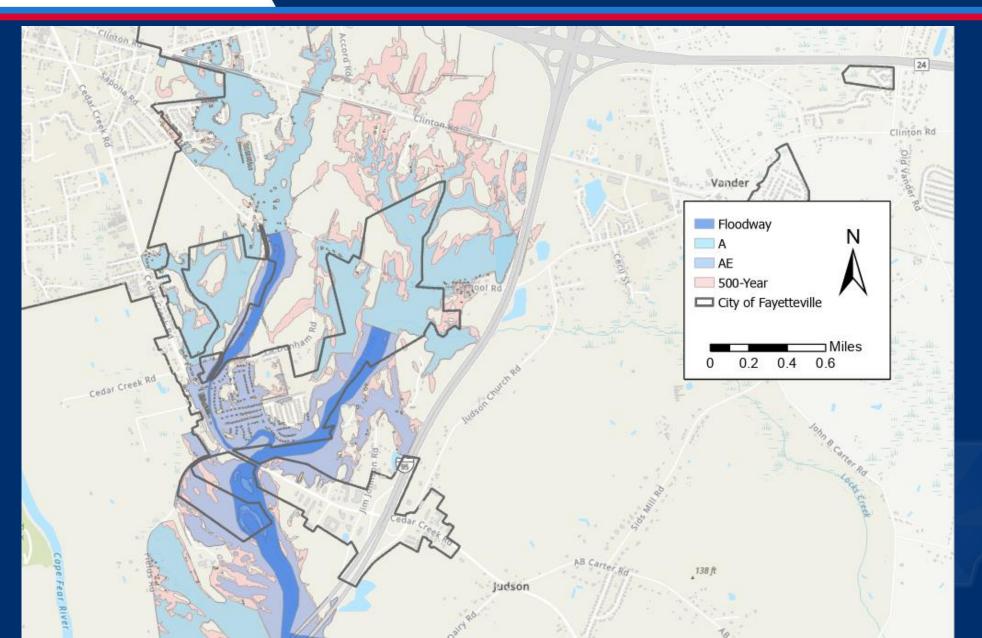
#### **Characteristics of a Floodplain**



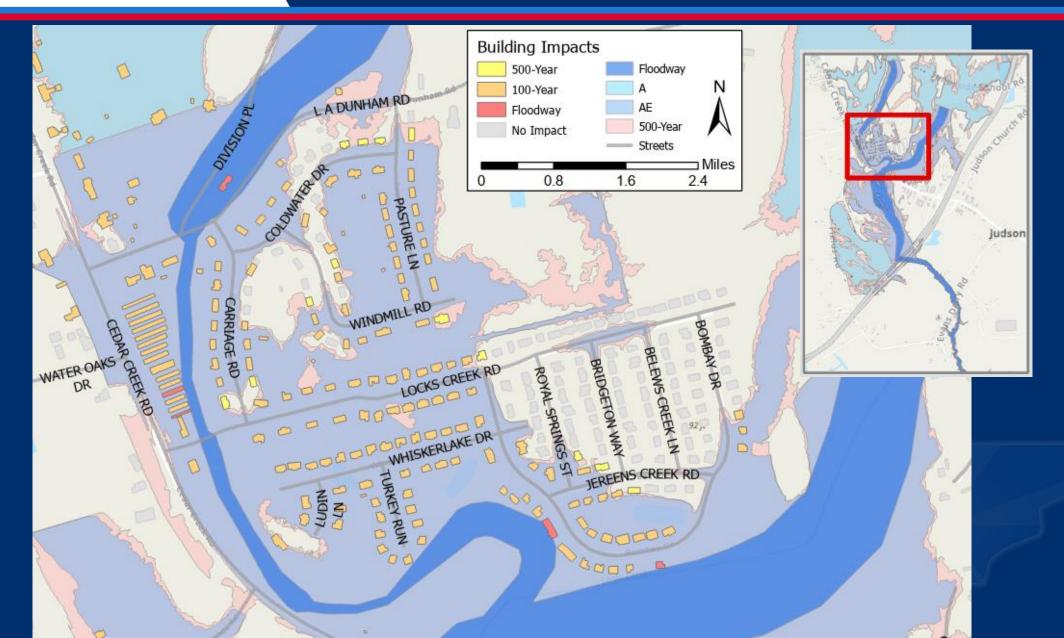








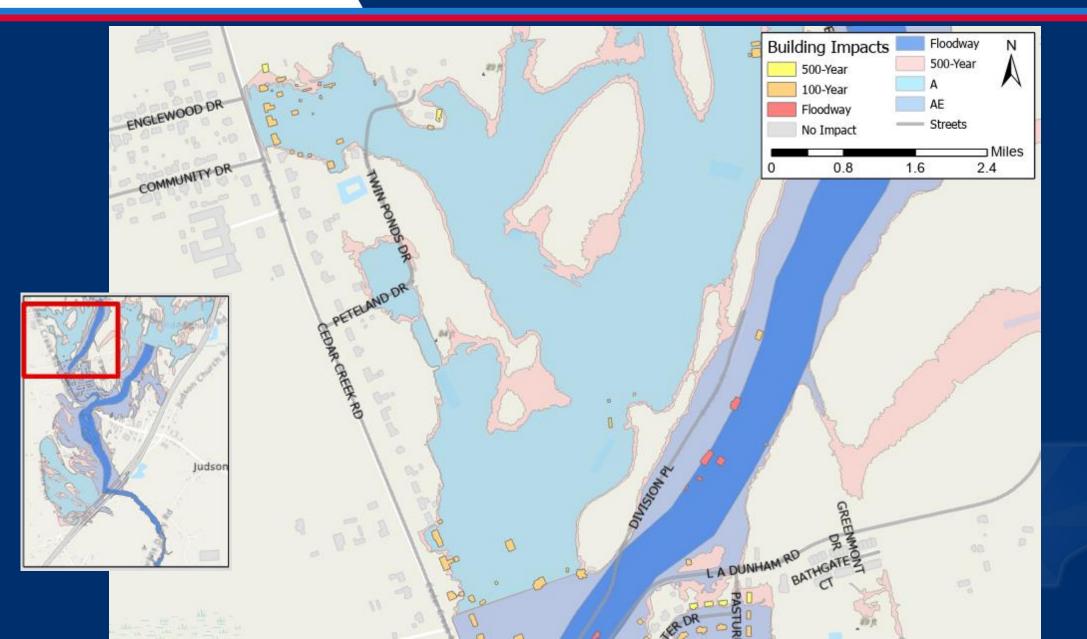


















#### RESULTS

#### Parcel Impacts

#### Parcels with Buildings\*

	Floodway	100-Year	500-Year
City	27	170	178
County	15	103	114
Total	42	273	292

#### Vacant Parcels

	Floodway	100-Year	500-Year
City	34	102	116
County	46	166	213
Total	80	268	329

#### **Building Impacts**

	Floodway	100-Year	500-Year
City	4	205	232
County	13	156	265
Total	17	361	497

	Zone A	Zone AE
City	35	170
County	120	36
Total	155	206

### FAYETTEVILLE

#### Flood insurance requirement

- New home purchase, new construction, refinances mandatory purchase
- Existing homeowners lender may require

# New development held to more stringent development standards

• City's Flood Damage Prevention Ordinance (Ch. 12)

Potential funding assistance



#### Seeking consensus from City Council to direct staff to move forward with Phase II and submittal of a LOMR or PMR to NCFMP for review.





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