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Innovations on Changes Since Last FIRM Toolset

Vikram Shrivastava, PE, PMP, D.WRE, CFM

Carrie Sigrist, CFM

Scott Ralston, PE, CFM (Iowa DNR)

Chris Kahle (Iowa DNR)

Outreach at CCO Meetings and Open Houses at Preliminary Issuance

Focus of this presentation will be on outreach at CCO Meetings and Open Houses at Preliminary Issuance



Why do outreach on impact of new flood hazard mapping?

- No surprises
- Transparency
- Due process
- Community acceptance of new flood hazard mapping
- Map adoption



Tools to assist in outreach on preliminary FIRMs

The screenshot displays the FEMA's National Flood Hazard tool interface. The main map shows a comparison of flood hazard maps for Allamakee, IA, with color-coded areas representing different flood depths. The sidebar on the right includes sections for FLOOD RISK MAPS, MAP NAVIGATION, SCOUR-PRONE AREAS, FLOOD RISK GRADIENTS, FLOOD DEPTHS, and MAP OPTIONS. The print map panel on the left provides instructions for printing the map and includes a size and file format selection.

Comparison of Flood Hazard
Effective & Preliminary Flood Risks

FLOOD RISK MAPS

- MAP NAVIGATION**
 - Select County
 - Search Address
- SCOUR-PRONE AREAS**
- FLOOD RISK GRADIENTS**
 - Flood Inundation Risk Gradients
- FLOOD DEPTHS**
 - 50% Annual Chance (2-year)
 - 20% Annual Chance (5-year)
 - 10% Annual Chance (10-year)
 - 4% Annual Chance (25-year)
 - 2% Annual Chance (50-year)
 - ☒ 1% Annual Chance (100-year)
 - 0.5% Annual Chance (200-year)
 - 0.2% Annual Chance (500-year)
- MAP OPTIONS**
 - Map Availability
 - About Mapping Project

MAP DESCRIPTION

- 0 - 0.5 Feet
- 0.5 - 1 Feet
- 1 - 1.5 Feet
- 1.5 - 2 Feet
- 2 - 4 Feet
- 4 - 6 Feet
- 6 - 8 Feet
- 8+ Feet

Print Flood Map

Input

To print NFHL FIRMette or Full FIRM:

- 1) Click the pin tool, and click on the map.
- 2) Choose to create a print-size FIRMette or Full FIRM.
- 3) Press "Execute" - The process may take a few minutes.*

Size*

FIRMETTE

File Format*

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Tools mapping to different levels of Outreach

Countywide

- › Prelim FIRMs, FIS, SOMA, DFIRM DB
- › CSLF



Neighborhood

- › CSLF?

