

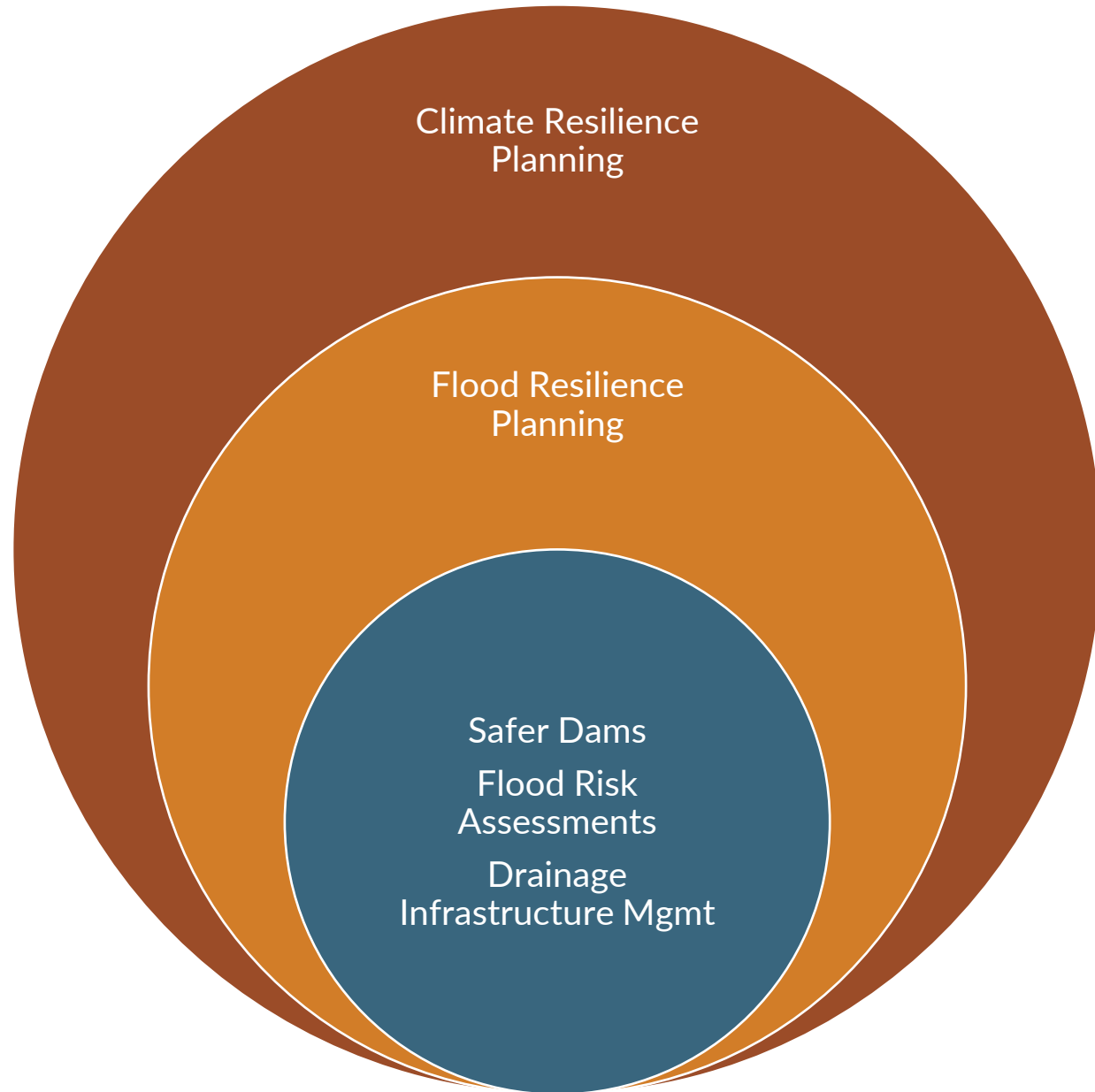
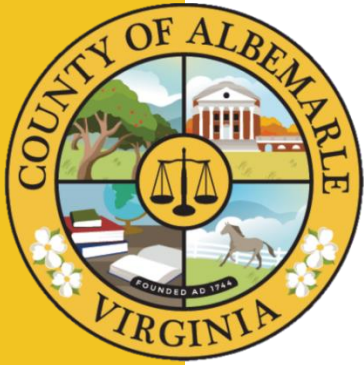
Flood Resilience through Investments in Infrastructure

Presentation to LUEPC

Greg Harper, P.E.

