

# Tsunami Phase 2

## Print Version for Teacher Support

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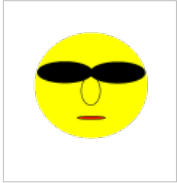
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# Tsunami/Phase 2

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**The waves have gone... What now?**



## Survival Agent

*Listen here* <playmp3>Survival Agent



### Objective

You will be learning to describe the physical and social impacts that a tsunami can have.

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# Tsunami/Phase 2/Lesson1 1

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## The effects a tsunami can have

Click the link below to watch a video about the impacts of a tsunami on Samoa and American Samoa.

*Warning: this video contains material which may be distressing to sensitive viewers. Discretion is advised.*

Tsunami impacts <sup>[1]</sup>



Discuss <sup>[2]</sup>

## References

[1] <http://www.youtube.com/watch?v=SHVXICZ1iU0&feature=related>

[2] <http://tsunamiwiki.wikispaces.com/message/view/home/27535519>

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# Tsunami/Phase 2/Lesson1 2

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## Physical impacts



## Survival Agent

*Listen here* <playmp3>Survival Agent

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## Activity

### Identify impacts

Examine these satellite photographs <sup>[1]</sup> to see the difference between Banda Aceh before the 2004 tsunami and after.

### What physical differences can you identify?

1. Think about the materials and the structure of the mosque compared with the materials and structures of the buildings around it that were all destroyed.
  - What differences can you think of between these structures that would explain why the mosque is still standing?
  - Are there any buildings in your community that would be more likely to withstand a tsunami than others?
  - Why?
2. Dr Jose Borrero from the University of Southern California was able to travel to Aceh province of Northern Sumatra, one of the areas hardest hit by the tsunami and earthquake. Read Dr Borrero's diary <sup>[2]</sup> of his time in Aceh (eight days) to see how he describes the physical impacts of this tsunami.  
Discuss <sup>[3]</sup>



## Activity

### Physical Impacts Presentation

After viewing the satellite photos and reading Dr Borrero's diary, prepare and deliver a presentation (to class mates) or add to the wikispace discussion to summarise in your own words the physical impacts of the tsunami on Banda Aceh (if you are completing this course at home, you could deliver your presentation to family or record it on a webcam and upload it to a video sharing website).

## References

[1] <http://www.globalsecurity.org/military/world/indonesia/aceh-andaman-tsunami-imagery.htm>

[2] [http://www.usc.edu/dept/tsunamis/2005/tsunamis/041226\\_indianOcean/sumatra/notes1.html](http://www.usc.edu/dept/tsunamis/2005/tsunamis/041226_indianOcean/sumatra/notes1.html)

[3] <http://tsunamiwiki.wikispaces.com/message/view/home/27535499>

## Class Mode Extension Activity 2: Before and After – 2.12

From the teaching guide of <http://wikieducator.org/Tsunami>

<p><b>Builds on:</b></p> <ul style="list-style-type: none"> <li>Lesson 2.12 – Physical Impacts</li> <li>Lesson 1.1X - Understanding of physical attributes of tsunami, especially run-up</li> </ul> <p><b>Future connections:</b></p> <ul style="list-style-type: none"> <li>Lesson 2.2X – Social Impacts</li> <li>Lesson 3.42 – tsunami game</li> </ul>	<p><b>Connection to Learning Outcomes:</b></p> <ul style="list-style-type: none"> <li>Define tsunami, describe how it occurs and identify the warning signs - both man-made and natural.</li> <li><b><u>Describe the physical and social effects that a tsunami can have.</u></b></li> <li>Design and evaluate survival plans and <b><u>precautions against the threat of tsunami</u></b> for their local context and other contexts.</li> </ul>
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### Collaborative Activity:

Students work in groups to analyse the before and after images displayed in lesson 2.12. Groups discuss one element of the pictures and present their findings to the class. [http://wikieducator.org/Tsunami/Phase\\_2/Lesson1\\_2](http://wikieducator.org/Tsunami/Phase_2/Lesson1_2).

