



Mid-term Levee Inventory (MLI) Status of Maryland Counties

Paul Slonac, CFM, Michael Baker Jr., Inc.
Steve Eberbach, CFM, Michael Baker Jr., Inc.

October 23, 2008

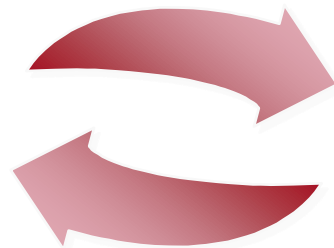
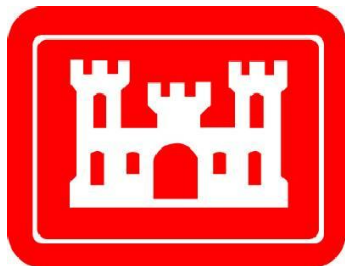
Baker

AGENDA

- **Background**
 - **FEMA-USACE Coordination**
 - **FEMA Requirements**
 - **USACE Requirements**
- **FEMA-Midterm Levee Inventory**
 - **Status**
 - **Recent examples of MLI Data uses**
 - **Next Steps**
- **Maryland Counties**
 - **Status**
 - **Examples**
- **Questions**

Background

- **FEMA and USACE working in partnership to build a common levee database**
 - Work began with the National Levee Policy Review Committee
 - Education on requirements for each agency
 - Collaborative development of the data model
 - FEMA Regions / USACE Districts contributing data to the inventory



FEMA

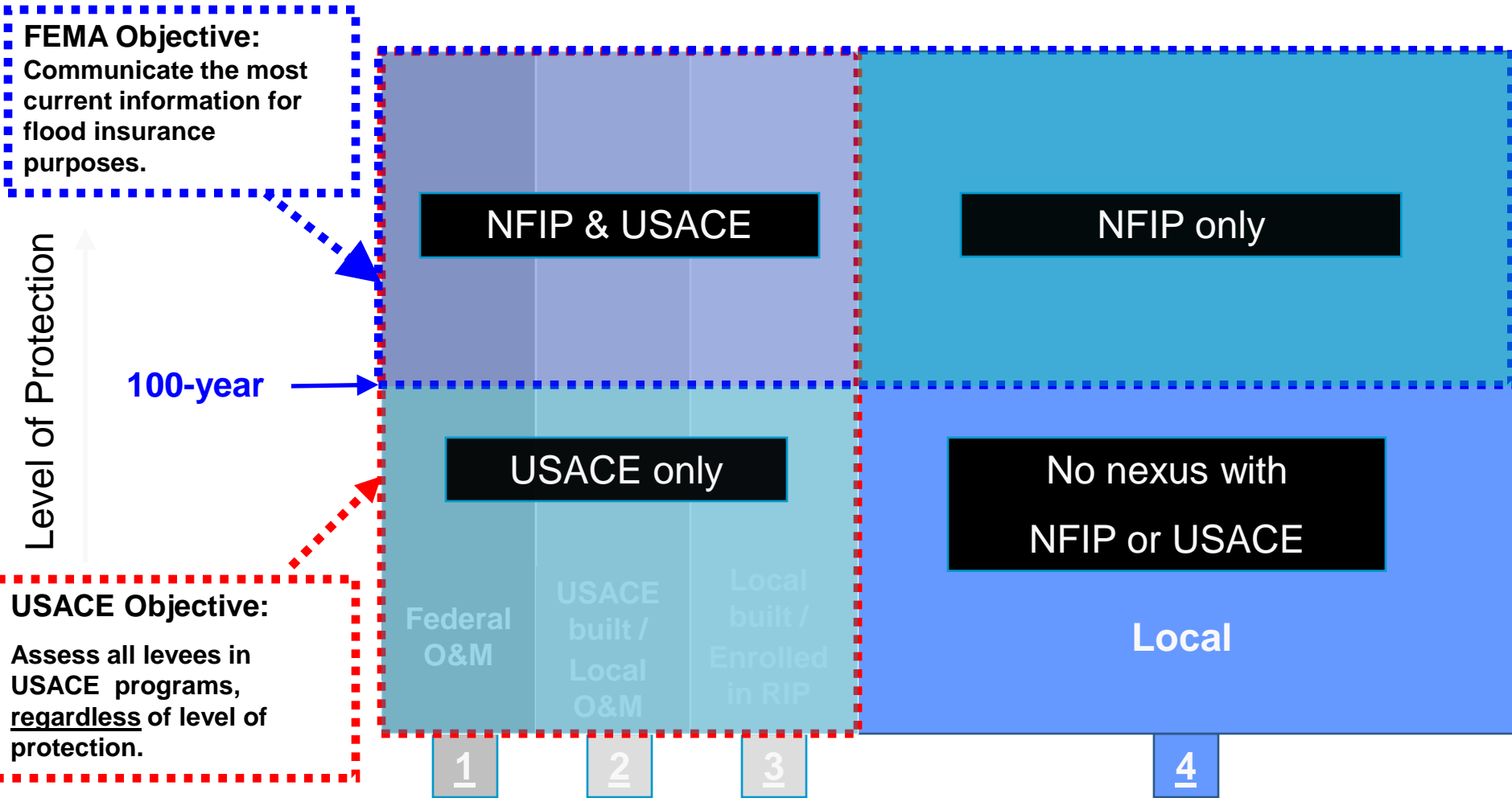
FEMA Requirements

- **Focus on all levees accredited in the NFIP**
 - 1-percent-annual-chance, regardless of ownership
 - Need to answer basic questions
 - Number of levees
 - Miles of levees
 - Certification, accreditation status
 - Track PAL status

USACE Requirements

- **Focus on USACE Project Levees**
 - USACE built, USACE O&M
 - USACE built, Local O&M
 - Local built, accepted in USACE program
- **Previous Efforts**
 - Some geospatial data
 - Geospatial data availability inconsistent

Universe of Levees



Levee Categories

Midterm Levee Inventory

- **Structure is based on the National Levee Database model**
 - Only critical data for FEMA is collected
- **Key Attributes**
 - Levee Centerline Locations
 - Ownership
 - Protection Status
 - Area Protected
 - Accreditation Status
- **Identical Relationships and Fields**