Albemarle County - Chief of
Environmental Services

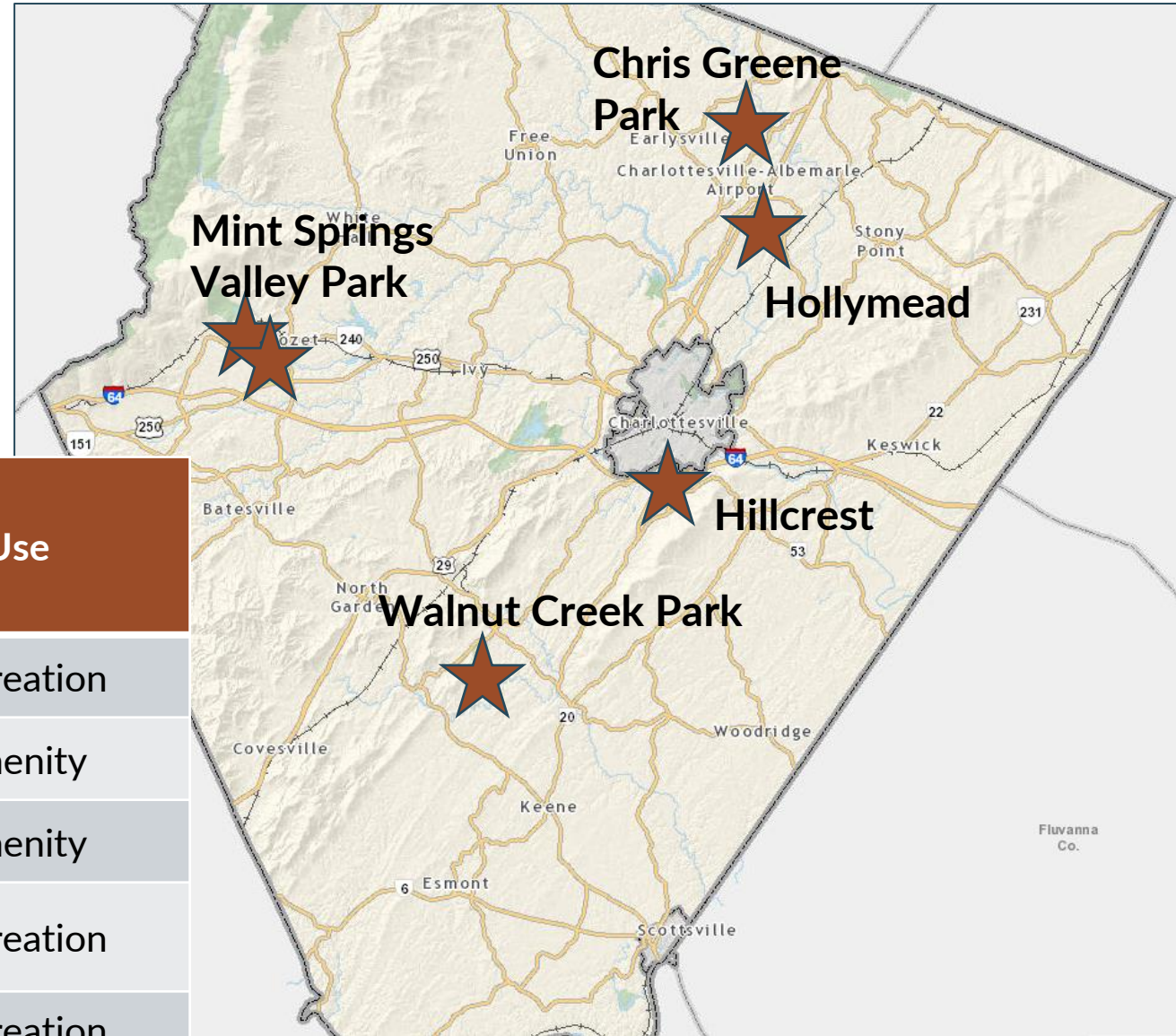
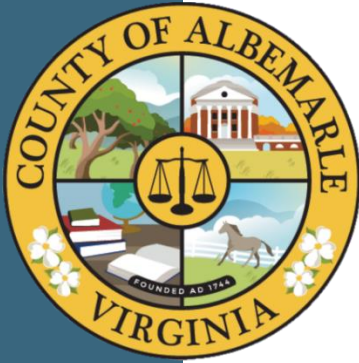
December 15, 2023