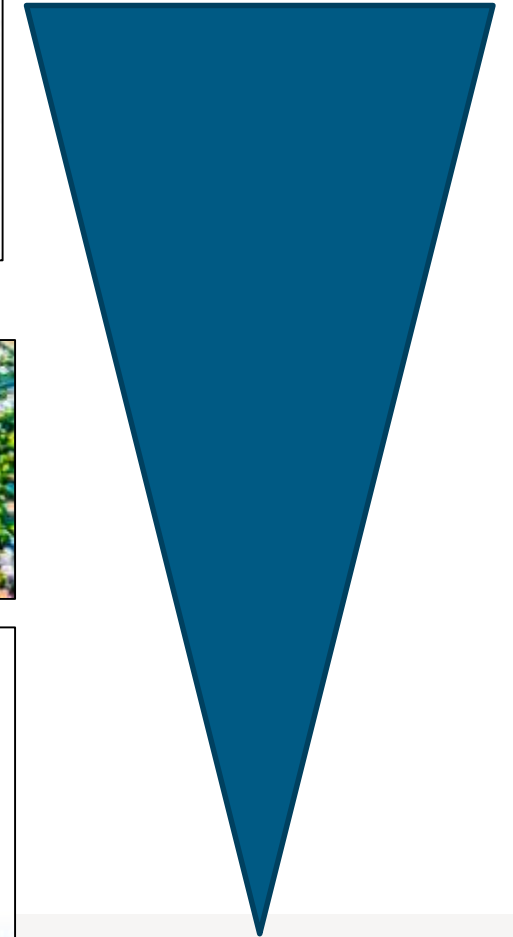


Needed



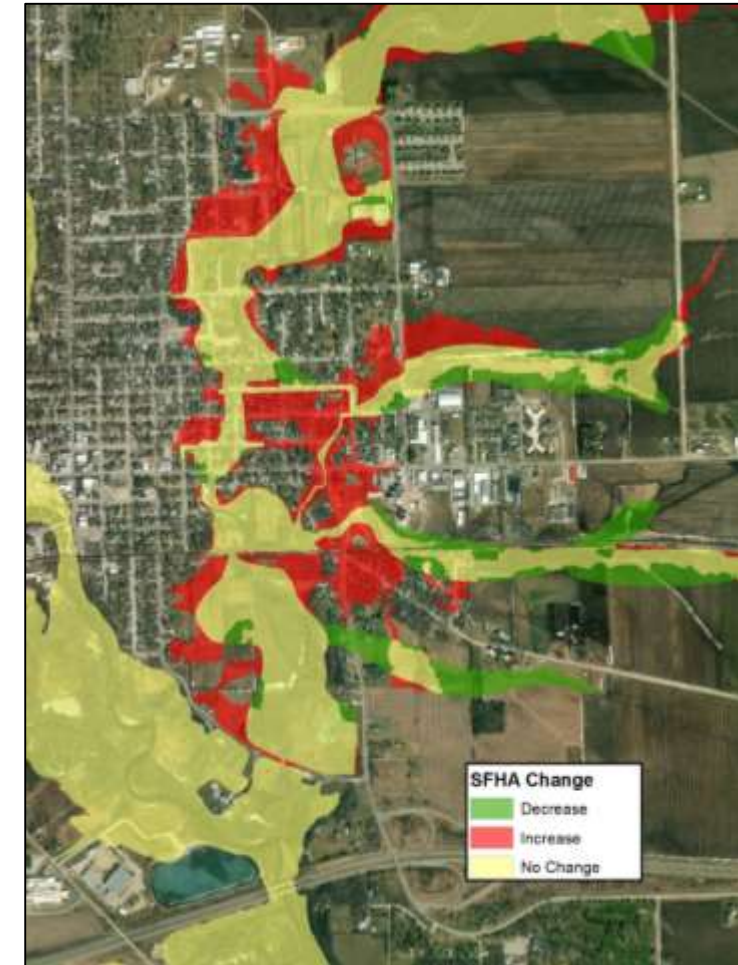
Property

- › Depth & WSEL Grids
- › Percent Annual Chance Grid
- › Building Footprints & Structure Centroid Data
- › Preliminary Map Comparison Tool
- › CLSF?



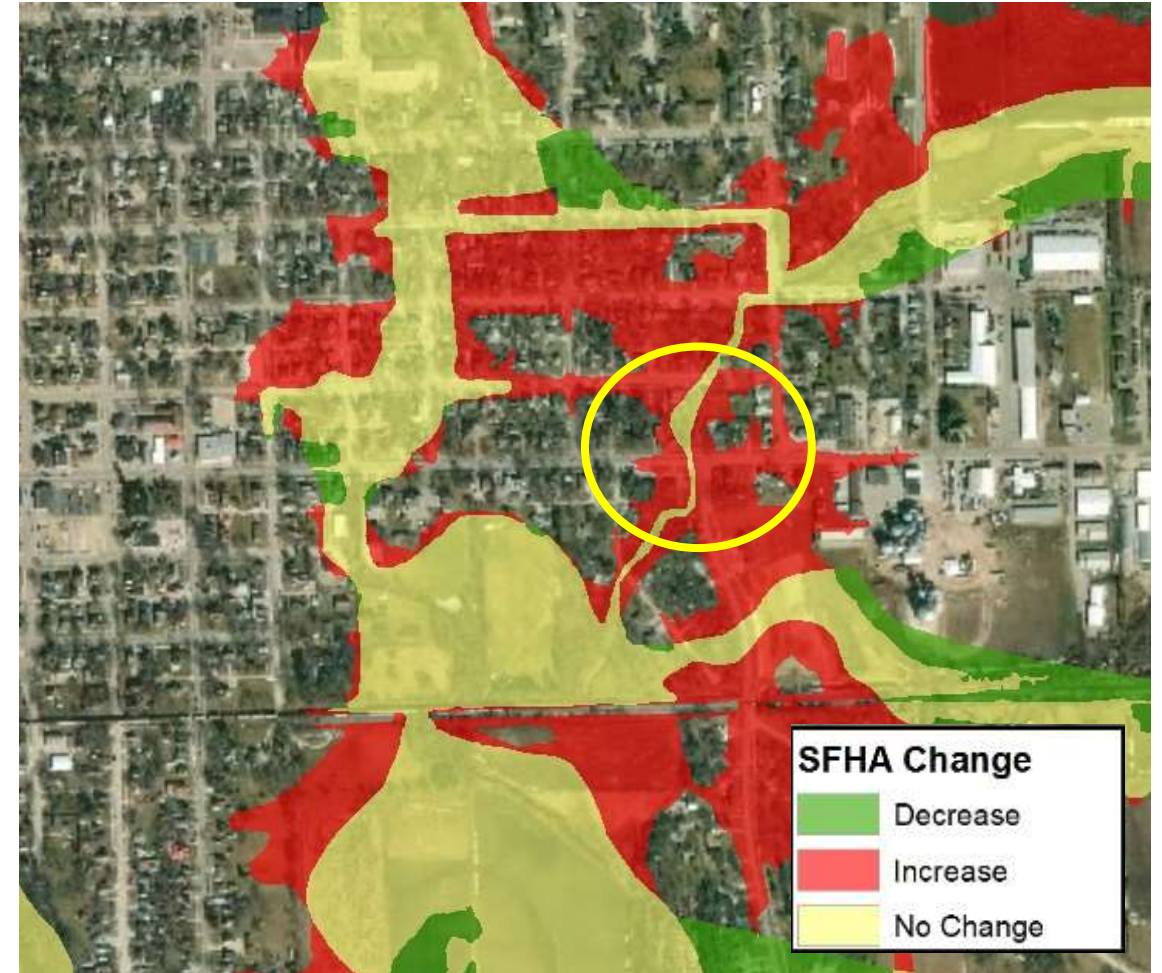
Changes Since Last FIRM (CSLF)