### Preparation:

- Access the set of before and after pictures displayed in lesson 2.12. Note – click on any image to display large version of the image with manual toggle (mouse over to change to before pic, mouse off to change to after pic). <http://www.globalsecurity.org/military/world/indonesia/aceh-andaman-tsunami-imagery.htm>
- If classroom will not have internet access or offline activity is preferred, a set of before and after images will need to be printed prior to the lesson.
- Write the four group focuses on the board before lesson starts or as class settles.

### Roles & Responsibilities:

Class is divided into 4 groups. Each group has a different focus for their group discussion. Teacher assigns each group with one of the following focuses:

- Consider the extent of the damage in these pictures and explain in detail how the tsunami caused it.
- Most structures are destroyed, while a mosque remains standing. Examine in detail why this is.
- Describe some of the long term effects that would be caused by the damage shown.
- Based on what you know about tsunami evacuation routes, identify the problems that people in this area would have faced as they tried to escape the tsunami.

### Facilitation:

Time	Action	Notes
T – 10 min	Introduce activity. Split class into four groups & set up media.	<i>Groups should each appoint a chairperson and two note takers.</i>
10 – 30	Assign each group with a focus statement: time limit discussion.	
30 – 35	Dissolve groups and arrange seating for class discussion. Explain that each chairperson will introduce group focus: note takers will explain main points and the whole class will discuss.	<i>Encourage other group members to build on points raised by chair &amp; note takers with aim of involving whole class.</i>
35 – End	Continue discussion on each focus for five minutes.	<i>Adhere to time limit strictly to include all.</i>

### Some Potential Reflection Tasks (next lesson):

- Resume class discussion in future lesson on any points that were left unfinished.
- Students consider the structure and position of local buildings and discuss how tsunami-resistant the local area is (could be made into a group activity where each group considers the safety of structures in a different local area).
- Students compare local coastal topography to Aceh flat lowlands and discuss how this would affect evacuation.
- Class, group or individual task: contemplate and describe the impact on student's own life if their local community was destroyed completely & compare this impact to Aceh survivors who depended on the land for sustenance.

# Tsunami/Phase 2/Lesson2 1

## Social impacts: could this be us?

The waves have gone, what now? <sup>[1]</sup> (*this link is to a video clip that may be disturbing to sensitive viewers*) The social impacts of tsunami are enormous and, sadly, long term. In Samoa, a small island nation, hundreds of people were killed when a tsunami struck on 29 September 2009. Given the small population size of Samoa, the immediate effect of this event meant that in some cases generations of a family or even entire families were wiped out. Many Samoans living in New Zealand went to Samoa to help with the emergency response and relief efforts and to re-establish contact with family members.

Earlier in this course you heard from Abbey Wutzler and her family about how they felt when the tsunami hit Samoa while they were on holiday. Watch this news reel of interviews <sup>[2]</sup> with American Samoans that survived the 2009 tsunami and with the family members that returned to help out. What impacts on the community can you see?



Many tourists were also killed, injured or stranded in Samoa and American Samoa afterwards. Some stayed to help when they could have returned to their own homes. In disasters such as tsunami, disaster relief carries on for a long time afterward to help rebuild and heal the societies affected. Although many countries provide relief to their neighbours in a disaster, the real lasting development happens inside the affected country. The strength of the government, the resilience of the local community and the local economy are the most important tools for regenerating communities after a disaster.

There are steps the community can take to minimise social impacts of a tsunami including:

- Identifying tsunami hazard areas and publicising these areas to the community and visitors to the area
- Identifying and promoting tsunami evacuation zones, routes, warning methods and signage
- Promoting and practicing evacuation procedures

Discuss <sup>[3]</sup>

## References

[1] <http://www.youtube.com/watch?v=ir4zqX0tgB4&feature=related>

[2] <http://www.youtube.com/watch?v=HIJG5y-niyY>

[3] <http://tsunamiwiki.wikispaces.com/message/view/home/27535477>

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## Tsunami/Phase 2/Lesson2 2

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### Activity

#### Social Impacts

1. In your team of survival agents, review the videos in this section of the course and discuss the social impacts you see in the videos. Try to answer the following questions.
  - What are the common impacts that you can identify?
  - What difference has this disaster made to the lives of the various people in the videos?
  - How would your lives be affected if a tsunami impacted on your community?Discuss <sup>[1]</sup>
2. Individually, write a very short story or a few days in a diary from the perspective of a survivor portrayed in one of the video clips you've watched, (or invent a character who is connected to one of these scenes and write it from their perspective).  
Discuss <sup>[2]</sup>