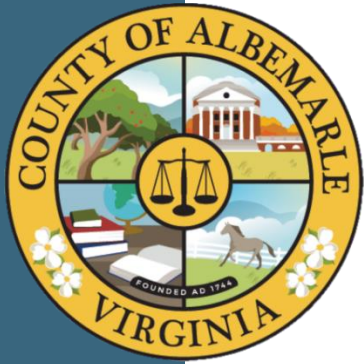


Safer Dams through Owner Outreach and Assistance





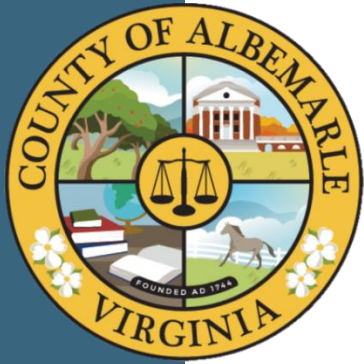
Name of Dam	Year Built	Hazard Potential Class	Use
Chris Greene Park	1968	High	Recreation
Hillcrest	1970	Low	Amenity
Hollymead	1974	High	Amenity
Mint Springs Park - Upper	1961	High	Recreation
Mint Springs Park - Middle	1961 (modified)	High	Recreation (originally water supply)
Walnut Creek Park	1990	Low	Recreation



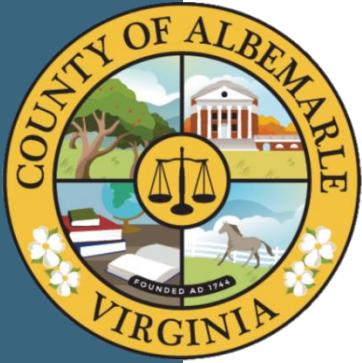
Hollymead Dam (2016)



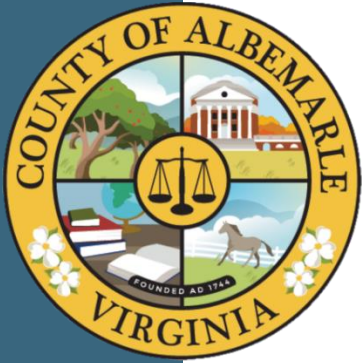
Hollymead Dam Improvements – 2018-2019



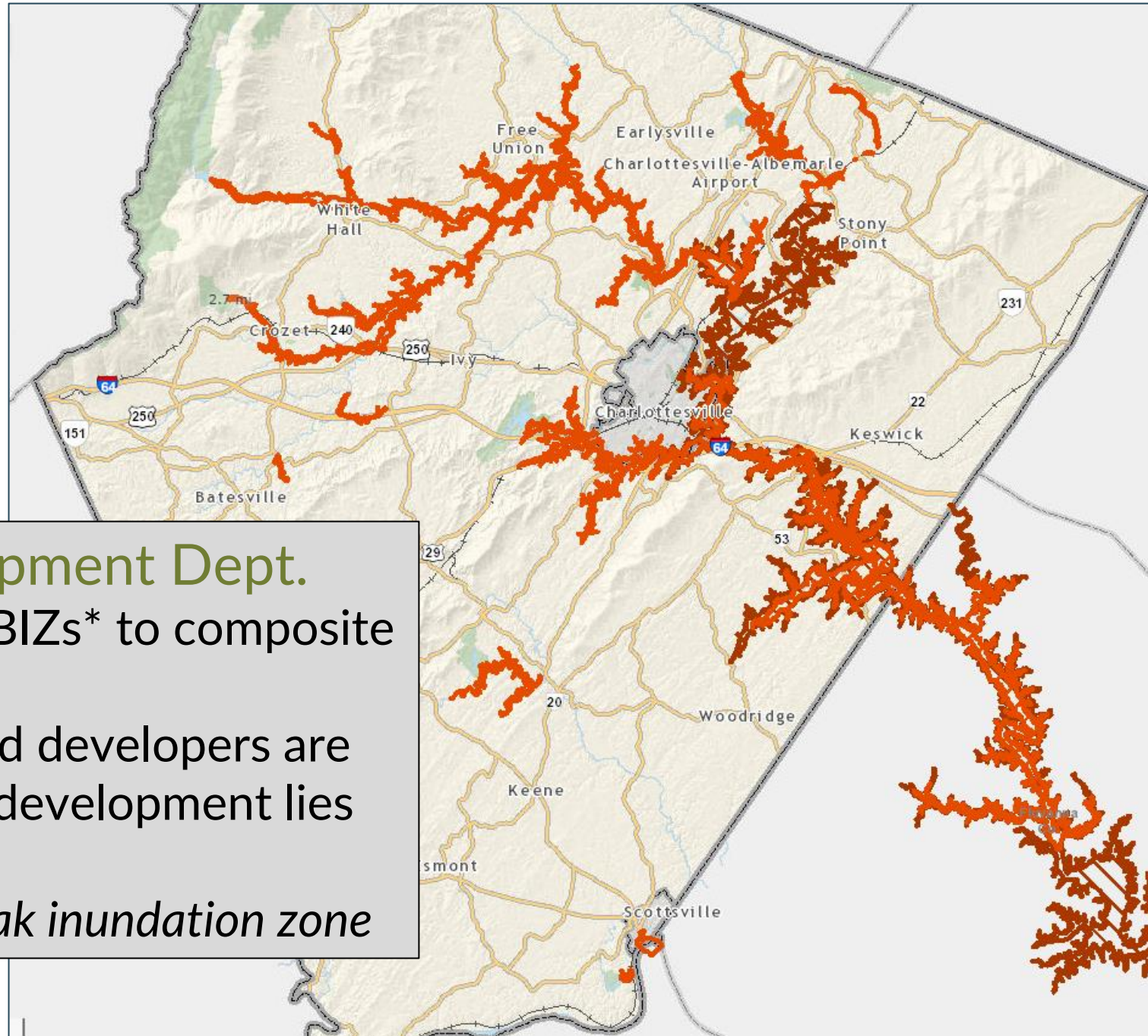
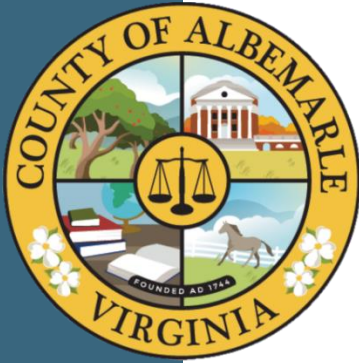
Hollymead Dam Improvements – 2018-2019