- CSLF enables a visualization of changes to the floodplain and floodway extents.
- Advantages
 - Gain insights into horizontal changes between effective and preliminary floodplains
- Disadvantages
 - Does not fully communicate BFE changes in area of “no change”
 - No insights into depth of flooding in areas newly mapped in the SFHA



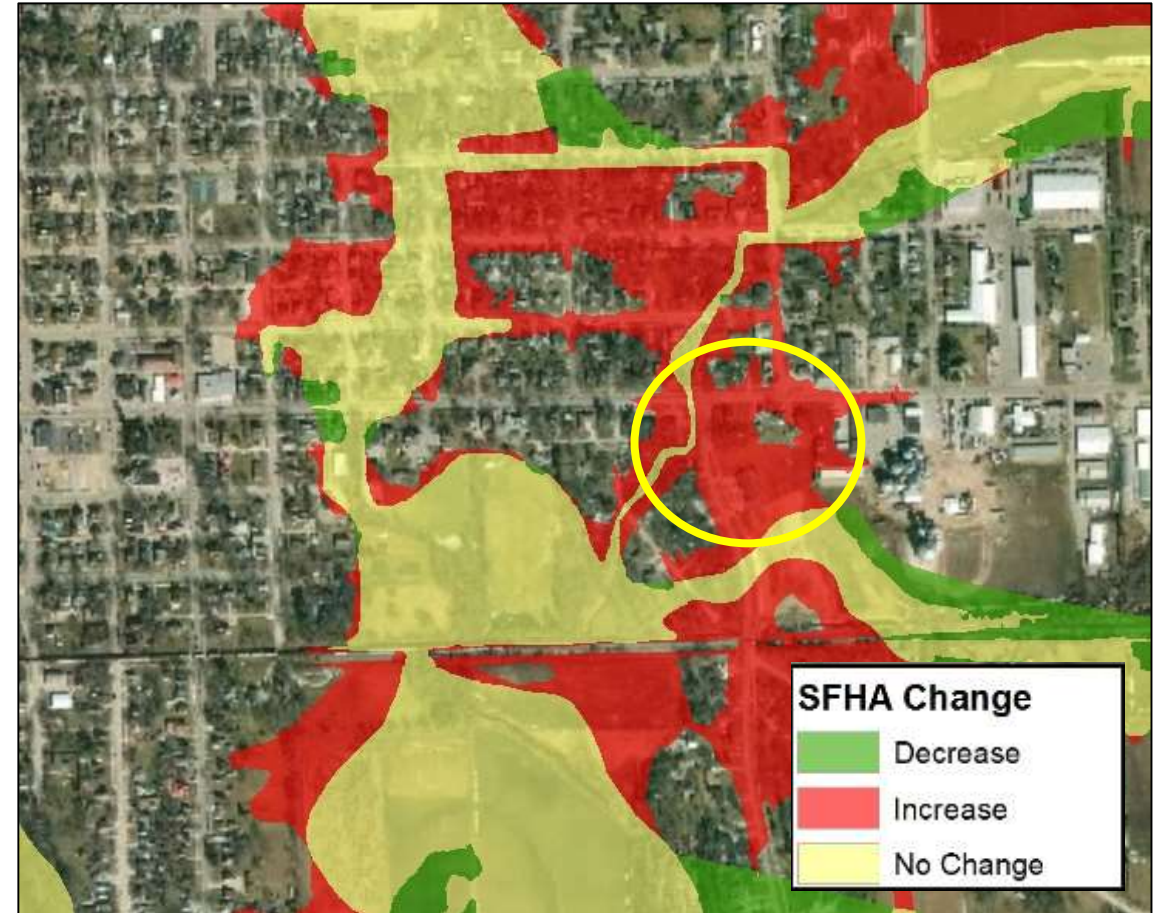
CSLF Limitations - Why do we need insights on BFE changes in area of no change?

