



**Community Field Data Collection  
2024 NHERI RAPID Facility  
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**Summary-**

- We would take middle schoolers on a field trip to a local area affected by a natural disaster/weather event and have them take photos of affected areas/specimens. They would then compare their images to images of non-affected areas/specimens and make a poster comparing the images, writing one to two sentences describing how they're different and how they know it is this kind of damage.
- **The students would be taken to the site of an event that did not severely affect local populations. For example, they would go see a floodplain or a tree struck by lightning.**

**Engineering Connection-**

- It engages students with topics like global warming and data collection.
- Students learn how to be conscious of the natural environment, which is an important type of respect to uphold in engineering.

**Audience-**

- Middle School (6-8)

**Lesson Objectives-**

- Students would learn how natural disasters/extreme weather events affect local vegetation and wildlife. This would create a sense of spatial awareness between students and their environment. This may help students be more observant of nature and changes in everyday life.

**Educational Standards-**

- ESS2.D: Weather and Climate
- Cause and Effect
- Planning and Carrying out Investigations

**Material List-**

- Most likely a bus would be required for transportation. On an individual level, students would need a camera or cellphone to take pictures. They would also need coats/boots/sun protective clothing if needed.

**Introduction-**

- Motivation is to help students better understand global warming and data collection methodology. This also introduces students to scientific method and data collection practices.

#### **Procedure-**

- Good understanding of what natural disasters/extreme weather events are and what they look like
- Research what natural hazards look like and the kinds of damage that is related
- Investigate and take photos of damaged natural elements
- Talk about the differences in what makes something damaged vs not and how we know it is caused by this event.

#### **Assessment-**

- Students will each contribute to a mural and paint how climate change relates to them and/or people they love
- Students will each notice effects of natural disasters in their neighborhood/park?
- Students will identify changes and damages from natural disasters

#### **Wrap-up-**

- Students explain at least one effect of natural disaster in depth in a large group to promote repeating information and promoting retention
- Students will have a chance to journal, draw or meditate on their findings
- Share about what students are taking from the experience in a large group long-term for example: ""What was the most important thing you learned today?""