(Proposed) Mint Springs Valley Park Dam Improvements – 2023-2025



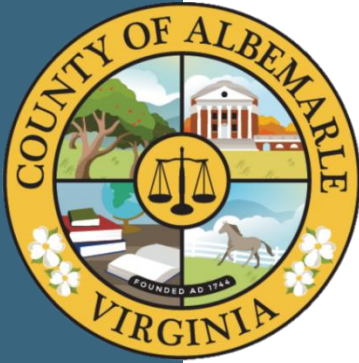
(Proposed) Mint Springs Valley Park Dam Improvements – 2023-2024



Community Development Dept.

- receives and adds DBIZs* to composite layer on GISWeb
- DCR, dam owner, and developers are notified if proposed development lies within DBIZ

*DBIZ - dam break inundation zone



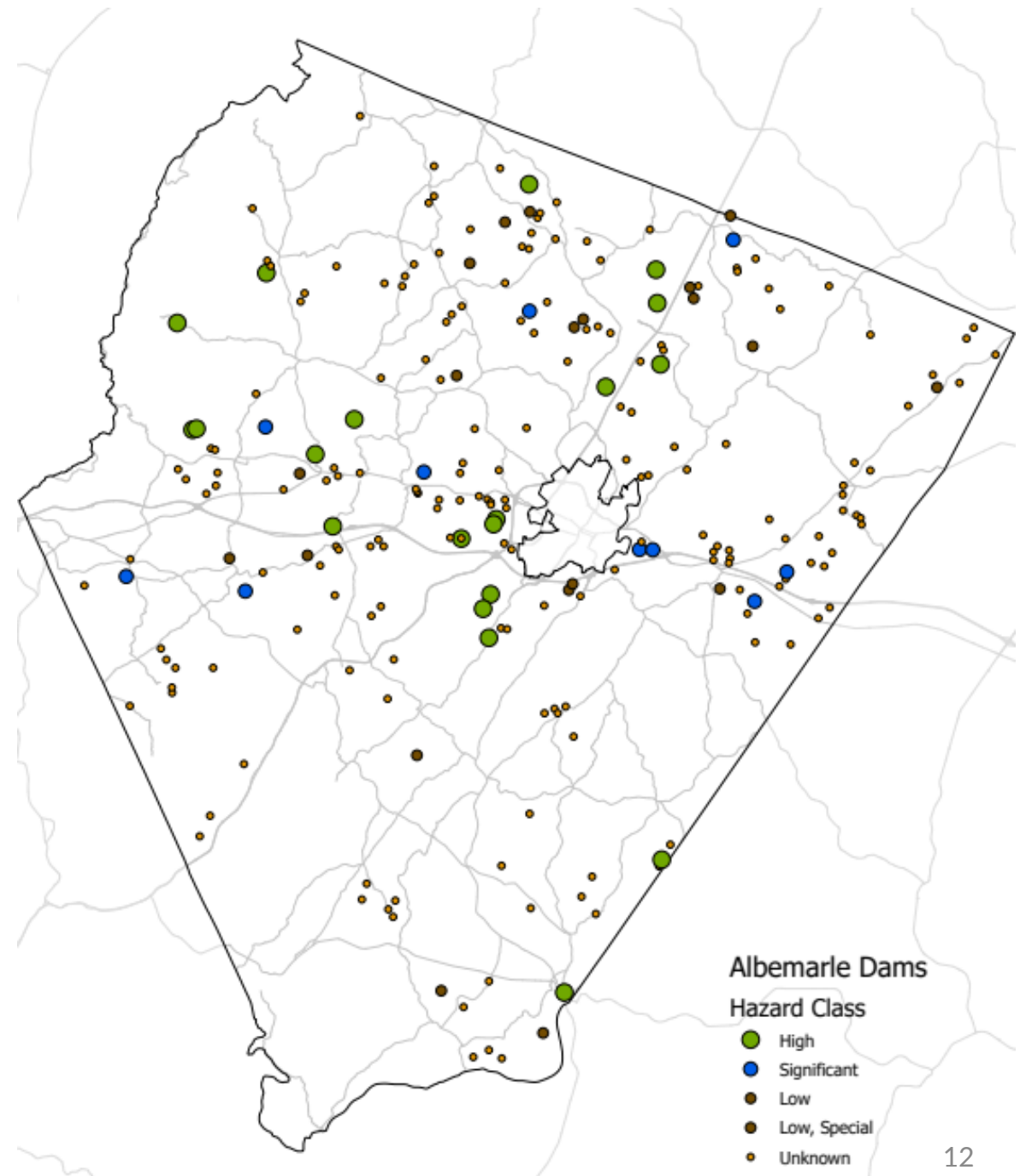
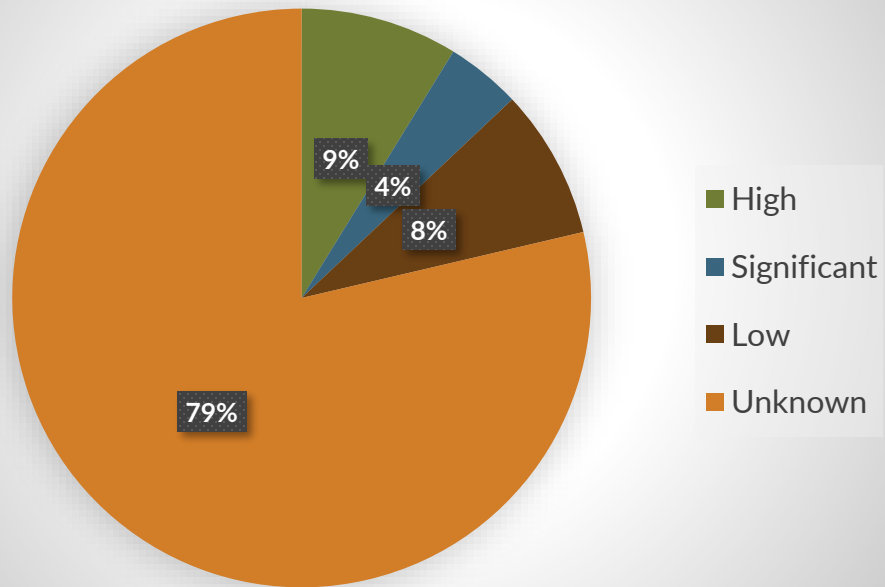
FEMA Collaborative Technical Assistance Program

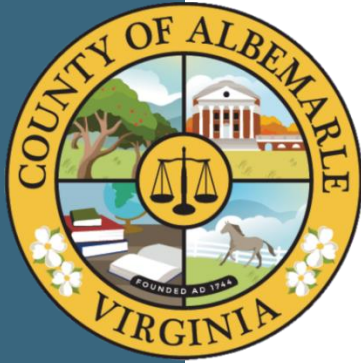
- assist communities to “better understand their risk-landscape and the potential consequences of dam-related emergencies”
- one and two-day work sessions each month from April to August 2023



