Documentary for Volcanic Risk Awareness in the Eastern Caribbean

Time	Narration	Visuals	Graphics	Sound
Start of section: **Introduction**		Background montage of Volcanic hazards, monitoring, monitoring agencies, Red Cross personnel at work etc. (Taken from PSAs) Image of Soufriere Hills Volcano Pyroclastic Flow Fade to black:	Opening credits Video Title: The Caribbean Volcano: Preparing for the Next Eruption	Music (Driving, rhythmic and serious) Music fades out
	The Eastern Caribbean islands stretch like an emerald chain linking North America to South America. Known for their natural beauty and warmth, both environmental and cultural, people often wonder how these island gems were formed.	Fade to map of the Caribbean Dissolve to images of nature, people in a city, cricket match. Dissolve back to map of Caribbean. Zoom in to focus on the Eastern Caribbean then		Music fades in (more melodic, possibly steel pan)

End of section: **Introduction** Duration: 1 minute Total: 1 minute	We now know that many Eastern Caribbean islands were built from volcanic activity and islands, example Montserrat Dominica and St Vincent continue to have live volcanoes. Residents of volcanic islands always live with risk of eruption.	highlighting Montserrat Dominica and St. Vincent Images of Soufriere Hills volcano, boiling lake in Dominica and La Soufriere in St Vincent People in a town setting with volcano in background. Image fades out		Music fades out
Start of section: **Formation of a Volcanic Caribbean Island**	Formation of a Volcanic Caribbean Island In order to live safely with this dangerous natural force. It is important to understand how a volcano works. The surface of the Earth is a thin layer of solid rock,	2D animation of island growing in profile view / other transitional animation Fade to image of an explosion Graphics depict the structure of the earth.	Caption: Formation of a Volcanic Caribbean Island	Music fades in (serious, powerful)

End of section: **Formation of a Volcanic Caribbean Island** Duration: 30 seconds Total: 1 minute 30 seconds	called the crust, which floats on a much thicker layer of molten rock called the mantle. The crust is broken into several large slabs called plates. In the Caribbean, where the North American Plate collides with and descends beneath the Caribbean plate, the descending crust melts and the bouyant magma makes its way upwards to the surface, where it builds up into a volcano.	Graphics or animation depict movement of the plates Animation or diagram of subduction zone. Image of erupting volcano Image fades out		Music fades out
Start of section: **An Eruption Experience: Montserrat's Soufriere Hills Volcano**	An Eruption Experience: Montserrat's Soufrière Hills Volcano The Soufrière Hills Volcano in Montserrat is	2D animation with bird's-eye view of Montserrat and volcano/other transitional animation Fade to recent image of Soufriere Hills Volcano	Caption: An Eruption Experience : Montserrat's Soufriere Hills Volcano	Music fades in softly

	an example of a currently active Caribbean volcano. It is located in the south of the island, and is characterized by a cluster of domes, which are basically huge piles of volcanic lava. The slopes of the Soufrière Hills Volcano are built from deposits created by explosions and dome collapses. Residents were living in their lush mountainous home as they had for centuries, with scarcely a thought to the apparently quiet Soufrière Hills Volcano, until suddenly in 1995, a new vent opened in the mountains. Over the next few months, Montserratians would come to learn a completely new reality as those peaceful mountains unveiled an active	Map of Montserrat showing the volcanos location. Footage of new dome/juxtaposed with footage of old dome covered with vegetation. Footage of pyroclastic flow deposits and delta. Footage of Montserrat before the eruption began. Footage or picture of the first vent. Footage or pictures of mountains before eruption Dissolve to footage or pictures of more desolate view after		(instrumental)

	volcano. Volcanic ash would fall regularly, settling all over the landscape. But that was only the beginning of social and landscape change. Montserrat's population of 11,000, began to decline rapidly, as people left the island. Meanwhile, a dome began to grow, and as it grew large within the crater, the threat to life and property escalated. It was soon necessary to evacuate all villages near the volcano and the capital of the island, Plymouth. The evacuation was accompanied by enormous economic and social disturbance. At present, The Soufrière Hills Volcano has re-claimed half of the island,	dome growth Images of an ash cloud Images of ash covered terrain. Pictures of people travelling Footage/pictures of dome growth. Footage of rock falls Footage of pyroclastic flows Footage/Pictures of evacuation Footage/ pictures of destruction in Plymouth and east and southern villages.		

	which is now inaccessible or buried by volcanic debris. It also claimed 19 lives. (please read with sensitivity)			
End of section: **The Eruption Experience: Montserrat's Soufriere Hills Volcano** Duration: 2 minutes Total: 3 minutes 30 seconds	Montserrat has changed drastically with new development taking place exclusively in the north of the island. The population has decreased to roughly 5000 residents who bravely face the road to full recovery.	Footage of development in the north of Montserrat.		
		Image fades out		Music fades out
	The Hazards of Eastern Caribbean Volcanoes	2D animation of a volcano exploding /other transitional animation	Caption: The Hazards of Eastern Caribbean Volcanos	
Start of section: **The Hazards of Eastern Caribbean Volcanos**	Usually we think of volcanoes producing red and fluid lava like at Hawaiian volcanoes. But Caribbean volcanoes are different and usually produce thick, viscous lava	Fade to map of the region superimposed on pyroclastic flow. Images of basaltic lava (e.g.		

