

# MEETING MINUTES

<b>Project Name:</b>	Southwest Colorado and Communities Risk Mapping, Assessment, and Planning (Risk MAP) Phase I
<b>Meeting:</b>	Discovery Meeting with Archuleta County & Communities
<b>Date &amp; Time:</b>	May 23 <sup>rd</sup> , 2022; 3:00 – 5:00 PM
<b>Location</b>	398 Lewis Street, Pagosa Springs, CO 81147 & Webinar via Zoom

## MEETING ATTENDEES

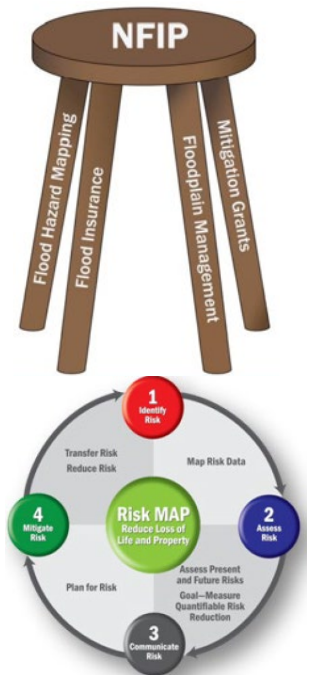
- Terri Fead (CWCB Floodplain Mapping Coordinator)
- Marta Blanco Castaño (CWCB – Flood Mapping Program Assistant)
- Doug Mahan (CWCB – NFIP Coordinator)
- Ronnie Maez (Commissioner, Archuleta County)
- Ryan Foster (Archuleta County)
- Todd Weaver (Archuleta County)
- Pam Flowers (Archuleta County)
- Sam Montoia (Archuleta County)
- Andrea Phillips (Town of Pagosa Springs)
- James Dickhoff (Town of Pagosa Springs)
- Brian Campbell (CDOT)
- Christine Gaynes (FEMA)
- Matthew Buddie (FEMA)
- Connor Johnson (AECOM)
- KC Robinson (AECOM)

## MEETING PRESENTATION

- **Introduction**
  - **Terri** welcomed attendees and introductions took place. An overview of the items to cover at this Discovery Meeting was covered.
- **Goals for the Project**
  - **Terri** covered the project goals for this project across Archuleta County and Communities because flooding is a serious risk and can change over time. Growth and development require updated risk information, at this helps inform building practices to promote resiliency. The information also can be leveraged and provide a basis for potential emergency management actions and mitigation project.
  - Ultimate goal is to keep people, property, and infrastructure safe from flooding.
- **National Flood Insurance Program (NFIP) Refresher**
  - **Marta** provided a refresher of the NFIP:
    - A voluntary program based on a mutual agreement between the Federal government and the local community
    - Engineers determine flood risk & develop maps
    - Participation makes Federally backed flood insurance available to all residents and enables flood mitigation/disaster assistance eligibility. State grants/loans may also be available.
    - The d insurance program is overseen by FEMA, managed by the community, and purchase requirement enforced by lenders

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- NFIP based on four main pillars (see graphic):
  - Know the Risk: flood hazard identification through mapping; determine mitigation focus areas
  - Mitigate the Risk: state and federal hazard mitigation grants/loans eligibility
  - Manage the Risk: adoption and enforcement of local, state, federal rules and regulations
  - Insure the Risk: flood insurance (Federally-backed insurance policies for property owners)



- **Risk Mapping, Assessment and Planning (Risk MAP)**

- **Marta** spoke about Risk MAP.
  - Mapping – Flood hazard identification
  - Assessment – Risk assessment tools and products
  - Planning – Community mitigation plans and actions
  - High quality flood maps help inform about the risk from flooding
  - Planning and outreach support – CWCB can help communities so they can take action to reduce (mitigate) flood risk.
  - Each Risk MAP is tailored to communities' specific needs.

- **Roles and Responsibilities**

- **Marta** then discussed that different stakeholders have different responsibilities under the NFIP, and all parties work together to make the program successful.