Information from DCR

State Regulated Dams in Albemarle County

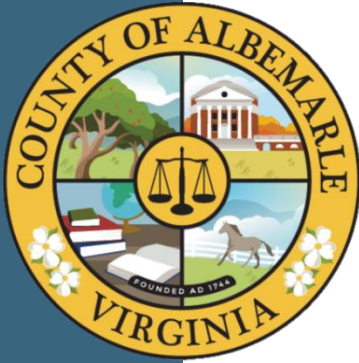




Private Dam Owner Outreach

Intent:

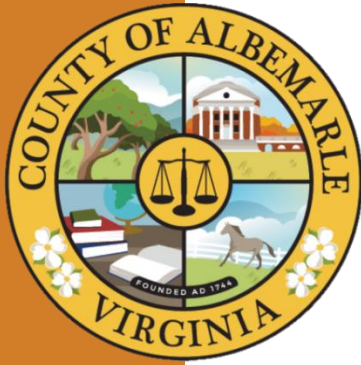
- reach reluctant dam owners
- increase their awareness and participation
- improve dam operation and maintenance
- increase County knowledge (fewer unknown dams)
- decrease overall community risk



Private Dam Owner Outreach

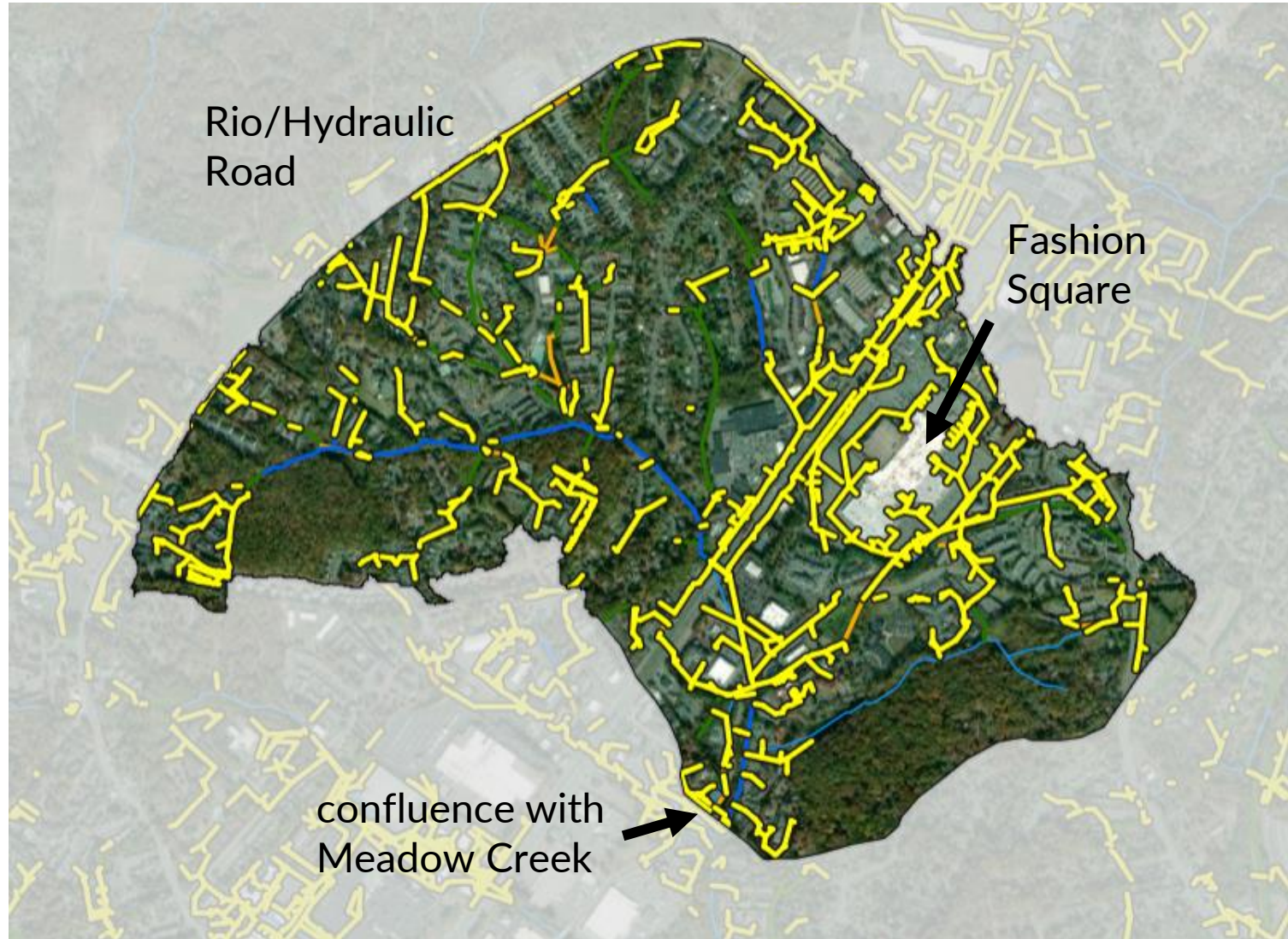
Dam owner workshop(s) – winter/spring

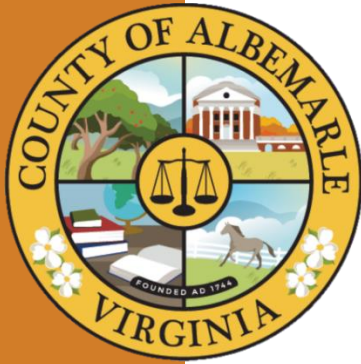
- clarify Virginia regulations
- connect to technical and financial resources
- partner with DCR, TJSWCD, RWSA
- consultants on hand as SMEs



