



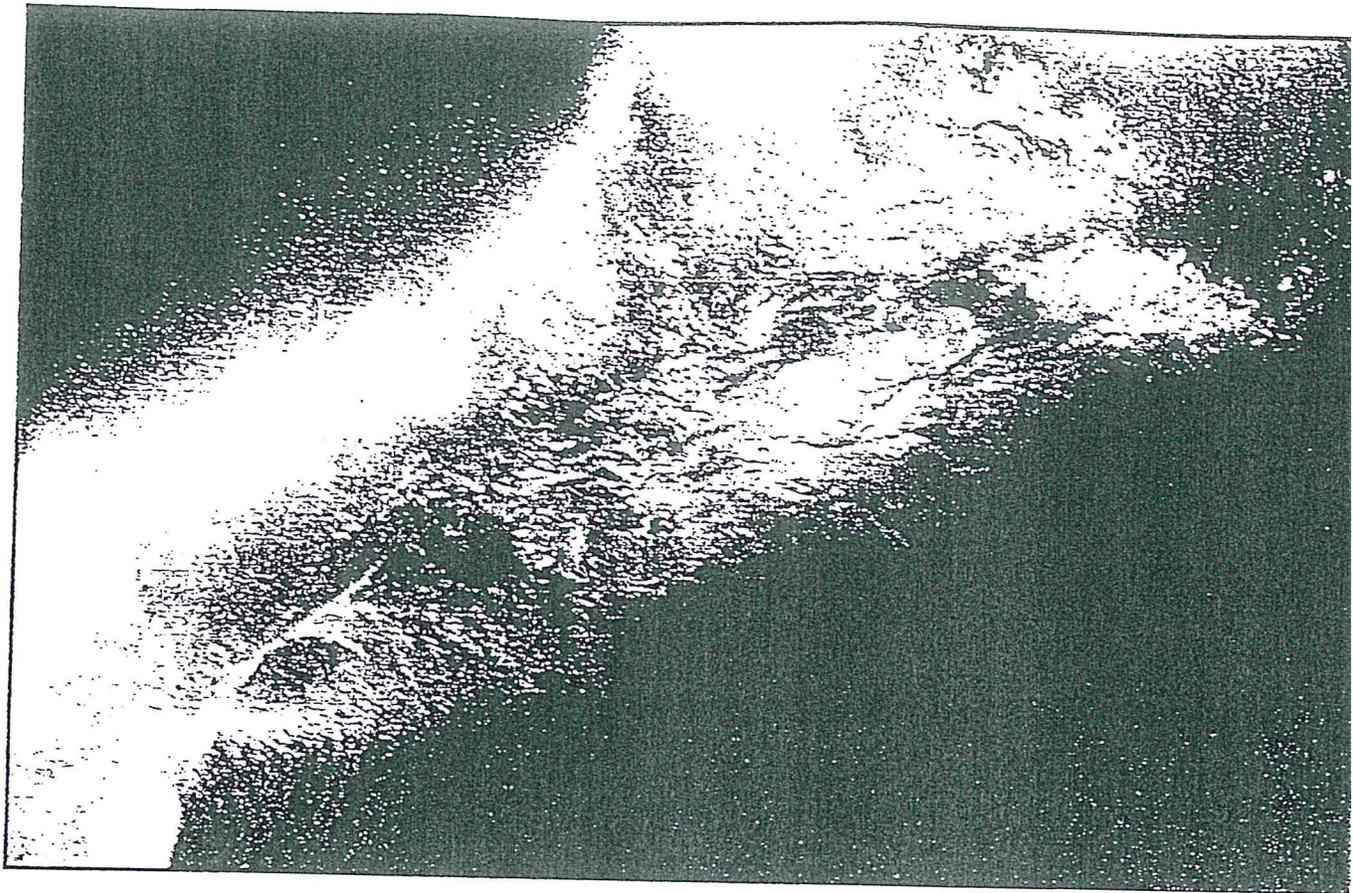
Tidal Wave!

The men in the Alaskan lighthouse looked at each other in surprise. They felt a strange trembling.

“What’s that?” asked one.

The other men shrugged. It was 2:00 A.M. on April 1, 1946. The men didn’t know that the trembling was caused by an earthquake. The earthquake caused a huge tidal wave. The tidal wave was rushing through the ocean toward them.