- Miscommunication that certain property owners are not affected by preliminary FIRMs
- Allow community officials and FPAs to engage with such property owners and explain why the flood hazards are changing
- Avoid property owners learning of change from insurance agents or mortgage companies



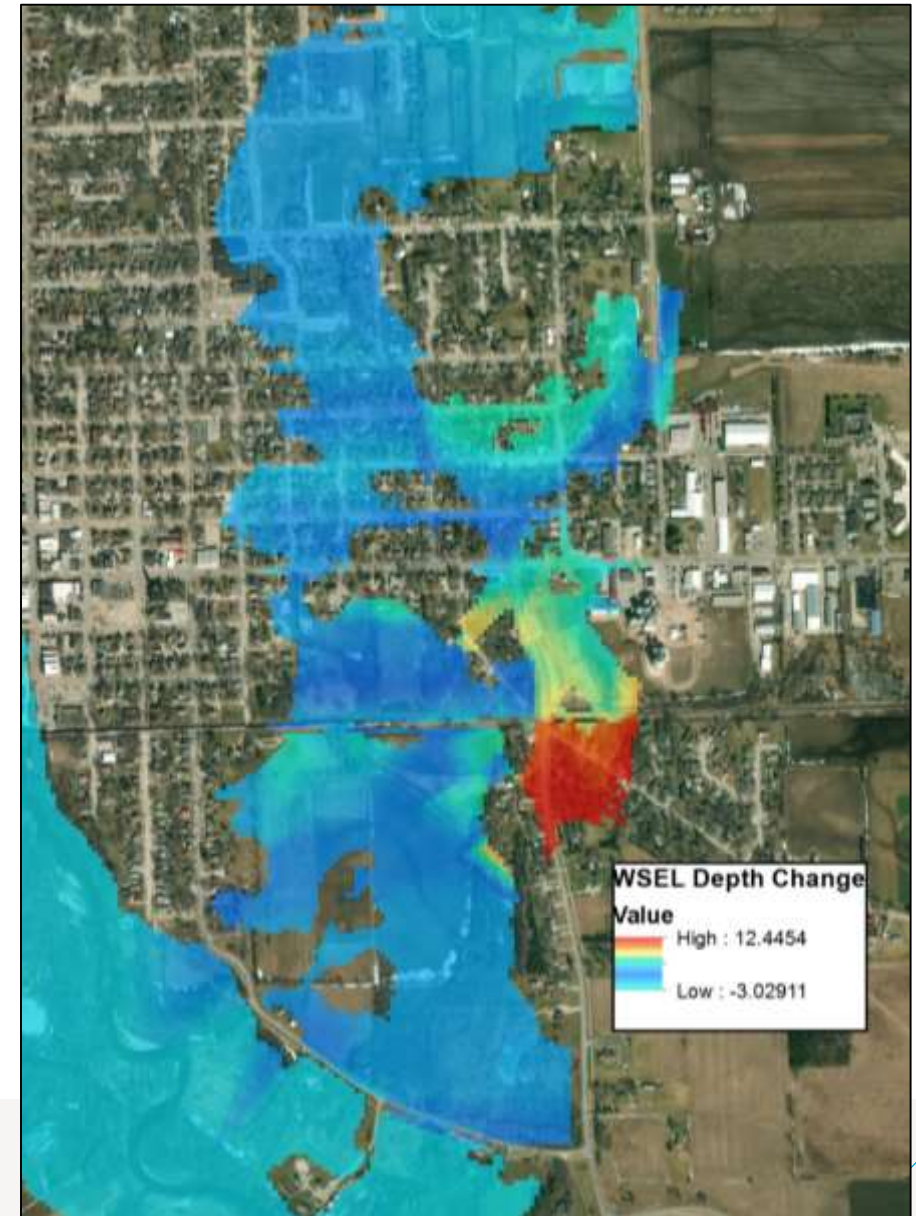
CSLF Limitations - Why do we want insights on flood depths in areas newly mapped in the SFHA

- Allow community officials / FPAs to determine if there are properties that are mapped in the SFHA but may benefit from a LOMA
- Allow community officials / FPAs to identify properties that may benefit from mitigation actions or buyouts