### References

[1] <http://tsunamiwiki.wikispaces.com/message/view/home/27535469>

[2] <http://tsunamiwiki.wikispaces.com/message/view/home/27535447>

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## Tsunami/Phase 2/Lesson2 3

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### Survival Agent

*Listen here* <playmp3>Survival Agent

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## Class Mode Extension Activity 3: Survivor Interview – 2.22

From the teaching guide of <http://wikieducator.org/Tsunami>

<p><b>Builds on:</b></p> <ul style="list-style-type: none"> <li>Lesson 2.22 – Social Impacts</li> <li>Lesson 1.1X - Understanding of physical attributes of tsunami, especially run-up</li> </ul> <p><b>Future connections:</b></p> <ul style="list-style-type: none"> <li>Lesson 3.12 – Getaway plan</li> <li>Lesson 3.42 – tsunami game</li> </ul>	<p><b>Connection to Learning Outcomes:</b></p> <ul style="list-style-type: none"> <li>Define tsunami, describe how it occurs and identify the warning signs - both man-made and natural.</li> <li><b><u>Describe the physical and social effects that a tsunami can have.</u></b></li> <li>Design and evaluate survival plans and <b><u>precautions against the threat of tsunami</u></b> for their local context and other contexts.</li> </ul>
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**Collaborative Activity:** At least two lessons.

Students work in groups to prepare and present a survivor interview (either as a video clip as in the [Wurtzler video](#) shown previously or as a performance to the class) based on their diary work. [http://wikieducator.org/Tsunami/Phase\\_2/Lesson2\\_2](http://wikieducator.org/Tsunami/Phase_2/Lesson2_2)

### Preparation:

- Those classes that have access to, and have some experience with, video cameras could adapt this easily as a video recording activity. Please note that this option will affect timing and your plans will need to adapt accordingly.
- Otherwise, the activity outlined here is intended to result in a basic performance to class (front of room as stage).
- Prepare video cameras & computers if following video presentation option.*

### Roles & Responsibilities:

Class is divided into small groups (3-6 students per group). Groups consist of the following roles, but the responsibilities will be shared to some extent and any student may hold more than one role:

- Script writer: plans, writes and develops script throughout process.
- Director: translates script into performance. Directs actors in rehearsal (& performance if video)
- Producer: Manages the process. Prepares schedule and ensures all members stay on task. Communicates with teacher and other producers if needed.
- Actors: Develop the characters presented, learn script and give performance.
- Cinematographer (camera operator): Responsible for care and operation of cameras, including camera positions, angles, movement and lighting – if video option.*
- Editor: Arranges and edits footage for the creation of final presentation clip – if video option.*

### Facilitation:

Time	Action	Notes
Lesson 1	Introduce activity. Split class into groups. Note that final clip / performance time limit (recommended 3 mins) Groups appoint roles and begin planning of story and schedule. Story should be based on one or more of the student diaries (2.22)	<i>Outcome of lesson 1 = all members assigned with role and homework tasks; story outline made and understood by whole group.</i>
Lesson 2	Script writer, director & actors work together in developing script and characters. Script writer develops script; director considers any props needed, setting and any action; Actors develop character based on script outline and begin practicing character. Producer keeps all on task, helps where needed and communicates with teacher any problems or questions.	<i>If video option – cinematographer practices with camera and experiments with lighting and angles. Editor practices editing software.</i>
Lesson 3	Performance of each group survivor interview / survivor story.	<i>If video option – lesson 3 is filming with lesson 4 as presentation.</i>
	If necessary, any number of lessons can be added before performance for development and rehearsal.	<i>...and filming if video option.</i>

### Some Potential Reflection Tasks (next lesson):

- Discuss, rate and commend performances. Reflection on their similarities and differences and implications of real clip.
- Reflection on how being interviewed may affect a survivor.
- Class project to create a larger presentation / performance by compiling and synthesising group efforts.

# Article Sources and Contributors

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