



Colorado Flood

High School Hazard Lesson

Setting the Stage



Flood debris after the 2013 Boulder flood. Photo Credit: AlmanacManiac, Wikimedia.

Driving Question:

What can we learn from past flooding events to help us prepare for future floods?

What You Will Be Doing:

- Analyze flood data to identify patterns of flood history and risk in Colorado.
- Communicate information about historic causes and effects of floods in your community. Explain what community members should do to be safe in the event of a flood.

Part 1

What do you know about floods in Colorado?

KWL Chart	
What I K now	
What I W onder	
What I L earned (Activity 3)	

What do you know about floods in Colorado?



Watch: [1976: Deadly Big Thompson flood devastates Colorado](#)

What do you know about floods in Colorado?



Watch: [Dramatic images show devastating flooding in Colorado](#)

What do you know about floods in Colorado?

KWL Chart	
What I K now	
What I W onder	
What I L earned (Activity 3)	

Flood Expert Interview



Watch: [Flood Expert Video](#), STOP @ 2:24

Part 2

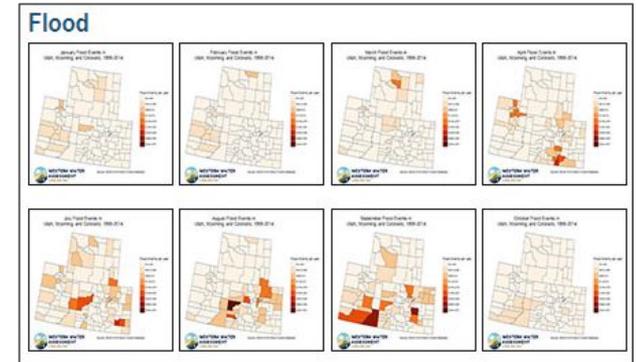
Flood Data Analysis Jigsaw



Group 1



Group 2



Group 3

<p>Rivers, Streams, and Floodplains</p> <p>Coastal Flooding, Riverine Flooding, Overbank Flooding, Urban Flooding, Floodplains are the areas of low-lying ground adjacent to rivers.</p>	<p>Restoring Floodplain Elements</p> <p>Coastal Flooding, Riverine Flooding, Overbank Flooding, Urban Flooding, Floodplains, and the wetlands and waterways that make them up.</p>	<p>Regulatory and Policy Approaches to Address Hazards</p> <p>Coastal Flooding, Riverine Flooding, Overbank Flooding, Urban Flooding, Floodplains, and the wetlands and waterways that make them up.</p>
<p>Planning Approaches to Reduce Natural Hazards</p> <p>Coastal Flooding, Riverine Flooding, Overbank Flooding, Urban Flooding, Floodplains, and the wetlands and waterways that make them up.</p>	<p>Enhanced Floodplain Mapping</p> <p>Coastal Flooding, Riverine Flooding, Overbank Flooding, Urban Flooding, Floodplains, and the wetlands and waterways that make them up.</p>	<p>Open Space Preservation through Land Acquisition</p> <p>Coastal Flooding, Riverine Flooding, Overbank Flooding, Urban Flooding, Floodplains, and the wetlands and waterways that make them up.</p>

Group 4

Key Message 3: Increased Risk of Flooding in Many Parts of the U.S.

Flooding may intensify in many U.S. regions, even in areas where total precipitation is projected to decline.