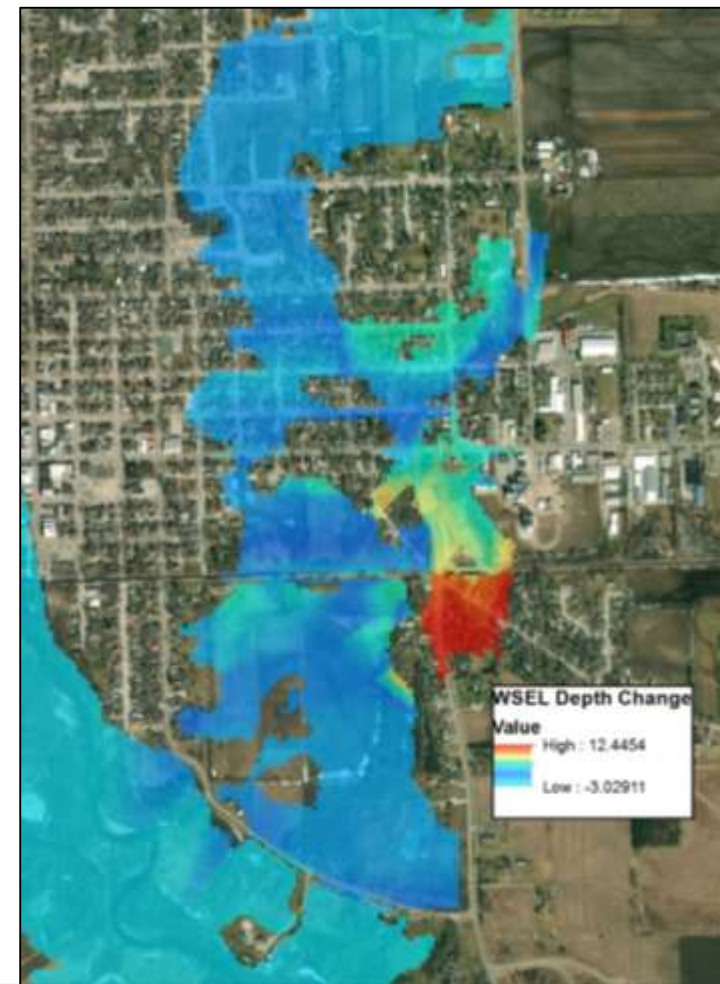
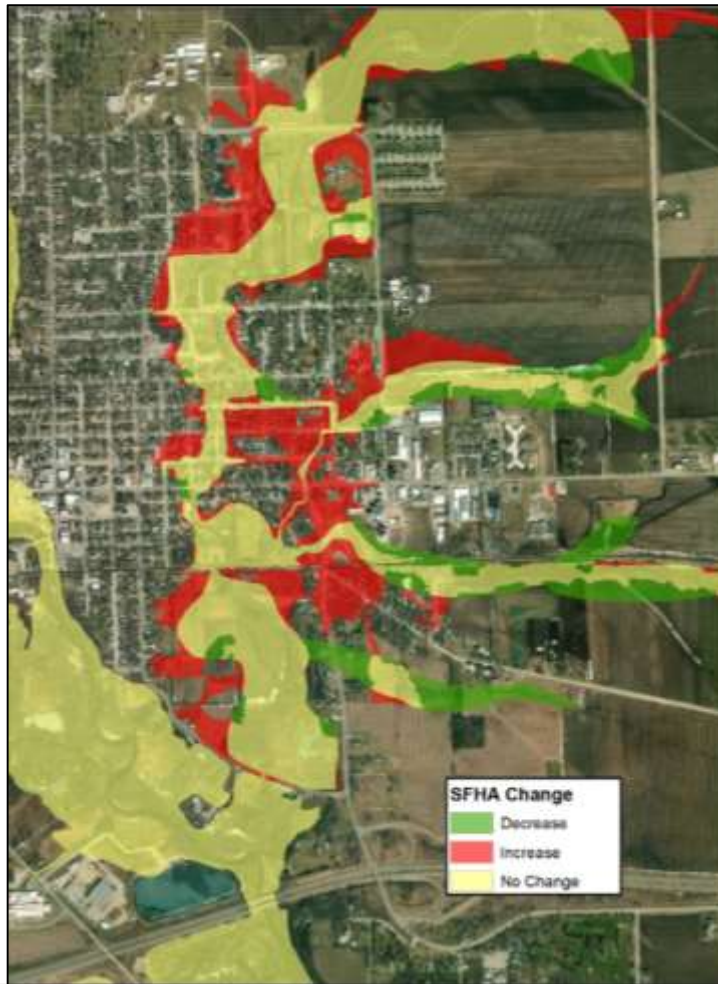


Proposed CSLF Enhancement

- **Solution**
 - Heat map of differences in WSELs on effective FIRM and preliminary FIRM
- **Attributes**
 - Indicates change in BFE
 - Estimated depth for areas newly mapped in SFHA
 - Identification of areas where depth grids are needed