By the time it reached them, it towered 115 feet in the air. It crashed over the lighthouse. The lighthouse and the men inside were swept away.



An Earthquake

The tidal wave, or *tsunami*, the Japanese word for *storm wave*, was caused by an earthquake deep in the Pacific Ocean. The earthquake shifted the ocean floor. It sent a huge wave traveling across the water. The wave rippled out in a wide arc. It gained speed as it went. Soon it hit Alaska. Then it struck the west coast of Canada and the United States. But the Hawaiian Islands took the worst beating.

A Giant Wave

Captain W.R. Wickland was aboard a navy ship in Hilo Harbor on the island of Hawaii. Around 6:50 A.M., he noticed something strange. The ship dropped a bit. Then it rose. It happened again.

"I looked out and saw what looked like a low, long swell at sea coming in awfully fast. I was some 46 feet above water line. That wave was just about eye-level."

Wickland tried to get the ship away from the dock. But the whole harbor emptied as the giant wave sucked out all the water. Wickland remembers looking out to see coral reefs around the ship.

The harbor filled and emptied four times as Wickland watched. Luckily, the ship's stern was pointed out to sea. That helped the ship ride out the giant wave.

The Lucky Ones

Fusai Tsutsumi was at home in the city of Hilo, Hawaii when the wave hit. She looked up in surprise as her sister burst into the room. "Come see the river! It goes so fast!"

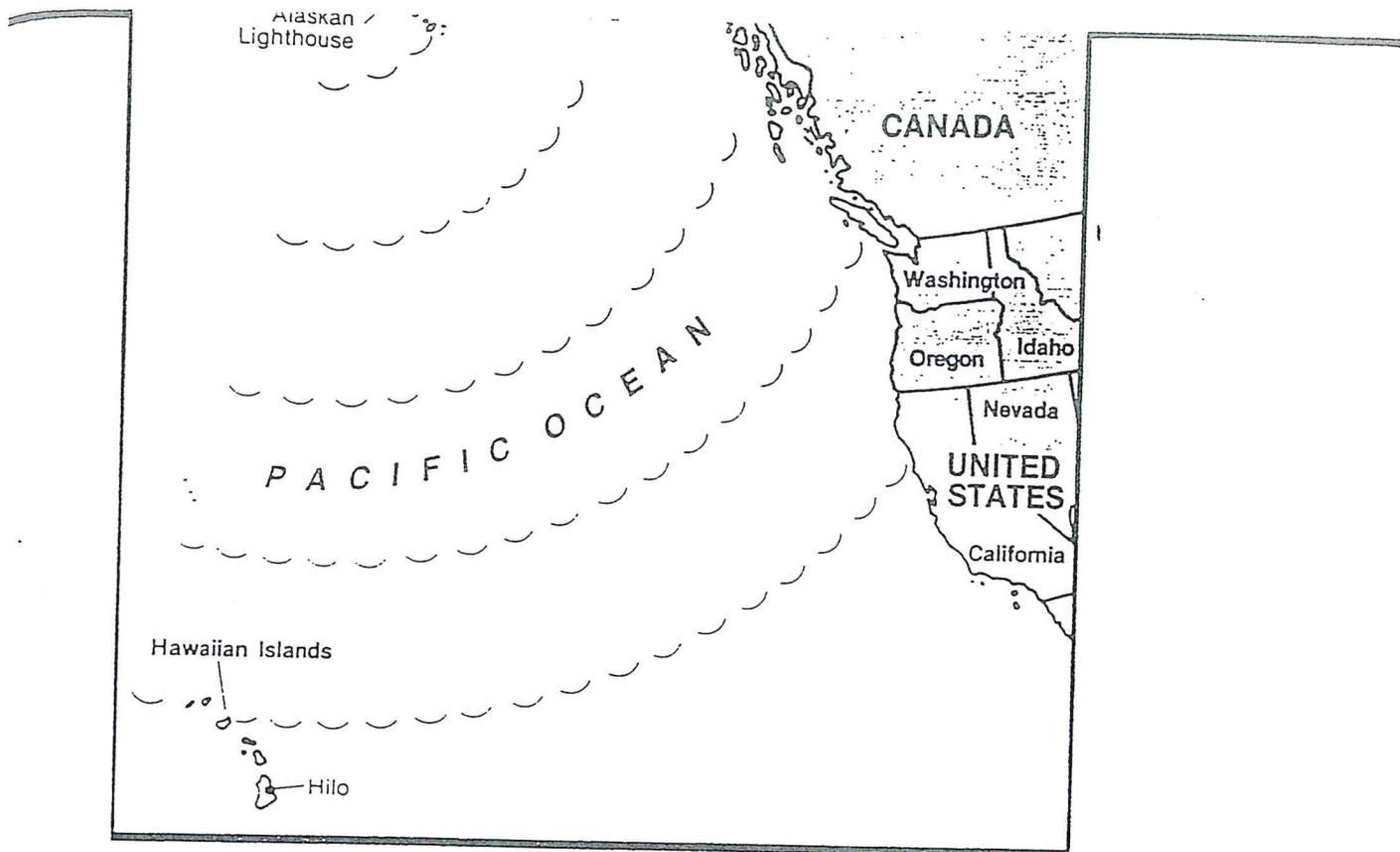
The two girls ran outside. They saw several boys biking as fast as they could. The boys yelled, "Tidal wave! Tidal wave!"