Branchlands Watershed Flood Risk Assessment

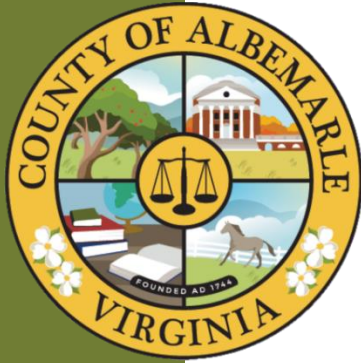
supported by \$96,261
FEMA grant (BRIC)





Branchlands Watershed Flood Risk Assessment

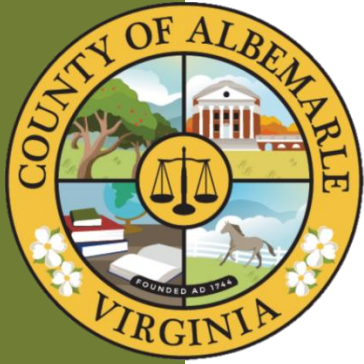
- create models for present and future (2070) conditions:
 - rainfall
 - land cover
- identify greatest flood risks
- identify mitigation activities/projects
 - creating more detention, including floodplains
 - upsizing pipes
 - green infrastructure
 - community awareness



Drainage Infrastructure Management

- a program to maintain *public* stormwater conveyance infrastructure on private property in the County's urban areas