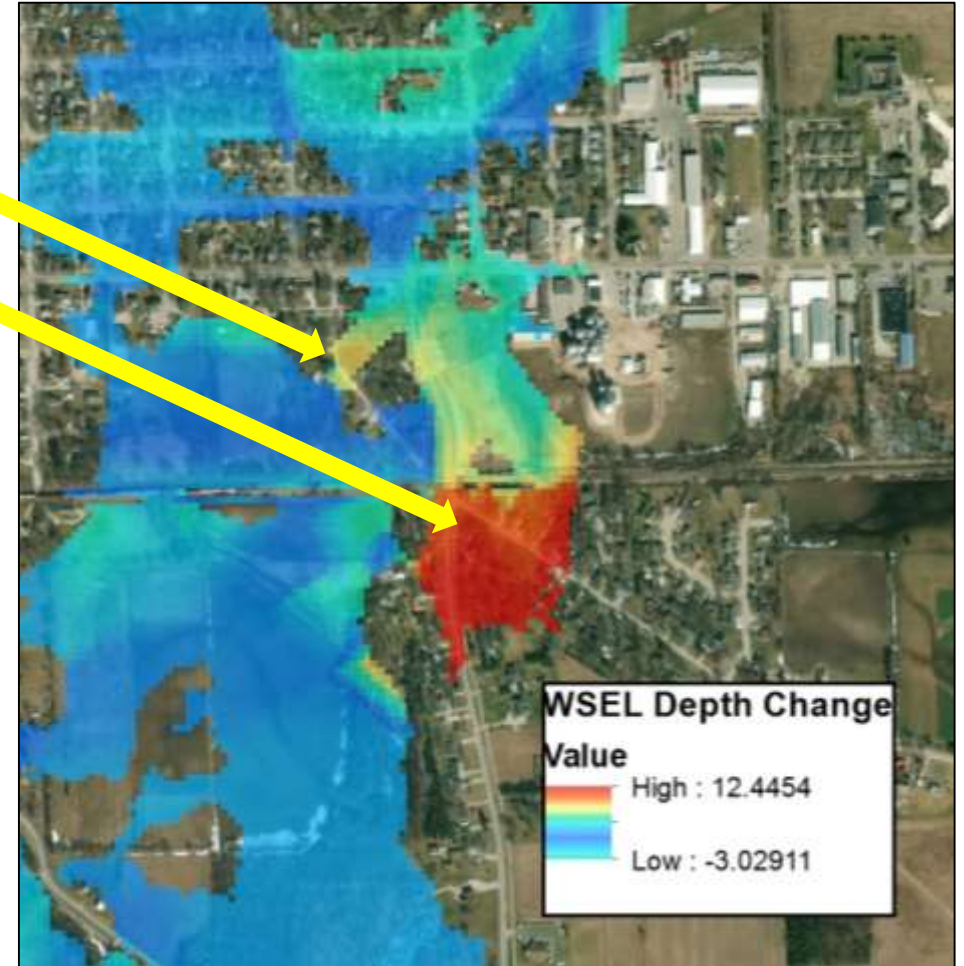


Case Study 1. Restudy of effective Zone AE reaches



Case Study 1. Restudy of effective Zone AE reaches

- Insights gained
 - Changes for properties in effective SFHA
 - Significant changes for properties newly mapped in SFHA
 - Need for outreach