Supporting Evidence

Group 5

All Groups: Community Flood Risk GIS Activity

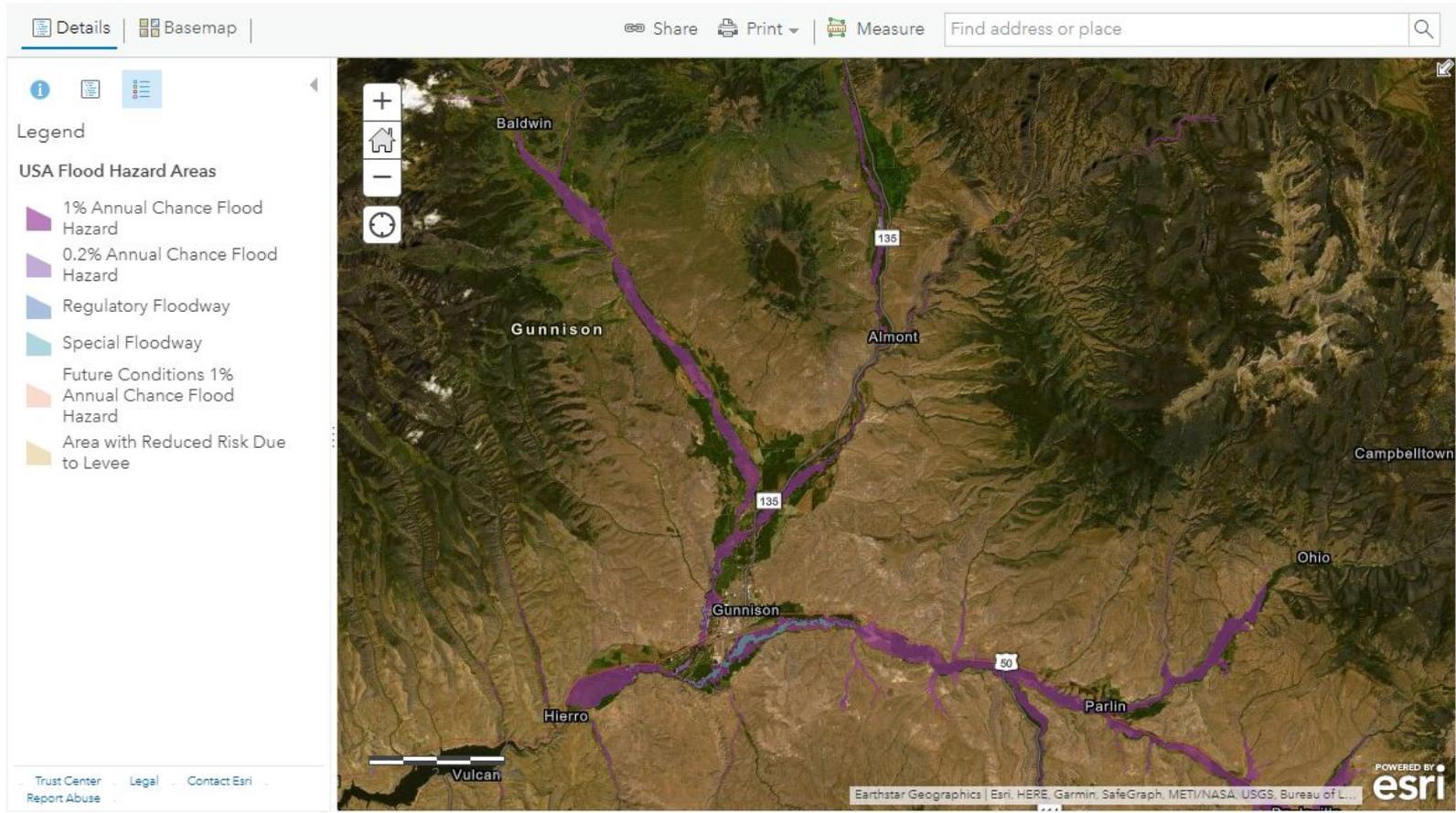


Watch: [The 100 Year Flood Is Not What You Think It Is \(Maybe\)](#), STOP @ 3:22

All Groups: Community Flood Risk GIS Activity

ArcGIS ▾ Colorado Flood Hazard Areas

Modify Map ⓘ Sign In



Explore: [ArcGIS Floodplain Map](#)

Part 3: Finish Flood Expert Interview



Watch: [Flood Expert Video](#), START @ 2:24

Flood Letter to the Editor

Assignment: Write a persuasive letter to the editor that explains current flood risk in your community. The letter should be 500-600 words and include:

- Address the letter “Dear Editor,”
- The first sentence should introduce the topic, and explain why readers should be concerned about flooding in your community
- The types of floods your community is vulnerable to
- A summary of historic floods
- How flood frequency and severity is expected to change in the future
- What time of year floods occur
- What areas in your community are most vulnerable to flooding
- Whether adequate technology is in place in the city to mitigate flood risk

Letters to the editor are typically brief (500-600 words), so write with brevity and clarity.