

Introduction: Eco-imagining Natural Hazards and Sustainable Rebuild

Natural hazards like hurricanes, wildfires, earthquakes, and floods can hit at a moment's notice. These devastations lead to severe loss and damage in communities, economies, and ecosystems. This is a crucial point in time to critically think and rebuild in a way that is supportive of all of these aspects. A time to protect the community, ecosystem, and use sustainable and renewable energies, along with resilient designs to help withstand future hazards. By focusing on sustainability during recovery, societies can transform disaster response into a pathway for lasting safety, equity, and ecological balance. In this workshop, we will improvise different ways of working towards and critically thinking about integrating sustainability in the aftermath of a natural disaster.

Warm Up: The Storm

- Start in a circle.
- The facilitator demonstrates the different ways to make rain sounds, going through each example and doing it together:
 - Rubbing hands together
 - Snapping fingers
 - Clapping hands
 - Patting legs

- Stomping
- Vocalization
- Then, everyone will begin to walk slowly around the room, finding new pathways and exploring the space.
- We will start to make light “rain” sounds using the actions from earlier.
- When prompted, they will begin to move faster through the room and make louder noises until the rain turns into a chaotic storm.
- We will climax with a collective “thunder” where everyone will do their loudest jump together. Then the group will be asked to get quieter and quieter until they return to neutral.

**This warm up is intended to be fun and allow students to feel more comfortable in the space.*

Give them time to warm up to their environment and feel comfortable moving and making noise.

Short Form: Machine

Split into two groups:

- Half of the class will create a machine that represents sustainable rebuilding.
- The other half will create a machine that represents a natural disaster.

Part 1: Building the Machine

- Each group will form a circle.
- One student will begin by stepping forward and performing a simple, repeatable gesture accompanied by a sound.

- One by one, each student will join in with their own unique gesture and sound, connecting to the others in some way (either physically, rhythmically, or through movement) until everyone is part of the collective machine.

Part 2: Bringing the Groups Together

- Once both machines are complete, the two groups will come together.
- The sustainable rebuilders and the natural disaster will interact to highlight the contrast between destruction and regeneration, creating a dynamic final scene.

**This activity should get the students thinking about the process of building back better while leaving room to explore physicality.*

Ask questions:

- What did the students notice?
- Is there anything coming up for them?
- What did this activity highlight about the struggles of rebuilding sustainably?

Long Form: Sustainable Storybook

- Split into evenly divided groups.
- Each group will receive a card with a natural disaster. The card will explain the disaster and how it affected its community.
- The groups will be asked to read over their disaster and discuss the impacts.
- Then they will create 3 tableaux or “living pictures”:
 - The first statue will embody the natural disaster itself.
 - The second will embody a sustainable rebuild.

- The third reimagines a more sustainable future.
- When it's time to present:
 - One group member should narrate the story as the tableaux are shown, briefly describing each stage.
 - Use cues such as saying "lights out" or "lights up" to signal transitions between each picture.
 - If possible, students can actually turn the lights off and on to create clear scene changes and atmosphere.
- Reflection

Examples of Cards:

1. Greensburg, Kansas, USA – Tornado (2007):

An extremely powerful EF5 tornado ripped through Greensburg, destroying about 95% of all buildings and homes.

How they rebuilt sustainably:

- The town was rebuilt using green energy and eco-friendly building designs.
- Most new buildings met LEED green standards.
- Greensburg now uses 100% wind energy for electricity.
- New homes and schools were built to better withstand future storms.

2. Taomi Village, Taiwan – Earthquake (1999):

A 7.6-magnitude earthquake struck central Taiwan, collapsing most homes and damaging farmland in Taomi Village.

How they rebuilt sustainably:

- The community restored the environment by turning damaged farmland into wetlands and ponds.
- They used local, natural materials to rebuild homes.
- The town developed eco-tourism, bringing in income while protecting nature.

3. Rotterdam, Netherlands – Flooding and Sea-Level Rising:

Rotterdam has faced frequent flooding due to being below sea level and exposed to rising seas.

How they rebuilt sustainably:

- The city built floating neighborhoods like the “Floating Pavilion,” designed to rise and fall with water levels.
- They invested in green roofs and water plazas that absorb rainwater.
- Flood protection was combined with urban design, making the city safer and more livable.

**This is intended to show real world disasters in a more physical and digestible way. By embodying both the disaster and rebuild, this activity should be an opportunity to explore these themes. Give the students time to reflect and acknowledge that learning about these disasters can be hard. Ask questions about what they noticed and if they struggled. Also ask what they saw in other groups. Did anything come up?*

Link to video examples:

<https://vimeo.com/1130042024/7df72ea921?share=copy&fl=sv&fe=ci>