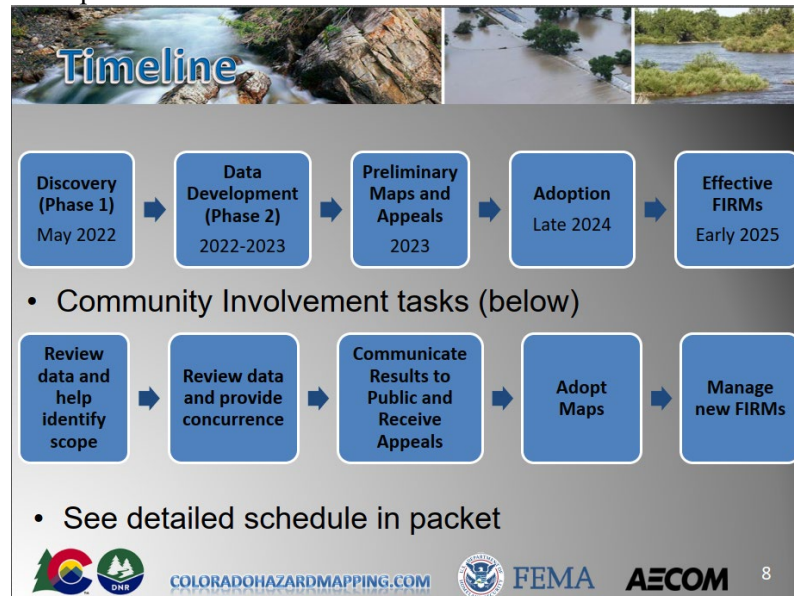
- The community's role includes:
  - Adopt local floodplain regulations that comply with federal and state laws.
  - Designate a Floodplain Administrator (FPA).
  - Enforce local floodplain regulations and encourage higher standards.
  - Provide technical assistance to residents.
  - Issue or deny floodplain development permits.
  - Inspect all development to ensure compliance with the local ordinance.
  - Maintain records of floodplain development.
  - Assist in the preparation and revision of floodplain maps.
  - Remedy violations.
- The State also has a role with the program and support through:
  - State floodplain hazard program oversight.
  - Ensure communities have the legal authority necessary to adopt and enforce regulations.
  - Establish minimum state regulatory requirements consistent with the NFIP.
  - Provide technical and specialized assistance to communities & state agencies.
  - Coordinate the activities of various state agencies that affect the NFIP.
  - State NFIP Community Assistance Program Coordinator at CWCB.
- FEMA has a role to manage the program on a national level by providing:
  - National program oversight.
  - Produce Flood Insurance Studies (FIS) & Flood Insurance Rate Maps (FIRMs).

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- Establish minimum floodplain development standards.
- Provide federal flood insurance.
- Administer federal flood mitigation grant and disaster relief programs.
- AECOM supports all the above by:
  - Working with community officials to update information
  - Generate updated flood risk
  - Supports FEMA/State as needed

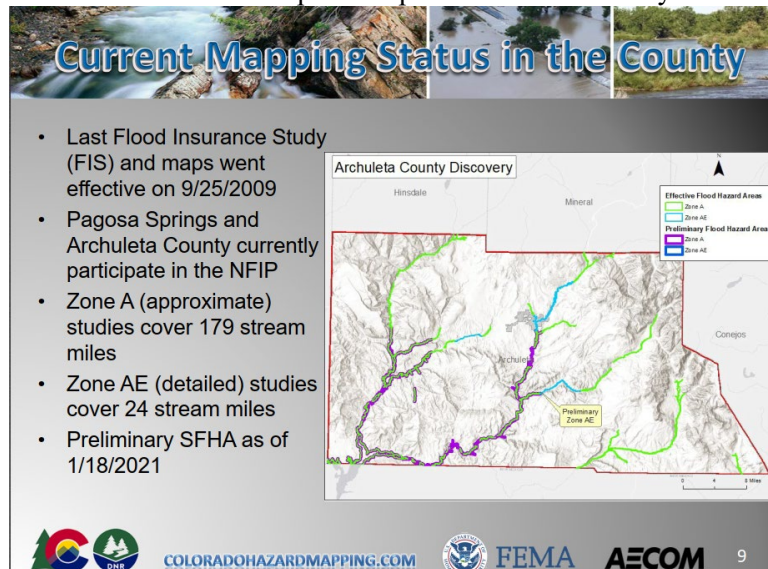
## • Timeline

- KC discussed timeline for the project and the upcoming steps
- Tasks for the community
- Detailed schedule in packet