Midterm Levee Inventory

Table: Cumulative Summary of Levees in the MLI for Counties Inventoried

MLI Levee Summary	as of:			
	6/15/2007	9/28/2007	3/28/2008	9/30/2008
Number of Counties Inventoried	62	215	315	414
Number of Levees Inventoried	681	8,574	10,637	13,252
Miles of Levees Inventoried	892	14,630	16,686	20,720



Midterm Levee Inventory

- Recent Examples of MLI Data Uses
 - The MLI database was queried to identify the presence, design, and PAL status of levees in counties affected by the mid-west floods in June of 2008. MLI levee summaries were provided for the States of Indiana, Iowa, Michigan, Minnesota, and Wisconsin. The MLI was also queried for counties along the Gulf Coast states during the 2008 hurricane season.
 - In August of 2008 the National Park Service (NPS) contacted FEMA indicating they were in the process designing a database to begin tracking NPS levees. The NPS after conducting extensive research on existing levee databases identified the MLI/NLD as a authoritative Data Model for that purpose.
 - In July/August of 2008 FEMA received a request to perform a complex geospatial analysis of the 42nd Congressional District to determine the number of homeowners impacted by the addition of new SHFAs and shaded X Zones behind “protecting” levees within the district.

Midterm Levee Inventory

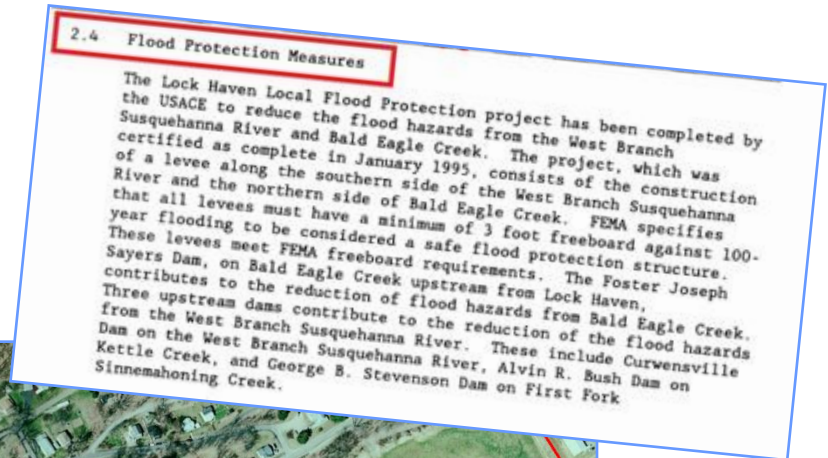
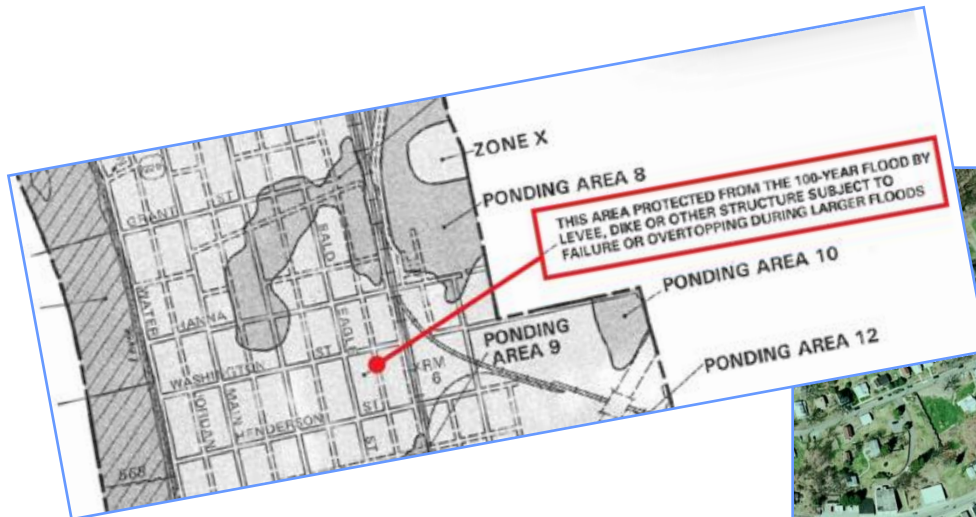
■ Next Steps

- Identify counties to be inventoried in the next phase of the MLI.
- Projection is to complete the remaining effective year 2009 counties for March 2009 delivery.
- Perform maintenance of current counties in the MLI (examples is update current PAL status).
- Continue coordination with USACE to ensure all data model updates are incorporated into the MLI.
- Provide latest version of MLI to USACE for incorporation into the NLD.

Region III MLI Resources

➤ Research

- USACE Inventory
- Effective Flood Insurance Rate Maps
- FIS report references to flood protection structures
- State agency documents
- Aerial imagery



Status of MLI within Maryland

➤ Progress made...

INVENTORIED:	AS OF:		
	6/15/2007	9/28/2007	9/30/2008
Number of Counties	1	3	6
Number of Levee Systems	2	12	30
Number of Accredited Levee Systems	0	1	1