	Because of its viscosity, this type of lava does not travel very far from the vent, but as seen in Montserrat, piles up into gigantic lava domes creating a number of dangers, including one of the most deadly--pyroclastic flows and surges. When a dome grows so large that it becomes unstable and collapses, or when there is a large explosion, a pyroclastic flow may be generated. This is a fast moving avalanche of hot ash and rock fragments in a turbulent gas cloud most likely exceeding 600 degrees Celsius, which will travel down valleys at speeds that can exceed 100 mph, causing total devastation of the areas over which they flow. The finer grain portion of the flow is called a pyroclastic	Hawaiian volcano) Images of dome growth. Video of pyroclastic surges Images of pyroclastic flows Images of destruction due to pyroclastic flows Image from 1902 eruption from La Soufriere St. Vincent Images of destruction due to pyroclastic surges Image from 1902 eruption of Mt. Pele in Martinique	Caption: Pyroclastic Flows and Surges.	

	surge and it can climb terrain such as ridges and hills, taking people by surprise. It is impossible to predict the moment when a pyroclastic flow will occur. It is also impossible to out-run a pyroclastic flow. Therefore to survive, it is necessary to evacuate areas threatened by pyroclastic flows before they occur. Respond immediately to evacuation orders. Another hazard typical of Caribbean volcanoes is that of explosions, which, in addition to pyroclastic flows, can generate ballistic projectiles and ash fall. When the	Images of pyroclastic flows Black/White background Video of explosion	To survive eruption: evacuate areas threatened by pyroclastic flows before they occur Caption: Ballistic Projectiles and Ash	

	volcano's vent becomes blocked, gas pressurizes the upper plumbing system until an explosion occurs. A great column of debris is ejected high into the atmosphere. Large blocks and bombs travel like cannonballs and usually land within 1 mile of the vent, but they can travel further during stronger explosions.	Diagram of volcano showing vent. Clip of ash cloud Images of ballistic projectiles		
	Ballistic projectiles are heavy and fall at incredible speed. Upon impact, they can smash buildings and other infrastructure into pieces. Anyone within range of these falling rocks is in extreme danger.	Images of ballistic projectiles Images of damage caused by ballistics		
	In order to survive an explosion, stay out of range of ballistic projectiles and out of their path. Again, it is necessary	Black/White background	To survive eruption: Respond immediately to evacuation	

	to respond immediately to evacuation orders.		orders.	
	During an explosive event, a great volume of volcanic ash is also ejected. These fine fragments of rock, up to about 2 mm in diameter, are forced upwards in the eruption column before settling out downwind. When volcanic ash falls it blankets the entire landscape. It may even be carried to neighbouring islands by prevailing winds. During the 1979 eruption of La Soufrière in St. Vincent, ash was carried as far as Barbados. Near to the eruption vent, the thickness of the ash deposits may be enough to collapse buildings and destroy vegetation,	Video of explosion Video of ash cloud Video of falling ash Images of ash covered landscape Images of La Soufriere eruption Images of destroyed buildings Images of destroyed		

	especially if there is rainfall.	vegetation		
	In order to stay safe during ash fall, do not drive unless absolutely necessary as dust and darkness will obstruct vision, causing accidents.	Images of vehicles driving in ash	Caption: Avoid driving in ash	
	Slippery wet ash also makes driving conditions treacherous.	Images of wet ash	Caption: Cover water and food supplies	
	Carefully protect food and water for human and animal consumption from contamination by ash	Images of animals in ash	Caption: Clean your roof and cover equipment	
	Protect your property by safely cleaning ash from your roof, and by covering equipment.	Picture of man cleaning roof	Caption: Cover your nose and mouth when outdoors	
	Ash can cause breathing difficulty, so remain indoors during ash fall, or cover one's mouth and nose with an ash mask or	Image of person covering mouth with rag or ash mask		

	a damp cloth when outdoors. There is another type of hazard to be aware of during eruption of the Eastern Caribbean volcano –lahars or mud flows. When it rains heavily, loose volcanic debris may mix with water to create a dense fluid rock mixture called a lahar or mud flow. Lahars act like wet concrete as they rush through valleys around the volcano, killing and destroying almost everything in their path. The threat from lahars may last for years after an eruption has ended. Do not attempt to cross valleys around the volcano, which are known to produce lahars, either by foot or in a vehicle.	Images of Lahars in Montserrat Images of Lahars Images of Lahars carrying away property.	Caption: Lahars/Mud Flows	