Case Study 2. Restudy of effective Zone A reaches



Case Study 2. Restudy of effective Zone A reaches

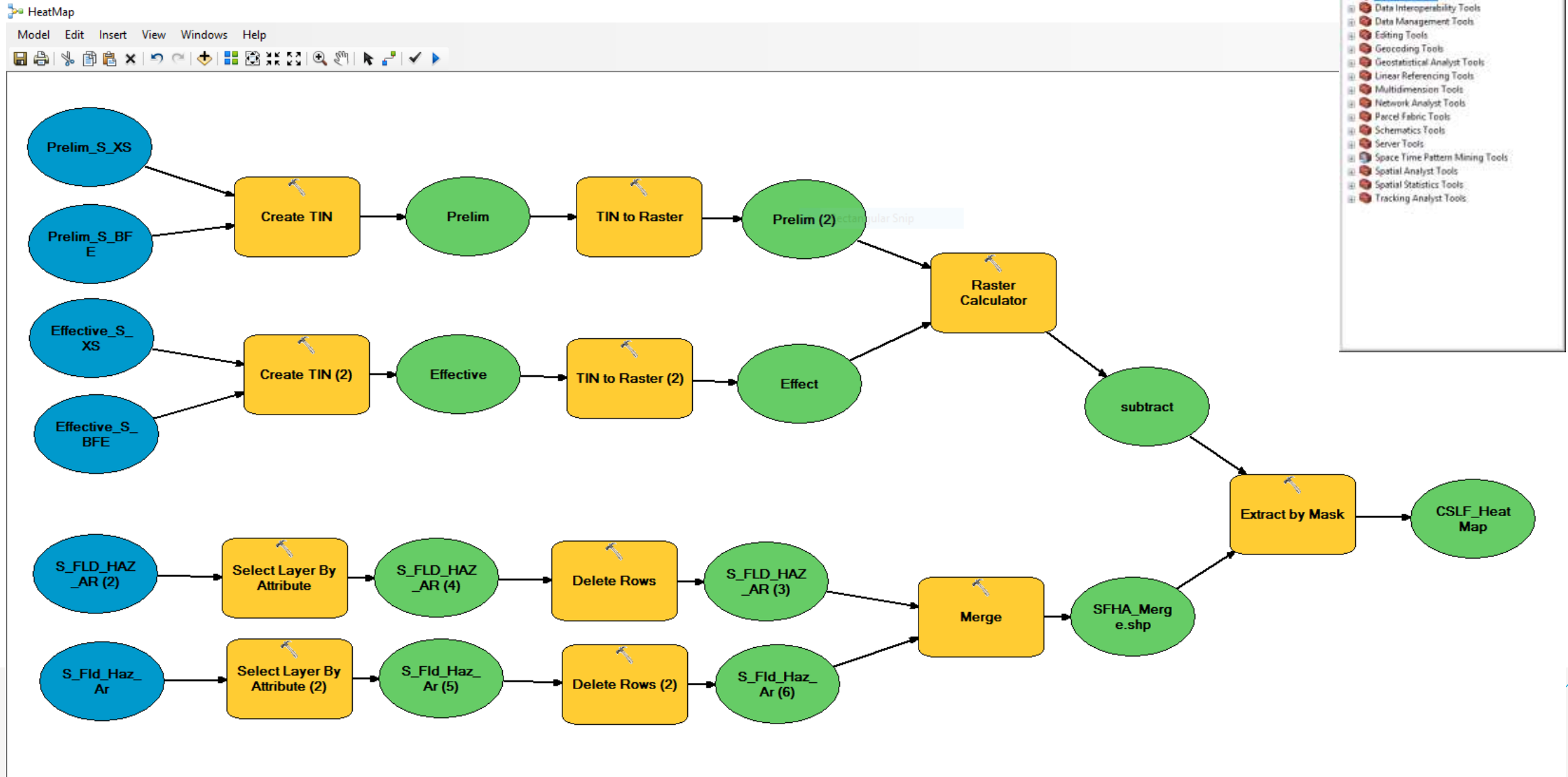


Case Study 2. Restudy of effective Zone A reaches

- **Insights gained**
 - 1% annual chance WSELs now available for Zone A reaches
 - Some reaches are now studied in detail (i.e. WSEL available) which were Zone As with no WSEL on effective FIRM
 - Community officials and FPAs can determine if LOMAs are useful for property owners.