Counties in Maryland with Levees

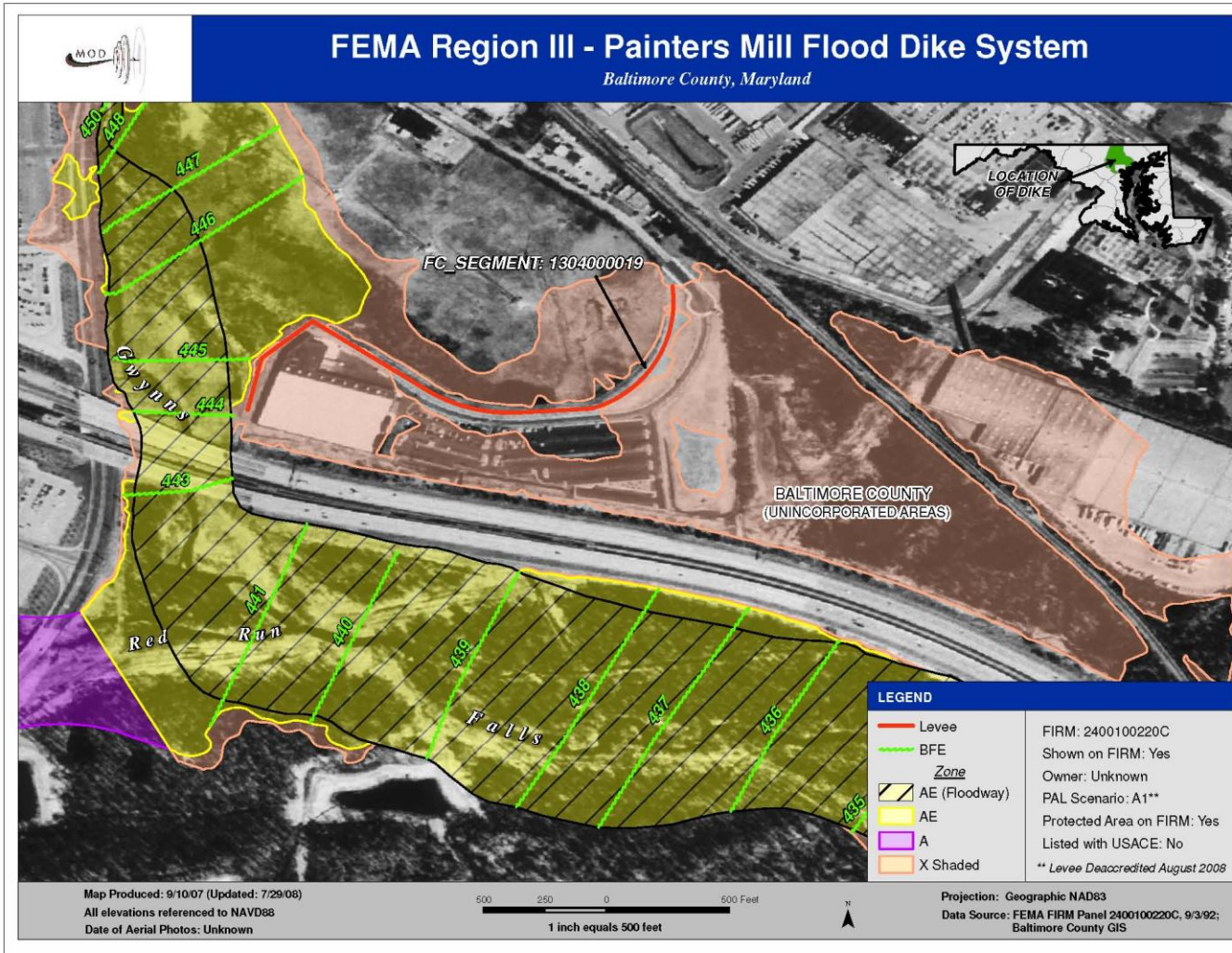
County	Levees	DFIRM Effective Date
Allegany	<ul style="list-style-type: none"> - Lonaconing Floodwalls - Cumberland Ridgeley Project: Wills Creek - Cumberland Ridgeley Project: N. Branch Potomac - Barton-Georges Creek Levee System - Midland-Neff Run - Luke-Westvaco Corp. Floodwalls - Westernport Floodwalls 	-----
Baltimore	<ul style="list-style-type: none"> - Painters Mill - Roland Run 	9/26/2008
Cecil	<ul style="list-style-type: none"> - Sassafras - Back Creek-Chesapeake & Delaware Canal - Elk River (Upstream/Midstream/Downstream) 	-----
Frederick	<ul style="list-style-type: none"> - Carroll Parkway 	9/19/2007
Garrett	<ul style="list-style-type: none"> - Kitzmiller 	-----
Prince George's	<ul style="list-style-type: none"> - Forest Heights - Upper Marlboro - Anacostia 	-----

Allegany County

Levee	Owner	PAL	Protected Area on FIRM	USACE Program
Lonaconing Floodwalls	Unknown	None	No	No
Cumberland-Ridgeley Project: Wills Creek	City of Cumberland	D	No	Yes
Cumberland-Ridgeley Project: North Branch Potomac River	City of Cumberland	D	No	Yes
Barton-Georges Creek System	Unknown	A	Yes	No
Midland-Neff Run Levees	Unknown	None	No	No
Luke-Westvaco Corp Floodwall	New Page Corporation	A	Yes	No
Westernport Floodwalls	Unknown	None	No	No

Baltimore County

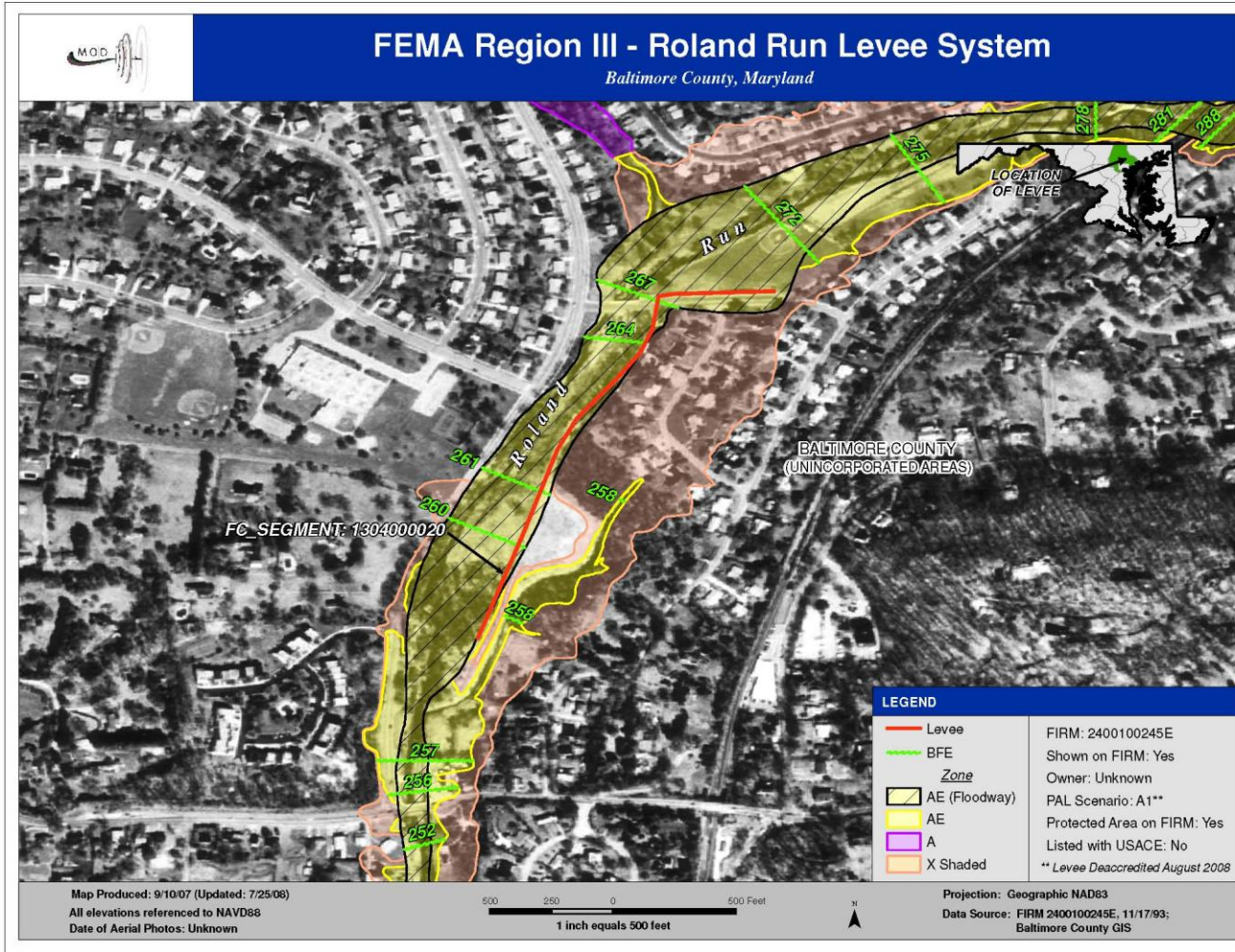
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Baltimore	- Painters Mill - Roland Run	9/26/2008