## • Mapping Status in County

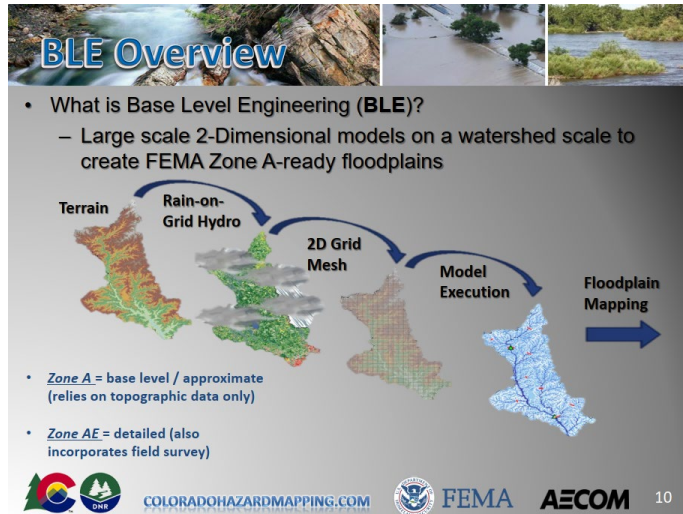
- KC went over the status of the floodplain maps in Archuleta County



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- **BLE Overview**

- KC briefly touched on what Base Level Engineering (BLE) is and a high level look at how the models and floodplains are built



- **Data Review Reminders & Related Hazards**

- Models are based on topographic data and conditions at a fixed point in time
- Actual floods can show different results every time based on:
  - Dam breaks
  - Bridges/culverts clogging
  - Debris
  - Ice jams
  - Streams are dynamic and can change due to sediment and debris
  - Reflect susceptibility to flood hazards vs. probability
- While we are addressing risk associated with flood hazard, the community should also consider mitigation for risks posed by other physical processes (i.e., Fluvial Hazard Zones) or natural hazards.

- **Next Steps in the Discovery Process**

- Gather input from community, finalize discovery and kick off next phase

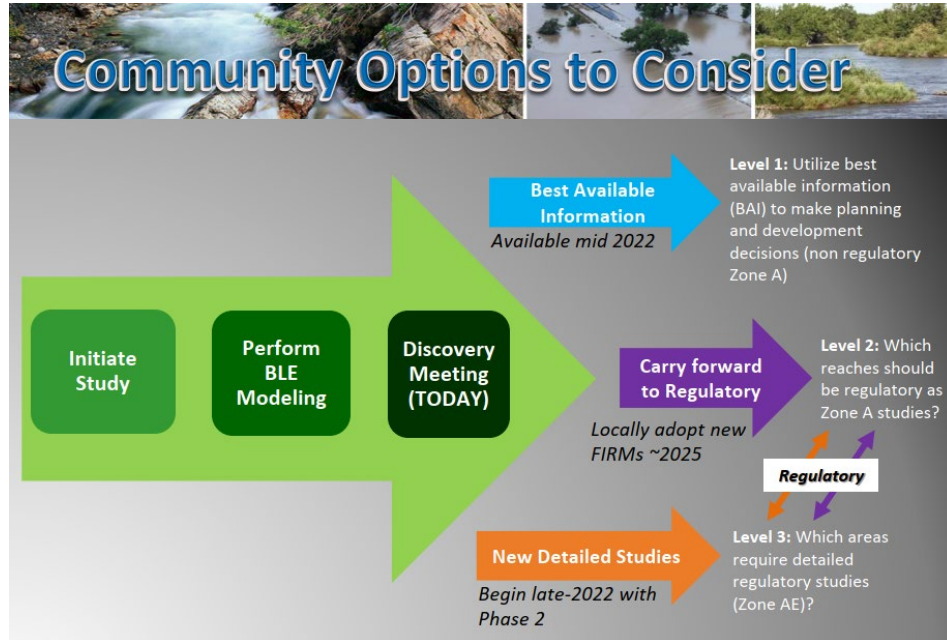




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- **Community Options to Consider**

- KC discussed items that communities need to consider on how they want to use the BLE results:
  - Best available data
  - Carry forward to regulatory
  - New detailed studies



- **Floodplains & Floodway vs. Flood Fringe**

- KC gave a brief refresher on floodplains and floodways
  - 1% annual chance flood
  - 0.2% annual chance flood
  - Special Flood Hazard Area
  - Floodway and Flood Fringe
    - Implications
    - Don't impact your neighbor (upstream and downstream)

- **Deliverables (Overviews provided)**

- Map Package (GIS)
- Packet
- Discovery Report
- 2D models

- **BLE Results Mapping Review**

- **Marta** reminded communities of the 45-day period to review and provide comments on the information
- Ask questions, please follow up, and decide how to move forward with study

- **Community Actions and Expectations**

- **Marta** restated that the process is a partnership between communities and CWCB. We are asking that communities:
  - Review discovery data and provide comments
  - Notify CWCB of additional requested study areas and study level
  - Inform CWCB of any supplemental analyses or specific projects they would like considered, and if the community staff would like additional training on use of the materials/data

