



Natural Disasters and Their Impact on the World's Waste



STANDARDS & CONNECTIONS:

NGSS.5-ESS3-1, NGSS.MS-ESS3-3, NGSS.HS-ESS3-1, CCSS.ELA-LITERACY.CCRA.W.4

BACKGROUND:

After a natural disaster, there are many aspects a community most deal with. One of the most overwhelming of these is waste and debris generated by severe disasters, such as flooding caused by hurricane, tsunamis, earthquakes, windstorms, etc. "The debris generated by most severe disasters overwhelm existing solid waste management facilities or force communities to use disposal options that otherwise would not be acceptable."¹ The EPA has made recommendations for the development of pre- and post-disaster waste management strategies in the United States, however not all communities have developed them. Stakeholds have important roles to play in eliminating the impact of natural disasters on waste management programs such as resource conservation, environmental protection, sustainable development of programming, and health and sanitation concerns surrounding disaster preparedness.

SUGGESTED MATERIALS:

Computer with internet access

QUESTION:

What happens to waste after destruction caused by natural disasters?



CREATE	TEST & IMPROVE	SHARE
Explore how local communities manage waste after a natural disaster impacts their community. Create an infographic that explains the ways in which communities are impacted by waste and debris due to natural disasters.	Students will share their findings, seek areas of improvement, and make changes where needed.	Students will share what they've created and their lessons learned.



Visit a local government office or agency to discuss disaster management planning strategies.

Write a letter to your local government officials highlighting possible solutions to managing natural disaster waste that you discovered through your research.

¹ <https://www.tandfonline.com/doi/pdf/10.3846/1648-715X.2009.13.171-190>

http://swana.org/Portals/Press_Releases/Hurricane/Managing_Wastes_Produced_by_Natural_Disasters_2011.pdf

<https://www.waste360.com/safety/how-waste-and-recycling-industry-prepares-natural-disasters>

https://www.epa.gov/sites/production/files/2019-05/documents/final_pndd_guidance_0.pdf

https://www.who.int/environmental_health_emergencies/natural_events/en/



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