- Offered PAL on October 23, 2007
- No PAL agreement reached; de-accredited August, 2008

Baltimore County

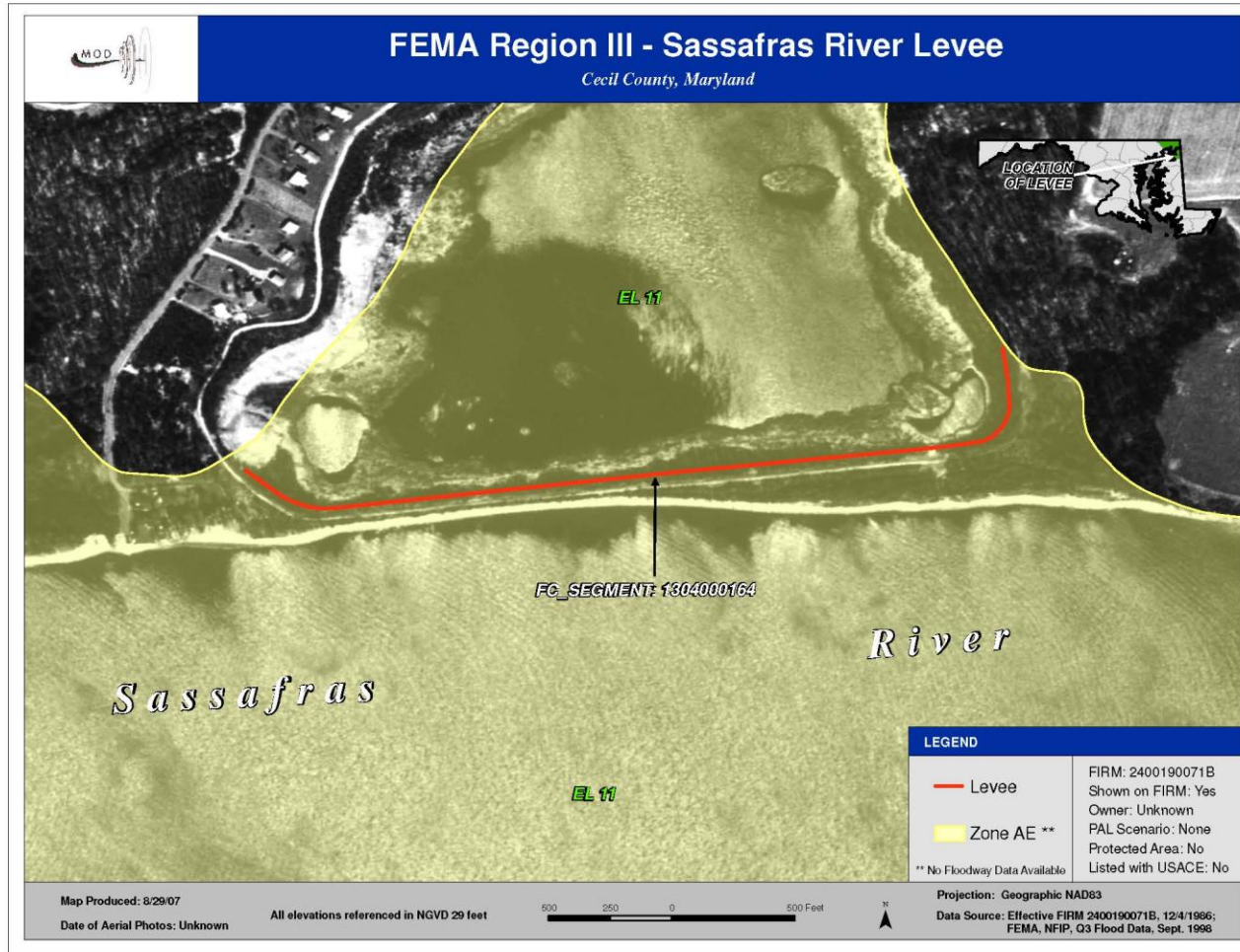
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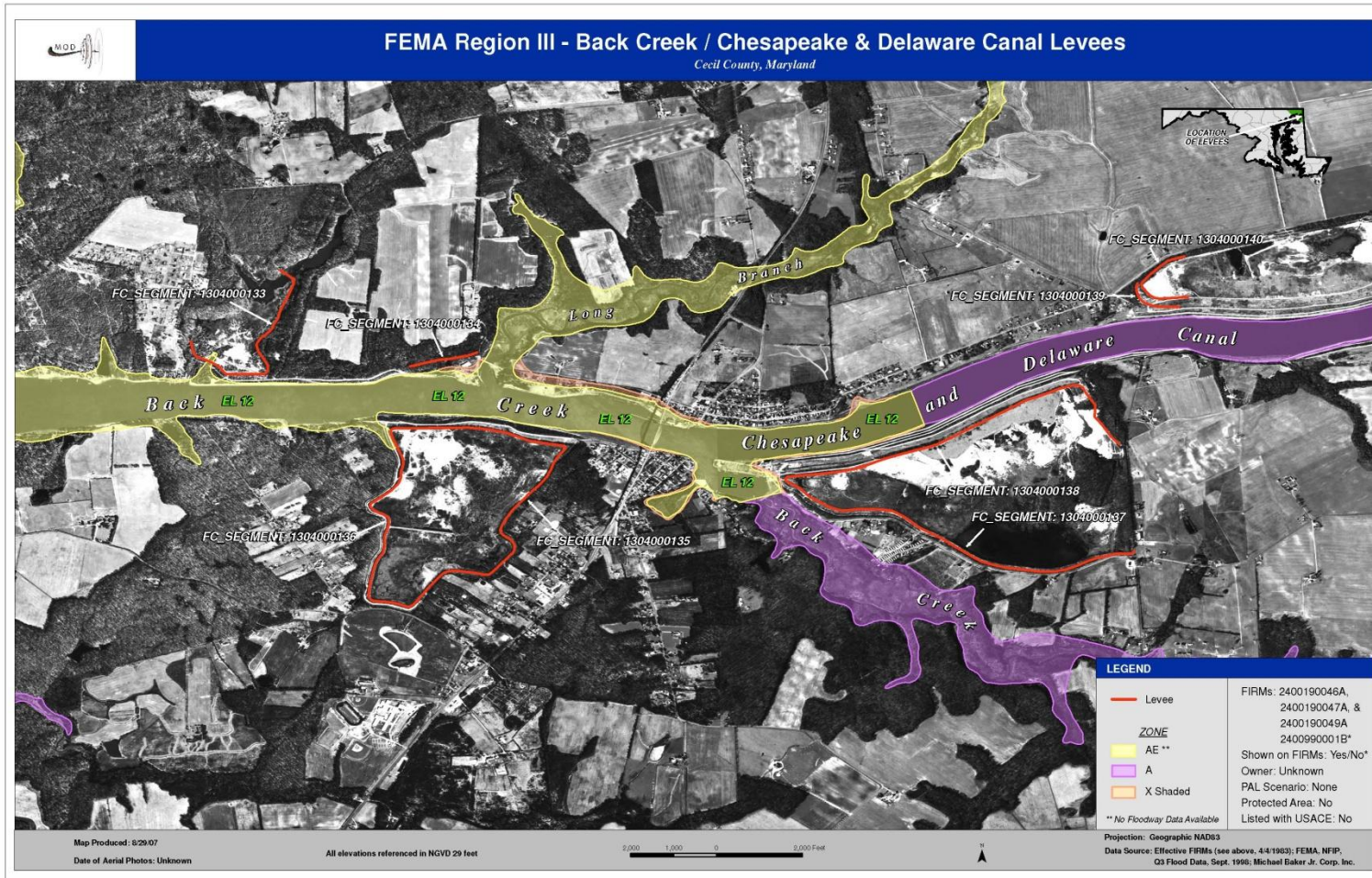
Cecil County