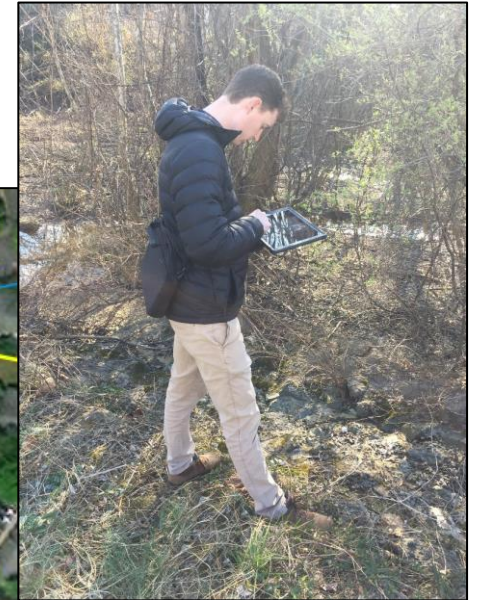
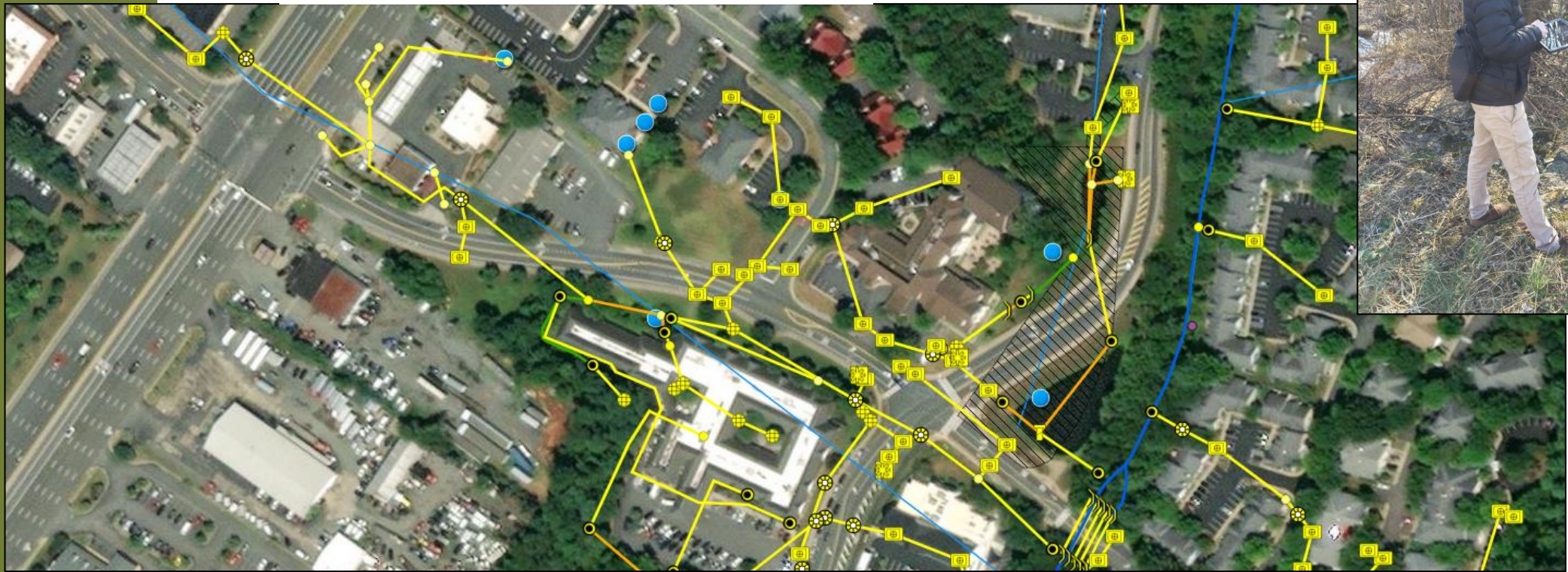
Drainage Infrastructure Management





Drainage Infrastructure Management

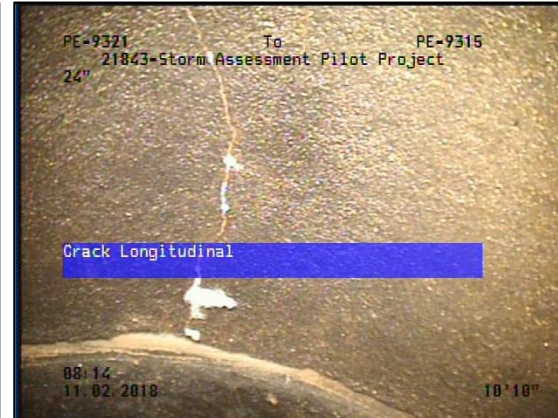
- mapping





Drainage Infrastr. Management

- cleaning and assessing

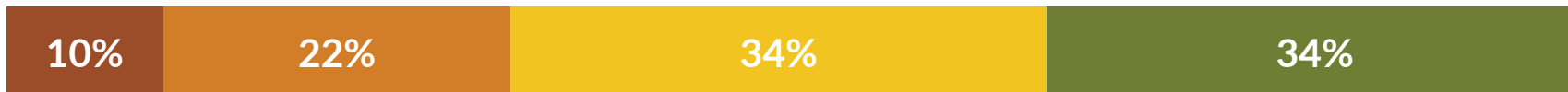


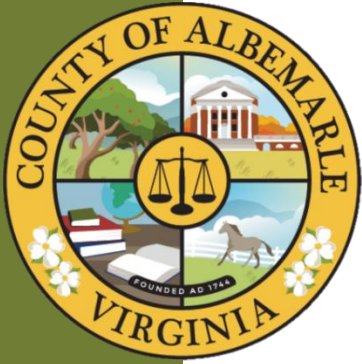
Risk of Failure

Moderate Defects

Minor Defects

Good Condition





Drainage Infrastructure Management

- prioritization and repairs





Questions?