

# PROMOTING ANCESTRAL WAYS TO ADDRESS IMPACTS OF CLIMATE CHANGE

## 2012 HIGH SCHOOL PHOTO ESSAY CONTEST WINNER

Commonwealth of the Northern Mariana Islands



Before: Micro Beach, Saipan. Trust Territory Times. 1950s-1970s

### Tatiana Ada Calvo

12th grade

Southern High School



Today: Micro Beach, Saipan. March 08, 2008. Gerald Zinnecker (photographer)

### Micro Beach

Along with its breathtaking landscape and mixture of cultures, the beautiful island of Saipan encompasses rich history within its shores. Over the decades, Saipan has undergone drastic changes that have affected the culture of its people and its landscape. However, people such as Ines Seman Ada recall what life on Saipan was like before such changes took place.

When asked about Micro Beach during the Trust Territory times, Mrs. Ada described a large pavilion within Micro Beach that was used to hold District Administration receptions and entertainment shows for off-island government officials from Guam, Micronesia, and Washington, DC. Mrs. Ada also discussed that the locals would utilize Micro Beach to “barbecue and enjoy the beach.” She explained that the shore was wide enough to cast volleyball nets, and during Labor Day celebrations the locals would play volleyball on the beach.

Today, new developments such as restroom facilities and a playground have been added to the Micro Beach area. The beach is seldom used to hold receptions or entertainment shows, as it was frequently used during the Trust Territory times. The beach is still used for recreational purposes; however, it is not being utilized like it was during the Trust Territory times.

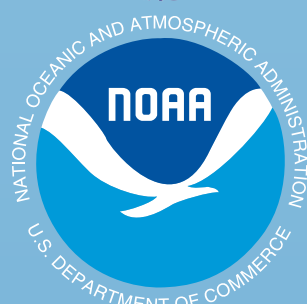
While comparing the two photos of Micro Beach, Mrs. Ada immediately recognized the differences in the shore, as the shore in the older photo was much wider. She expressed that the potential impact due to climate change would be sand erosion, and that erosion may be evident whenever Saipan experiences typhoons. Mrs. Ada suggested that in order to protect the site, the government should continue to maintain cleanliness in the area.

In any culture, preservation is the key factor to its survival. By preserving Micro Beach, future generations may continue to carry on its tradition of recreation and enjoyment.

COASTAL PEOPLES ADDRESS CLIMATE CHANGE  
**FIRST STEWARDS**  
[www.firststewards.org](http://www.firststewards.org)



**Western Pacific Regional  
Fishery Management Council**  
[www.wpcouncil.org/](http://www.wpcouncil.org/)



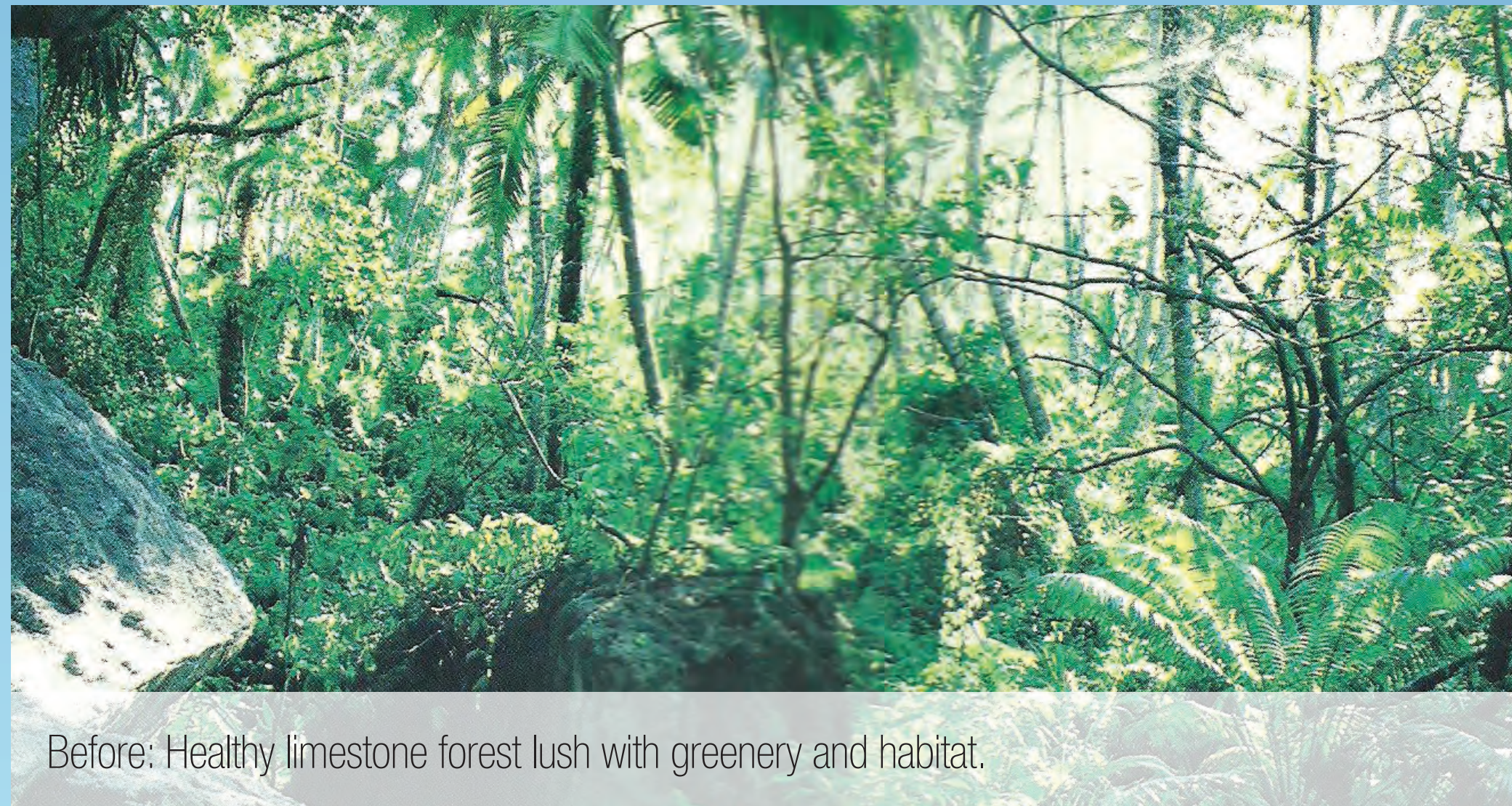
**NOAA Fisheries Service**  
Pacific Island Regional Office  
[www.fpir.noaa.gov](http://www.fpir.noaa.gov)