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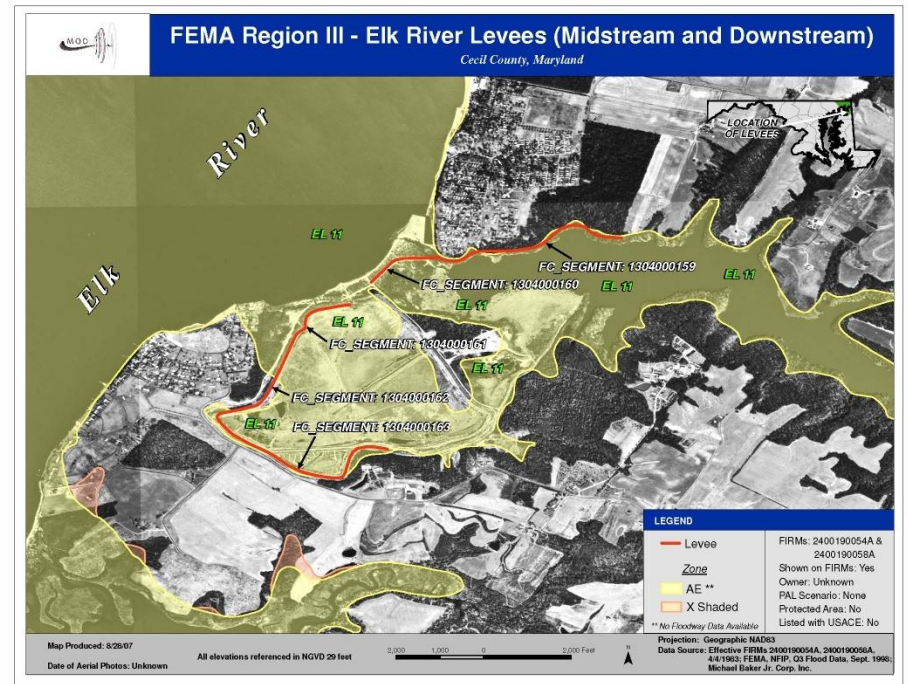
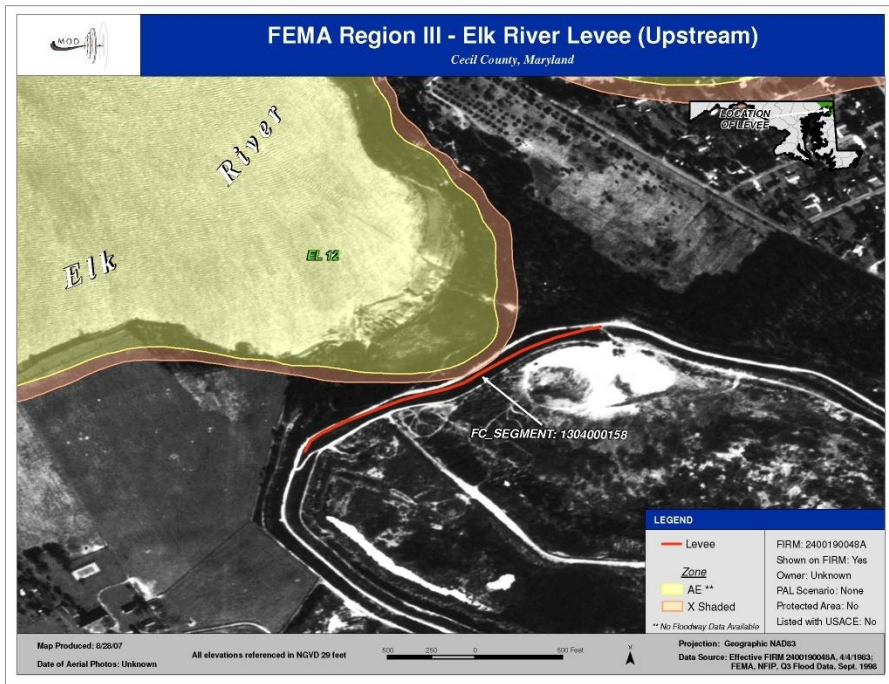
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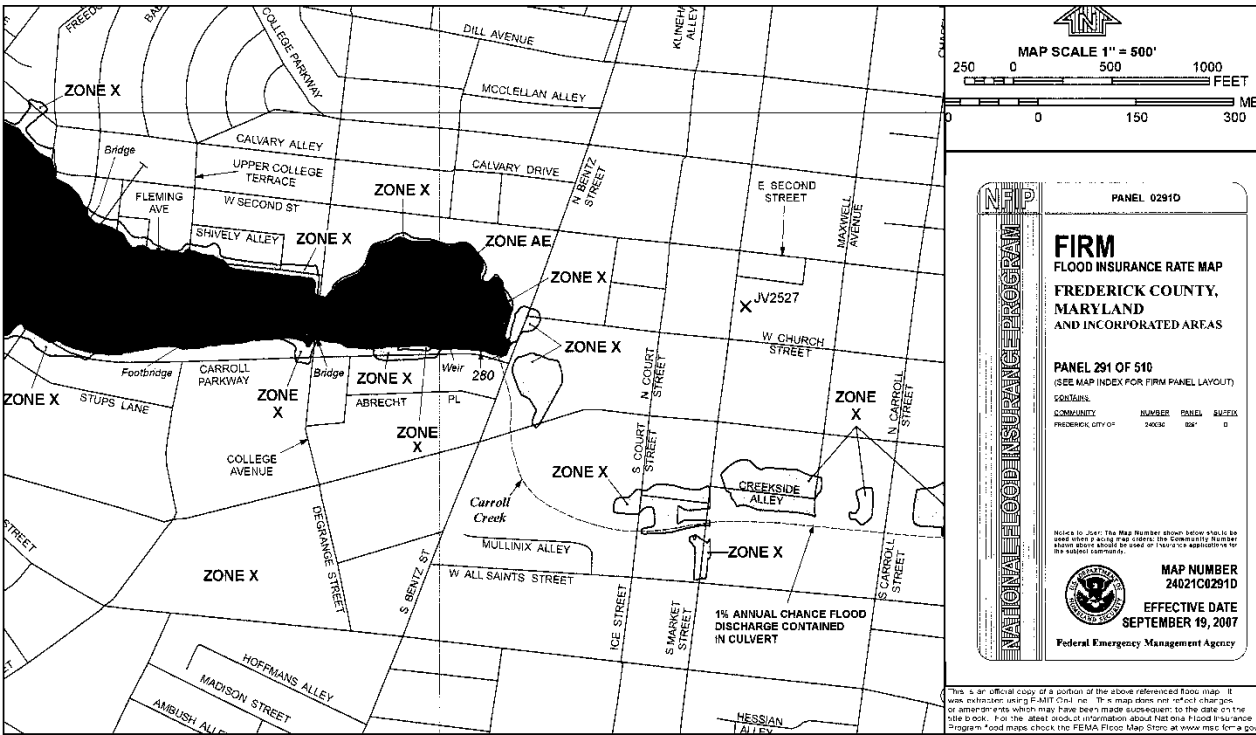
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Frederick County