# MEETING MINUTES & ACTIONS

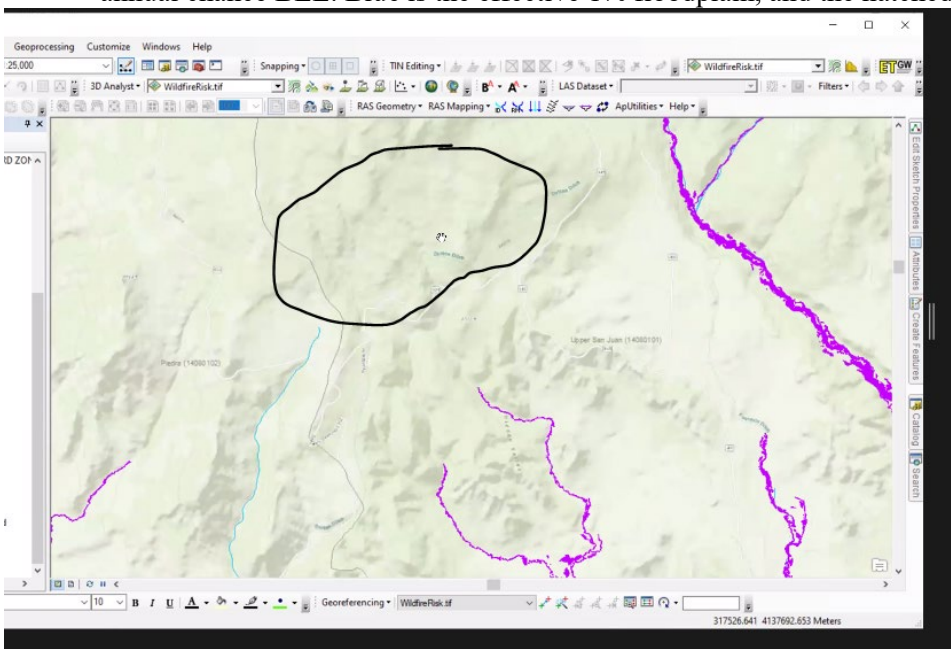
- Verify that they are aware of the flooding sources included, and agree with the general approaches and methodologies, being used for the study. This is not indicating agreement with all study results.
- Reach out with questions or concerns
- Recognize that no community funding necessary
- Study will result in updated flood risk
- Reach out to communities to inform of changes to flood risk
- Communicate with CWCB and notify them if there is existing local information that can be leveraged for the study

## POST-PRESENTATION: Question, Answers, Discussion, and Additional Resources

- **KC Robinson** (AECOM) brought up the Archuleta Discovery report and went through the different pages. He then brought up the Map Package (GIS) to show draft floodplains to compare to effective and preliminary floodplains.

### Question:

- **Ryan Foster** (Archuleta County) - Plumtaw Fire – Fourmile watershed – fire that is ongoing at the time of this meeting
  - Fourmile is tributary to McCabe Creek
- Significant source of drinking water for the town. Intakes where fire is going on. Want to make sure that everything is okay there.
- **Pam Flowers** (Archuleta County) asked question to clarify the color scheme and what the hazards are between the BLE and what the effective shows.
- **KC** further explained that the BLE is done on a large scale to get a good approximation of flood risk. Detailed study would be needed to get further information on the stream and its floodplains.
- **Terri Fead** (CWCB) – BLE will not replace a detailed study
- **Sam Montoia** (Archuleta County) – McCabe Creek – does this study incorporate new project?
- From the room it was determined that our study would not have incorporated that project. Sounds like a LOMR is scheduled to be completed soon for culvert rehab project.
- Looking at Plumtaw Fire area (South of Cade Mountain). \*Note: in following screenshots purple is the draft 1% annual chance BLE. Blue is the effective 1% floodplain, and the hatched teal/red is the effective floodway.