Proposed CSLF Enhancement



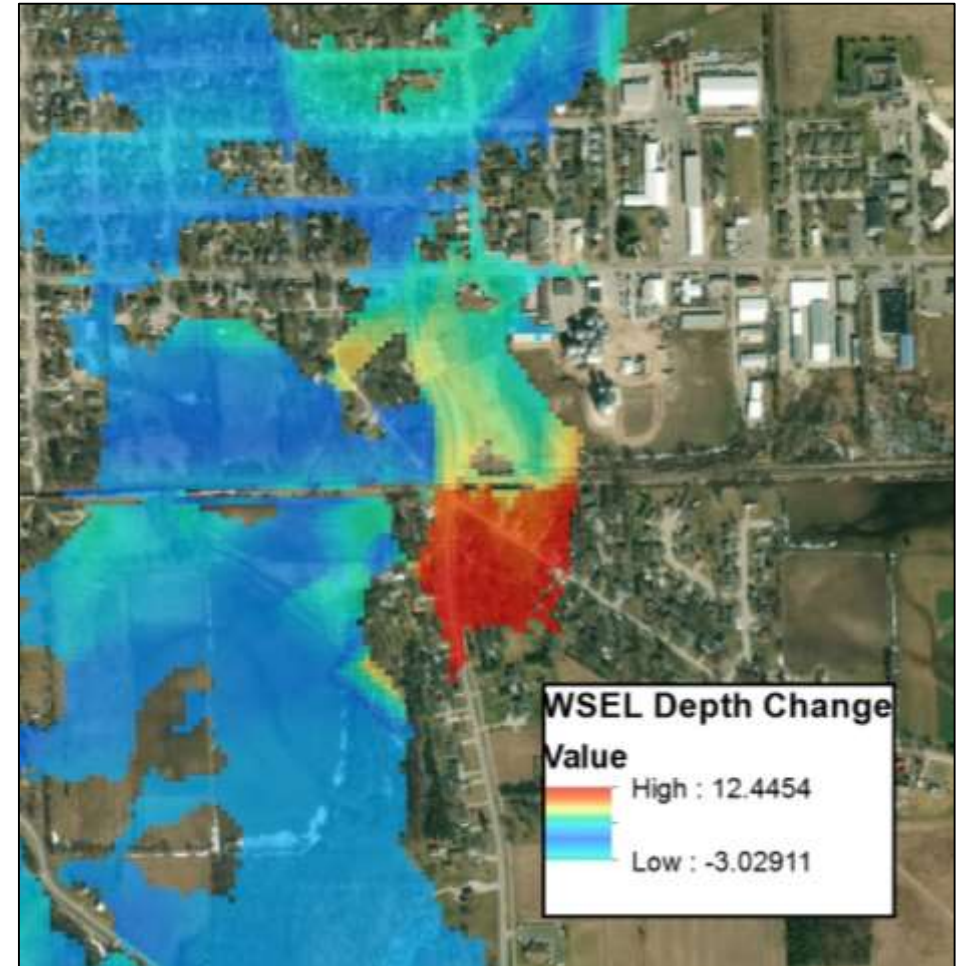
Proposed CSLF Enhancement

Advantages

- › Simple to understand, heat maps
- › Provides neighborhood level insights

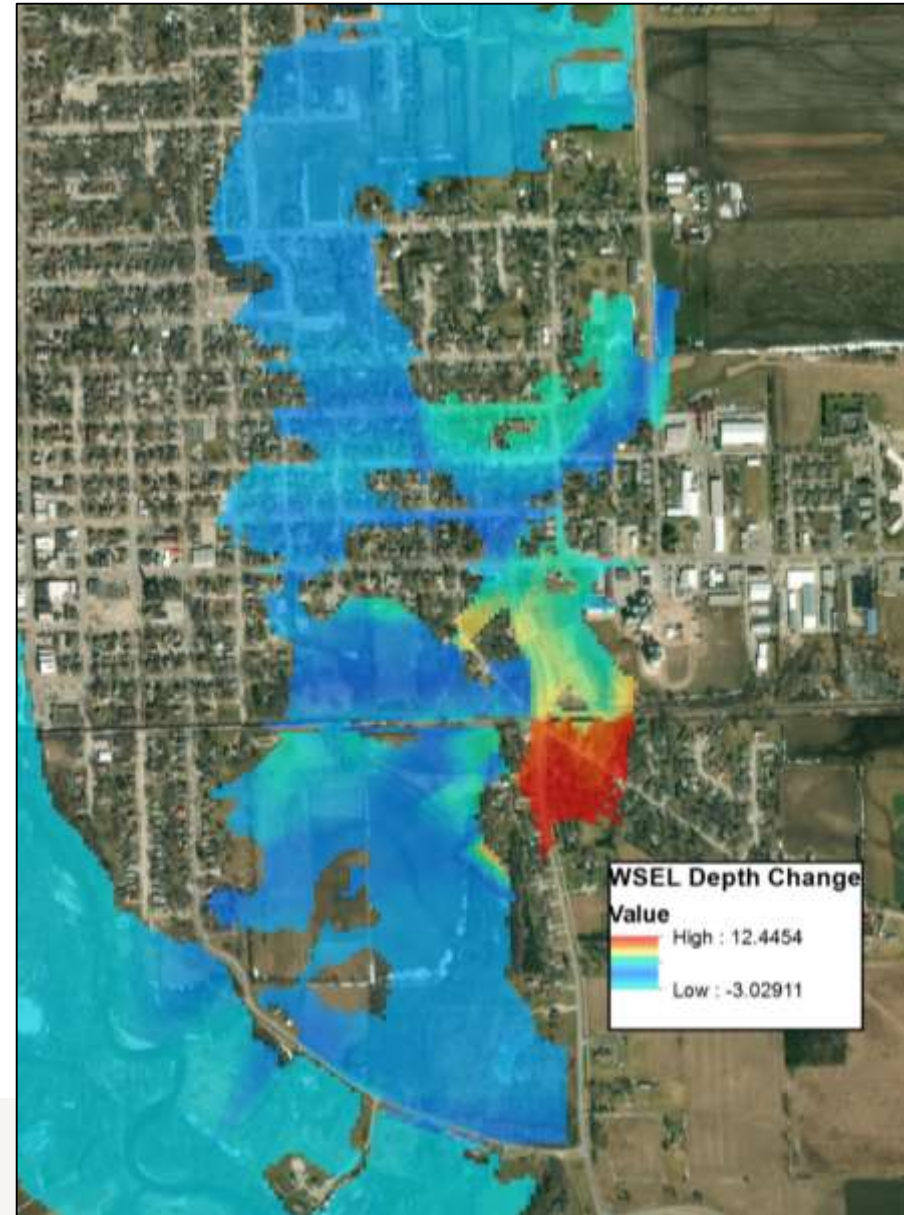
Disadvantages

- › For areas newly mapped in SFHA, the difference is based on difference in WSEL, does not take interest account topography
- › Additional depth grid information needed for better understanding in areas newly mapped in the floodplain



Conclusions

- Proposed CSLF enhancement fills gap in tool for community officials/FPAs to identify neighborhood level BFE changes
- Simple to understand as uses heat maps
- Allows FPAs to identify areas of significant change and thus outreach





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Thank you

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Questions