

Lake Peigneur Accidentally Drained in Hours

On November 20, 1980 people watched in disbelief as a 150' drilling rig and platform were engulfed in a whirlpool in a lake that was only 10' deep. On the day prior, an oil drilling rig accidentally penetrated a salt mine under the lake with a 14" drill bit causing the lake to drain into the salt mine. Fifty employees were present in the salt mine. One of the miners called in an evacuation alarm. All 50 salt miners escaped with no injuries.

The Delcambre Canal that usually flowed from Lake Peigneur to the Gulf of Mexico had its flow direction reversed allowing ocean water to back flow into the lake creating a 150' waterfall into the empty lake bed. The vortex force was so strong it sucked in another nearby drilling platform, a loading dock, 70 acres of soil, trucks, trees, structures, a parking lot, 11 barges from the canal, and a tug boat.

- 1. Problem** The problem is defined by filling in the Outline. First capture what, when and where the incident occurred. Then list the ways that the incident impacted your organization's goals. To get started we will focus on the safety goal. All impacted goals are added to the Cause Map as it is developed.

What	Problem(s)	Lake Peigneur accidentally drained, Loss of property and equipment
When	Date	November 20, 1980
	Time	Morning
Where	Facility, site	Drilling rig on Lake Peigneur
	Unit, area, equipment	Drilling rig
	Task being performed	Mining salt and drilling an oil well
Impact to each GOAL		
Safety	Potential for injuries	
Environment	Loss of 65 acres of land	
	Fresh water lake ecosystem changed to salt water ecosystem	
Property, Equipment	Damage to Live Oak Gardens nursery	\$12,800,000
	Damage to the salt mine	\$45,000,000
	Loss of drill rig	\$5,000,000
		This incident \$62,800,000

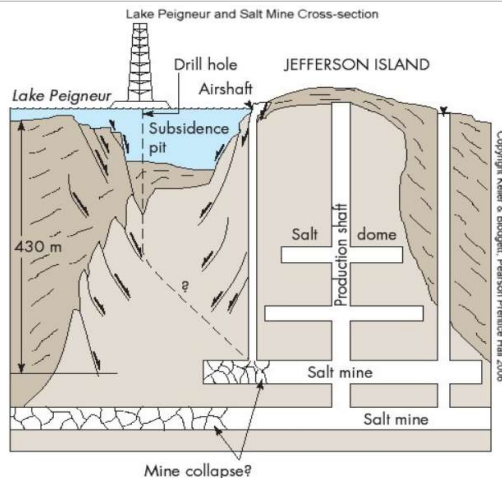
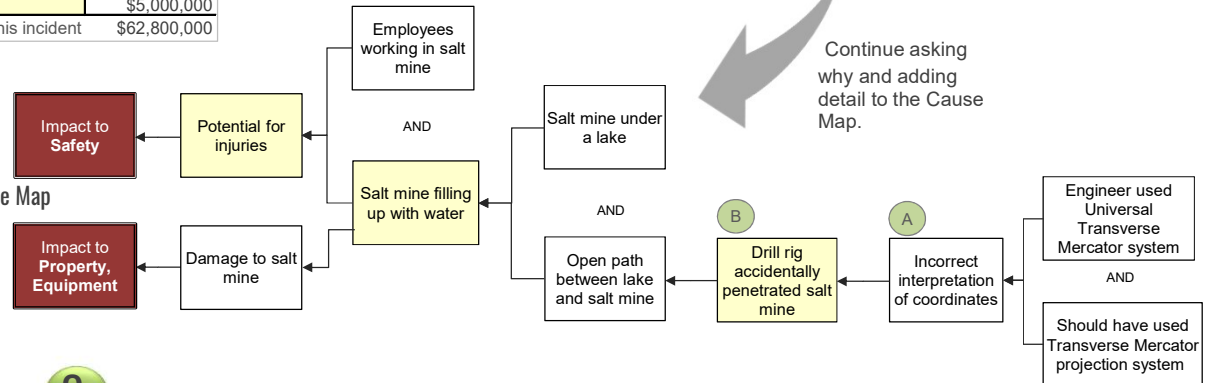


Diagram from http://members.home.nl/the_sims/rig/lakepeigneur.htm

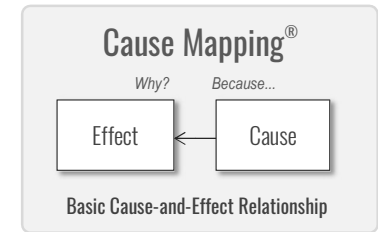
10-Why Cause Map



- 3. Solutions** Each cause captured on the Cause Map presents an opportunity for a solution. However, you may not develop a solution for every cause. Try to develop solutions that are doable action items that will not only reduce the likelihood of this incident from happening again, but also reduce the risk of similar incidents from happening as well.

Ref.	Possible Solution
A	Add step to planning procedure to verify coordinate system used
B	Develop and document review process for drilling plans. Add review process to planning procedure.

- 1. Problem**
- 2. Analysis**
- 3. Solutions**



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