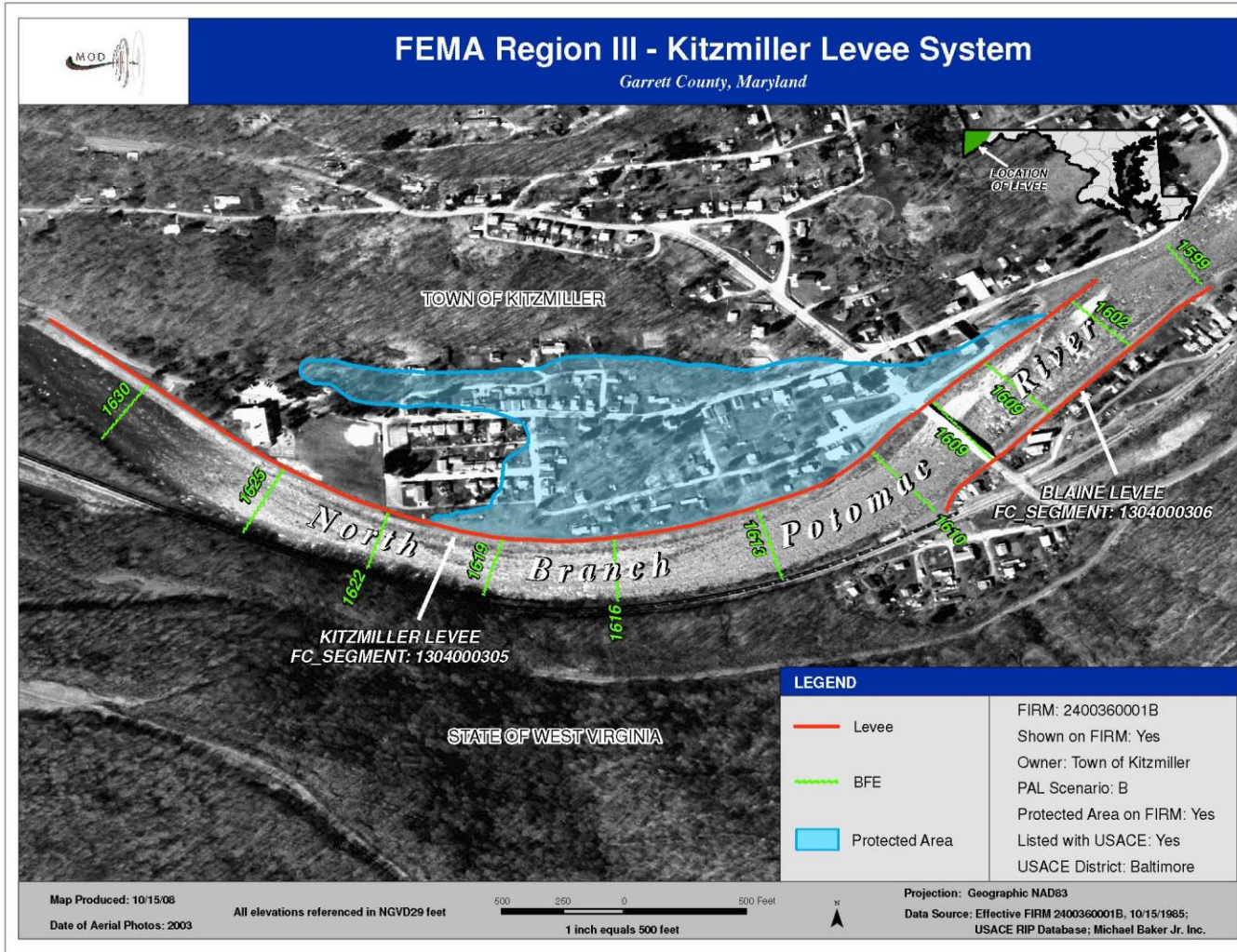
County	Levees	DFIRM Effective Date
Frederick	- Carroll Parkway	9/19/2007



