	Yellowstone Fire	Mt. Pinatubo Eruption	Hurricane Georges	Soufrière Hills Eruption
Biosphere		-		· · · · ·
Short-Term Effects Medium-Term Effects	 Fire destroyed land cover (bushes, trees, grasses). Animals and people were killed or displaced. The smoke caused health problems. Landslides and erosion led to loss of land cover and death or 	 Pyroclastic flows destroyed land cover. Animals and people were killed or displaced. Ash caused health and machinery problems. Lahars led to a further loss of land cover and death or 	 High winds and flooding destroyed land cover. Animals and people were killed or displaced. Landslides led to a further loss of land cover and death or displacement of living things. 	 Pyroclastic flows destroyed land cover. Animals and people were killed or displaced. Ash caused health and machinery problems. Lahars led to a further loss of land cover and death or
	displacement of living things.	displacement of living things.		displacement of living things.
Lithosphere				
Short-Term Effects	Charred debris changed the soil structure.	• Pyroclastic flows and explosive activity changed the land's surface structure.	 Flooding led to inland erosion. Tidal surge led to beach erosion. 	• Pyroclastic flows and seismic activity changed the land's surface structure.
Medium-Term Effects	Erosion and landslides changed the land's surface structure.	• Erosion and lahars changed the land's surface structure.	• Erosion and landslides changed the land's surface structure.	Erosion and lahars changed the surface structure.
Atmosphere				
Short-Term Effects	• Smoke and heat entered the atmosphere. The heat created driving local winds.	Volcanic ash and sulfur dioxide gas entered the atmosphere.	• There were high winds and heavy rains.	• Volcanic ash entered the atmosphere.
Medium-Term Effects	• Smoke cleared within days after the fire subsided.	• There is evidence that the sulfur dioxide affected global weather. However, this is not discussed in the readings.	• There are no medium-term effects of a hurricane on the atmosphere.	• The volcanic ash did not extend high enough into the atmosphere to affect global weather.
Hydrosphere				
Short-Term Effects	 Debris fell in lakes and streams, making the water undrinkable. Chemicals were accidentally dumped in one river. 	Pyroclastic flows and volcanic ash contaminated the rivers.	• High winds and rain created flooding and a tidal surge.	Pyroclastic flows and volcanic ash contaminated the rivers.
Medium-Term Effects	• Further contamination resulted from erosion and landslides.	• Further contamination resulted from erosion and landslides.	• Erosion and landslides led to contamination of rivers.	• Further contamination resulted from erosion and landslides.

Chart of Event to Sphere Hazards