The sisters ran back inside the house to warn their brother. He just laughed. He thought it was an April Fool's Day joke.

The three of them looked out the window. They saw people and debris washing down the river. That was when they realized the danger. This was no April Fool's Day joke! They dashed outside. They ran to a nearby soft drink bottling plant. The concrete building saved them and many of their neighbors.

The Not-So-Lucky Ones

The children of the Laupahoehoe School were not so lucky. Many arrived at school early. They played



This map shows the path of the tidal wave.

on a field just inside the sea wall. Other students were riding down the hill in their school bus. They saw the sea draw back. They couldn't believe their eyes. The ocean floor was bare. All the water had been sucked out to feed the tidal wave. When the bus stopped, students rushed to the sea wall. The strange sight thrilled them.

Suddenly, an ever-rising wall of water appeared. The students screamed in terror. They ran for their lives. Some made it. Others were swallowed by the wave and never seen again.

In all, the tidal wave killed 159 people in the Hawaiian Islands. Property damage was about \$26 million. Scientists are now able to give warnings of tidal waves. They study earthquake tremors to measure how long after an earthquake a tidal wave will hit. Their warnings will help save many lives.

Do You Remember?

■ Read each sentence below. Write **T** if the sentence is true. Write **F** if the sentence is false.

- _____ 1. The lighthouse was destroyed.
- _____ 2. An earthquake under the ocean caused the tidal wave.
- _____ 3. The tidal wave missed Alaska.
- _____ 4. Captain Wickland was killed by the wave.
- _____ 5. Wickland was on a ship when the tsunami struck.
- _____ 6. A soft drink bottling plant sheltered some people.
- _____ 7. The tidal wave that hit the lighthouse was 115 feet high.
- _____ 8. The tidal wave sucked all the water out of Hilo Harbor.

Critical Thinking – Finding the Sequence

■ Number the sentences to show the order in which things happened in the story. The first one is done for you.

- _____ The children ran for their lives.
- _____ The bus stopped at the Laupahoehoe School.
- 1 The ocean floor shifted.
- _____ The tidal wave struck Alaska.
- _____ The children saw the bare ocean floor.

Exploring Words

- Use the words in the box to complete the paragraphs. Reread the paragraphs to be sure they make sense.

sea wall	tidal wave	arc	swell	shrugged
tsunami	towered	dock	tremors	coral reefs

When the trembling started, the men in the lighthouse

(1) _____ . They didn't know a (2) _____
was coming. The giant wave spread out in an (3) _____

Another word for tidal wave is (4) _____. The wave
(5) _____ 115 feet in the air.

From far away, the tidal wave looked like a low (6) _____
in the water. But in fact it was huge. Ships near the
(7) _____ were in danger. The tidal wave
sucked the water out of the harbor. Because of this,
(8) _____ could be seen on the floor of the ocean.

The wave also swept away some children standing near a
(9) _____

Scientists study earthquake (10) _____ so that they
can warn people of approaching tidal waves.