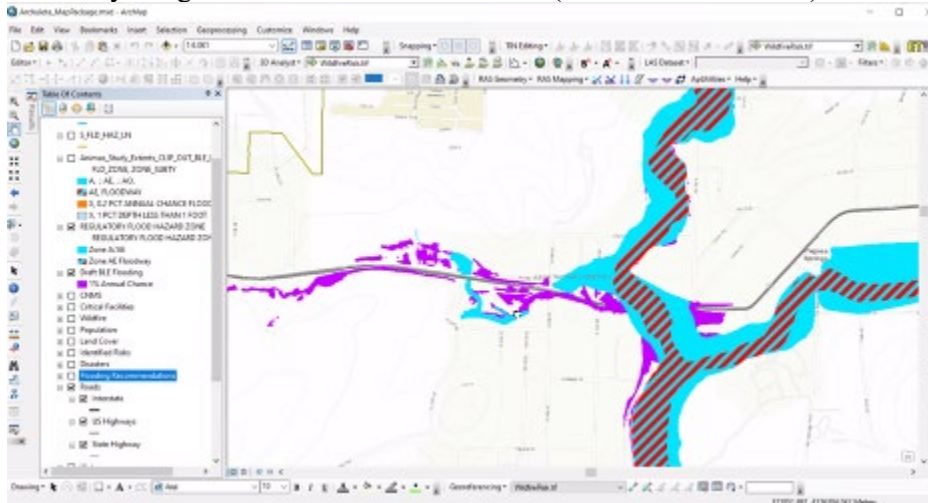


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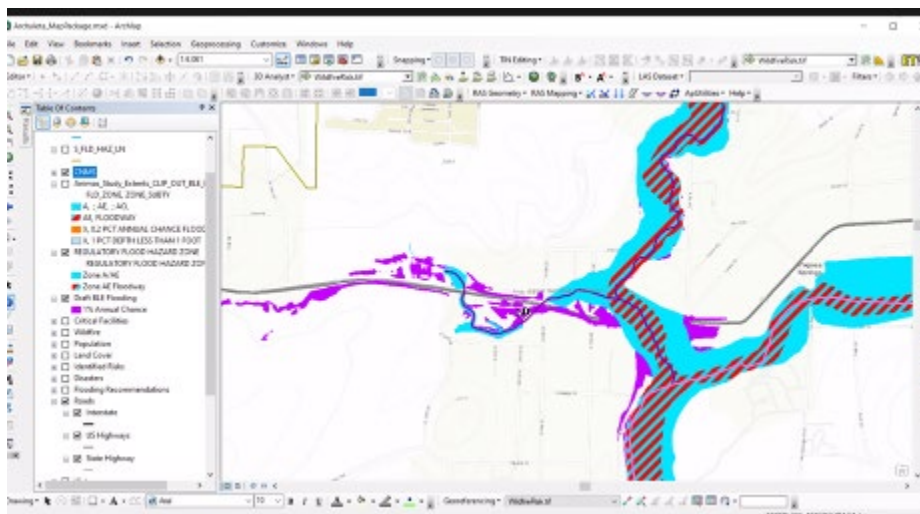
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- The screenshot displays the ArcGIS Desktop environment. The main map window shows a topographic map of a river and surrounding areas. Overlaid on the map are several data layers, including flood zones (indicated by red and yellow colors) and infrastructure (indicated by blue lines). The left pane, titled 'Table of Contents', lists the layers in the map, including 'Flood Zones', 'Infrastructure', and 'Land Cover'. The top pane shows the 'Map' view. The bottom pane shows the 'Status Bar' with coordinates and scale.

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- **Brian Campbell (CDOT)**
- Downtown area (West McCabe Creek) Main Street (rehab project for culvert – lining for culvert)
- FEMA floodplain permit
- Split flow conditions
- Floodplains are not showing what effective flooding is showing
- West McCabe Creek hydrologic analysis by CDOT shows much lower flows than effective
- Effective model does not show enough upstream
- Flow may not get to the north side of the road (see screenshot below)



- Good location for detailed study
- **Chris Gaynes (FEMA)** – good to bring this forward now so that we can be aware of projects.
- **KC** showed that this stream is in the CNMS as valid, but it may not have included the culvert upstream in the effective study