➤ Accredited
January 24,
2003 through
LOMR Case
02-03-117P

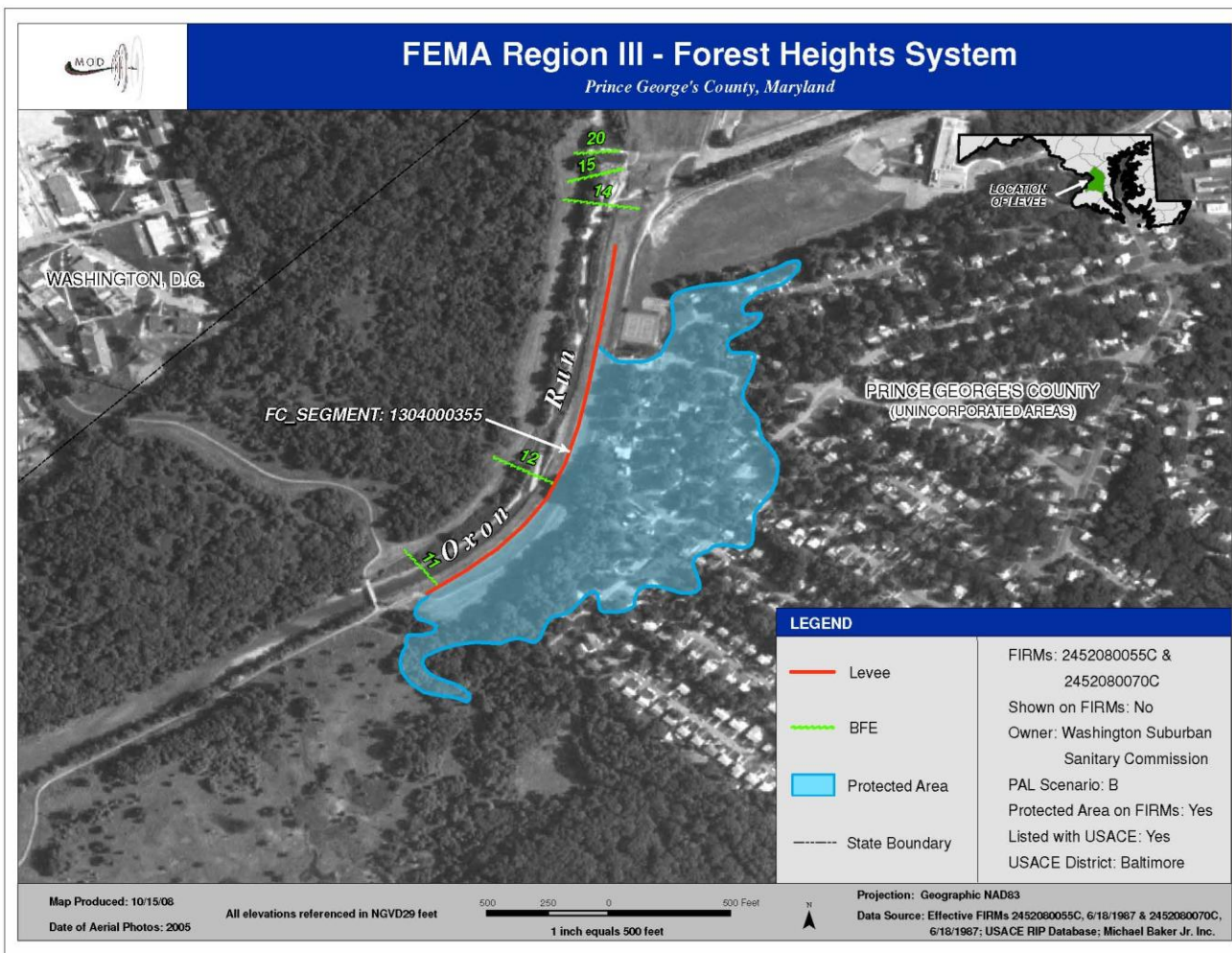
Garrett County

County	Levees	DFIRM Effective Date
Garrett	- Kitzmiller	-----