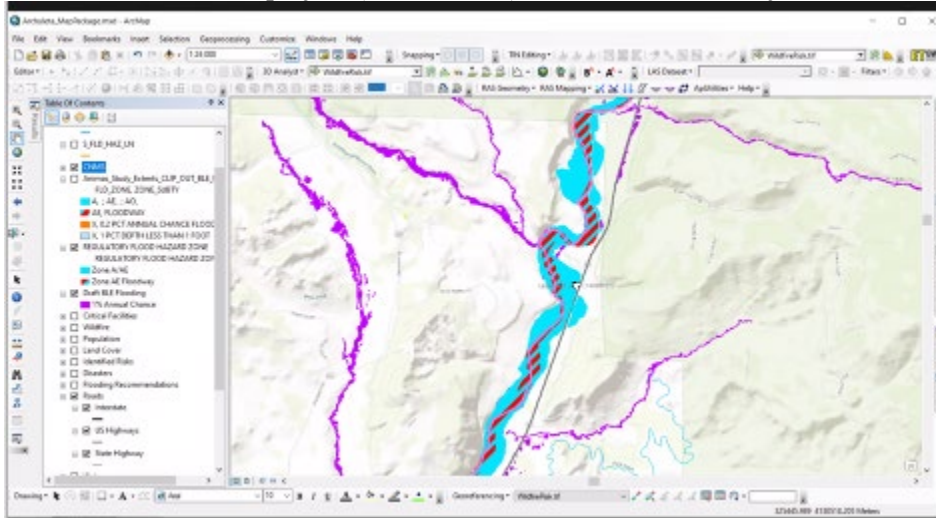


- **Brian** – LOMR to be filed when project done.
- **Terri** – we want to get that information now so that we can leverage that project information
- **Brian** to forward information to **KC/Marta/Terri** about project. Project is in construction right now. Post construction LOMR. Could leverage this info and avoid restudy.

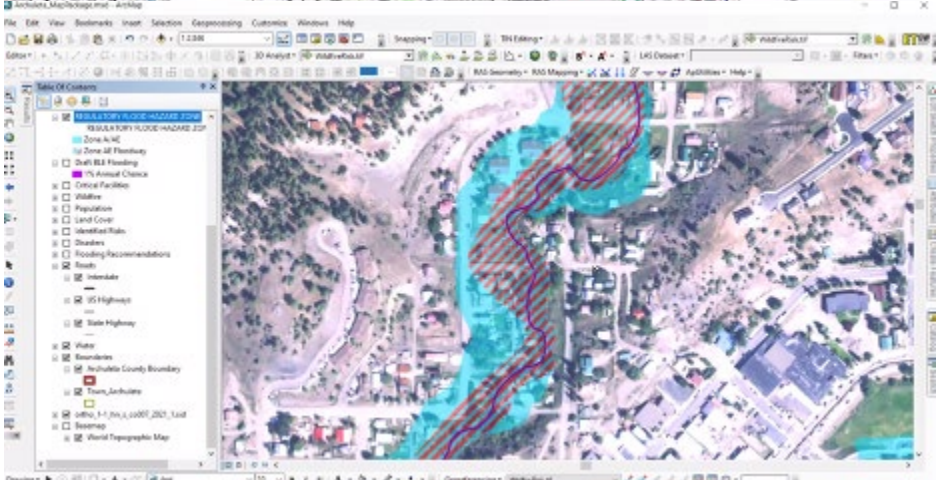
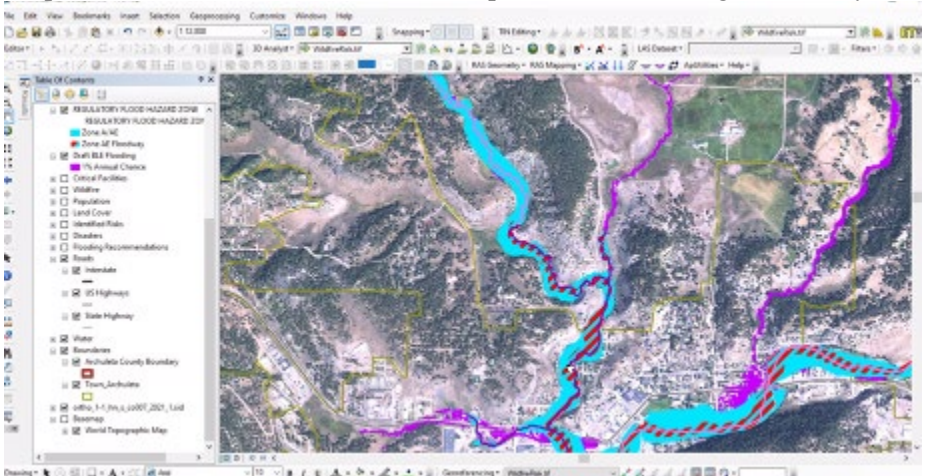


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- **Brian** – culvert rehab project (160 corridor) – on McCabe Creek just northeast of town

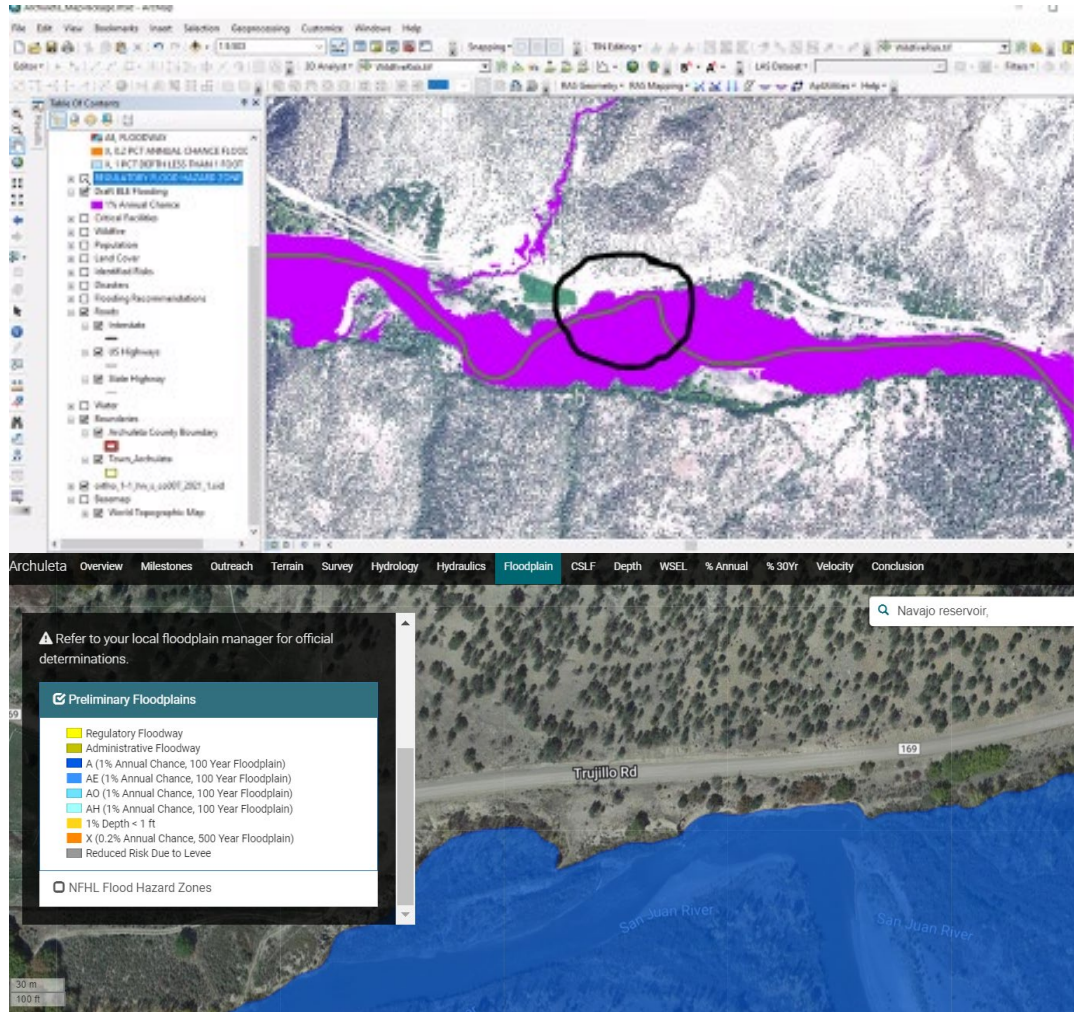


- **Ronnie Maez** (Commissioner, Archuleta County) – will new waterflow allow buildable property on McCabe Creek?
- Properties south of Florida street to have possible benefit. Right now they are in a floodplain.



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- Todd** – San Juan River eroding away at road (Tribal land, BLM land?) and the County wants to redesign this area in the future. Near Navajo State Park past Pagosa Junction. Navajo Lake. East of Navajo Reservoir. County Road 169. Trujillo Road. **Todd** says that engineering eyes are on it currently. Future construction that will need a lot of bank stabilization.