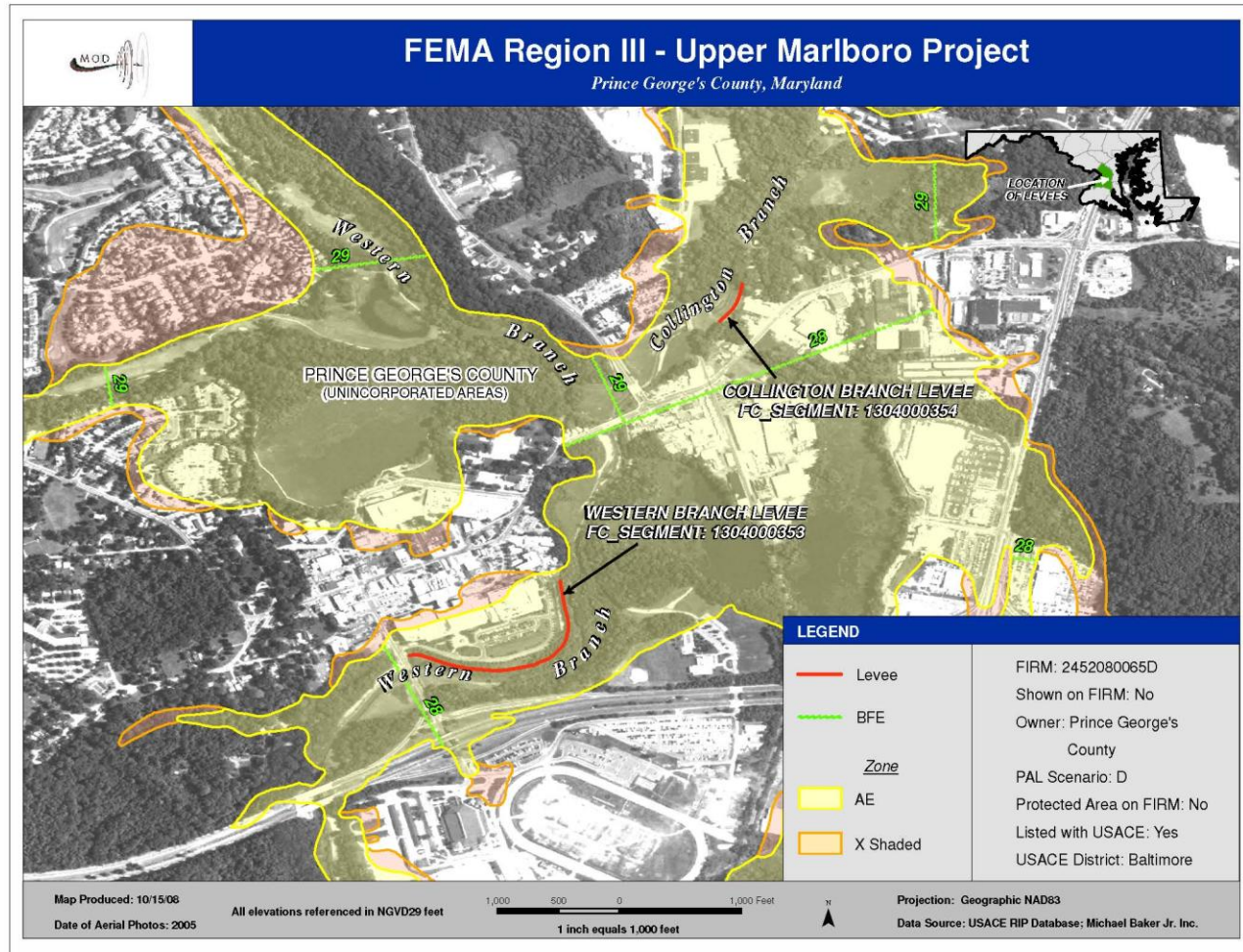
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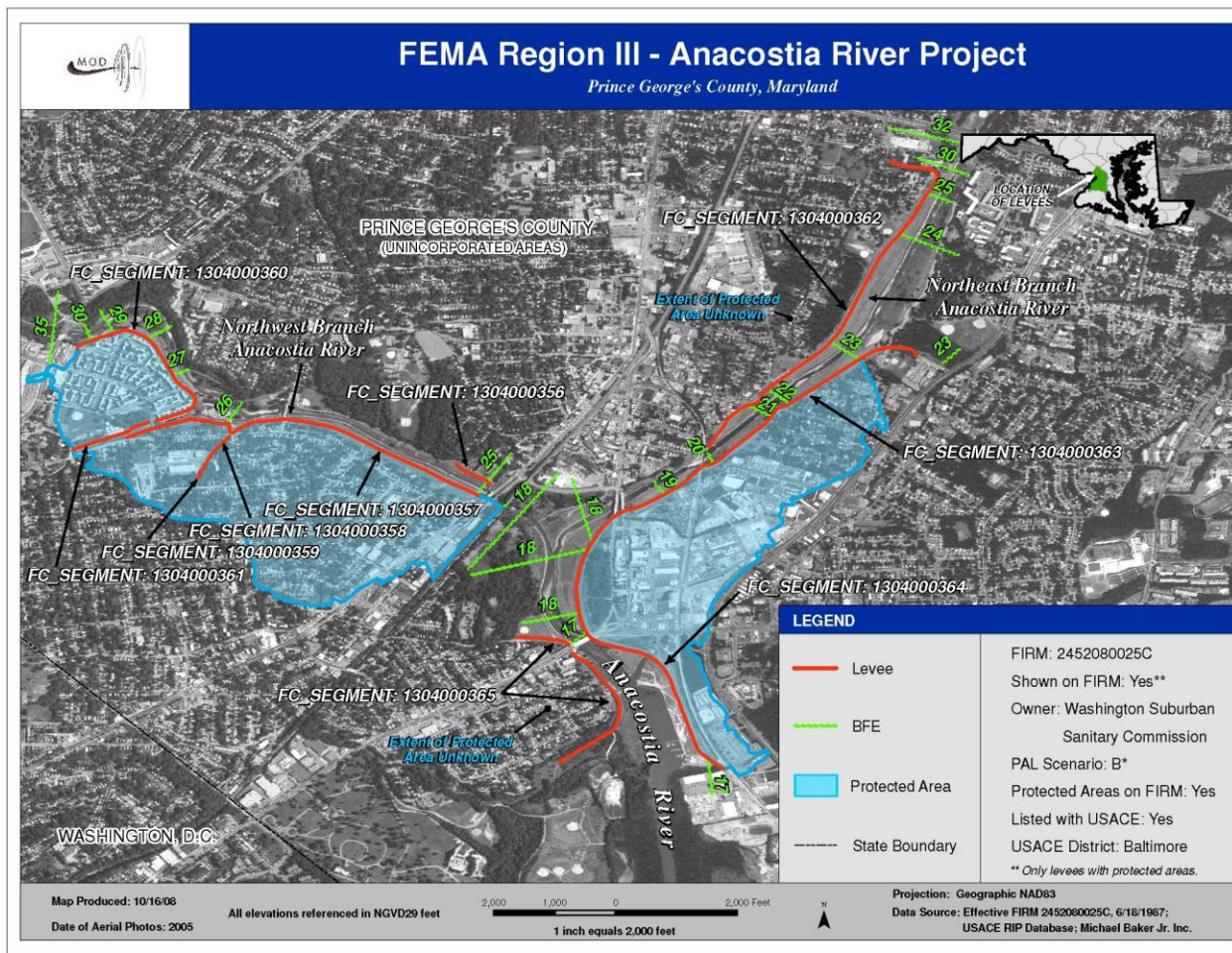
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QUESTIONS????