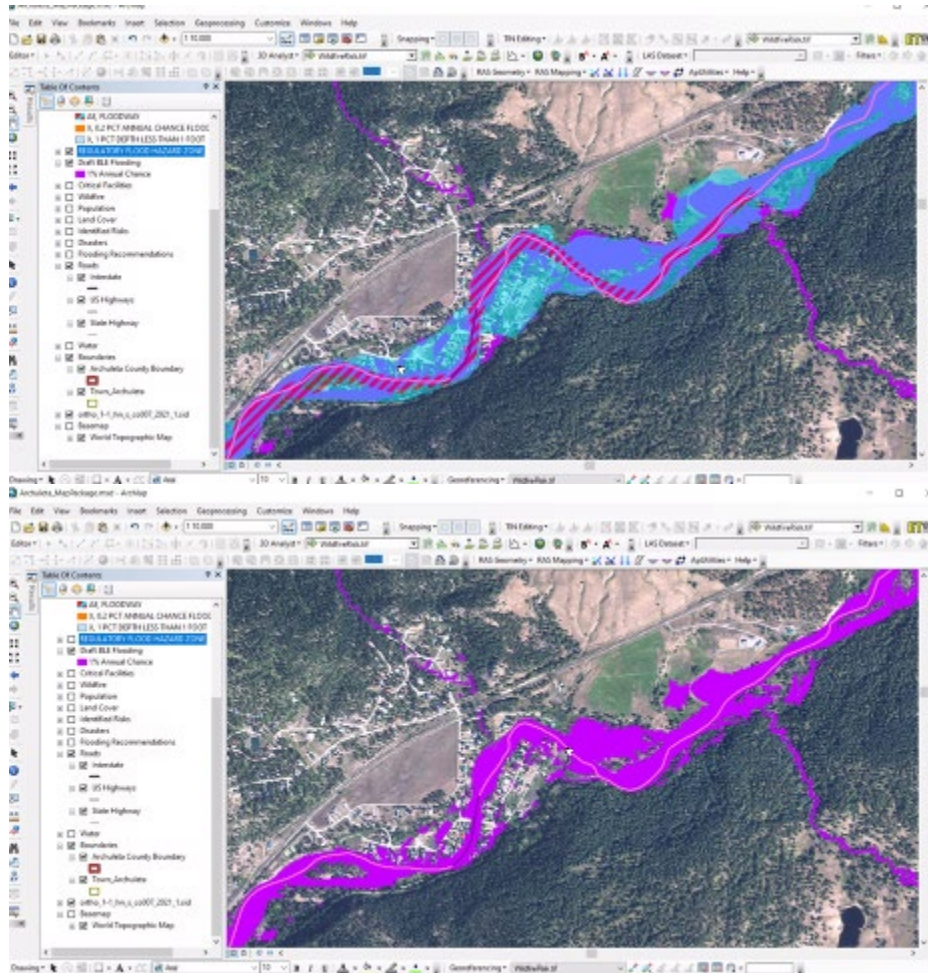


- Sam** – approved to have ESRI license (enterprise partner) for Archuleta County.
- Sam** mentioned some GIS data (parcel and other data) that Archuleta County has that could help our detailed study. Will follow up with appropriate information. The County thinks it would be helpful for the State to have (and possibly show) this data for the coloradohazardmapping.com website.



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- **Todd** – up 160 towards Wolf Creek (neighborhood that is inside of effective flooding) Showing effective and BLE below.



- **KC** – explained the gage data available on San Juan and what that can mean for estimating the peak flows for extreme events (1% annual chance).
- **James Dickhoff** (Pagosa Springs) – Pending future funding can we do more areas? Previous mapping wasn't done with LiDAR.
- **Sam** said that he's pulled terrain from CWCB website and says that it's working.
- **KC** showed how to request LiDAR and download on CWCB website.
- **Brian** – Thanks for LiDAR collection and putting it into a database. Streamlined their workflow.
- **KC** navigated around the website to showcase other features. Using an address to look at preliminary flooding and effective flooding.

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- **Additional information**
  - Flood Smart: [www.floodsmart.gov](http://www.floodsmart.gov)
  - FEMA's outreach materials – <https://www.fema.gov/flood-insurance/outreach-resources>
  - FEMA's mapping portal - <https://msc.fema.gov/portal/home>
  - Colorado Hazard Mapping Page - <https://www.coloradohazardmapping.com/>
  - CWCB Flood Page - <https://cwcb.colorado.gov/focus-areas/hazards/flood-information-resources>
- The team here and with FEMA are also committed to helping as needed. Contacts are as follows.
  - **Terri Fead**  
*CWCB Floodplain Mapping Program Manager*  
[terri.fead@state.co.us](mailto:terri.fead@state.co.us)  
303.495.0153
  - **Doug Mahan**  
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303.843.2409

**Meeting adjourned at approximately 4:45 PM.**

These notes are an interpretation of discussions held. They intend to capture primary takeaways from the meeting, but not to thoroughly document everything discussed. Please provide any additions or corrections to the originator as soon as possible; otherwise, they will be assumed correct as written.