# SURVIVING CLIMATE CHANGE THROUGH CHAMORRO CULTURAL TRADITIONS AND VALUES

## 2012 HIGH SCHOOL PHOTO ESSAY CONTEST WINNER

Guam



Before: Healthy limestone forest lush with greenery and habitat.

### Anthony Tornito

12th grade  
Okkodo High School



Today: Introduced, invasive species have silenced the jungle and inhibited growth.

### Halom Tano' (Forest, Jungle)

For approximately 3,500 years a mysterious and unique culture evolved: the Chamorro culture. Our people heavily depended on the birds (paluma), bats (fanihi), and plants (tinanom) that grew on land and the fish (guihan) and other life that graced the ocean encompassing our island. These resources, once abundant, continue to disappear before our eyes.

Change is inevitable. An example of a major change on Guam is the silence within the jungle. The introduction of the brown tree snake made native bird and fruit bat populations drastically decline, leading to the extinction of one species (the Guam Flycatcher) and subspecies on Guam. In an interview with my grandparents (Mañaina), who grew up with the birds, memories were reawakened. They stated that music filled the jungles, and now they are amazed with its silence. With the absence of native birds and declining populations of bat colonies, the once abundant source of food and entertainment are now absent; our pollinators of the forests are gone. Without pollinators, new trees cannot grow. When trees cannot grow, there are no roots to hold the soil together. Soil will erode into the rivers that flow into the ocean and cover the corals from the sunlight thus leading to the death of coral.

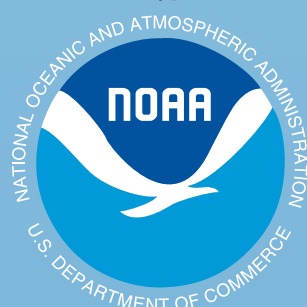
Along with today's changes, a major contributor is climate. As with any island across the Pacific, we are surrounded by water. In the future, our shores will get smaller due to the dramatic rise in sea levels. The coral that have adapted to a certain temperature and depth will disappear. The disappearing coral will lead to the disappearance of fish and important species that were once a vital part of the ancient Chamorros' lives.

Without these resources today, we will lose the future. Saving my culture and island are my priorities!

COASTAL PEOPLES ADDRESS CLIMATE CHANGE  
**FIRST STEWARDS**  
[www.firststewards.org](http://www.firststewards.org)



**Western Pacific Regional  
Fishery Management Council**  
[www.wpcouncil.org/](http://www.wpcouncil.org/)



**NOAA Fisheries Service**  
Pacific Island Regional Office  
[www.fpir.noaa.gov](http://www.fpir.noaa.gov)



# CLIMATE CHANGE AND RELATED TRADITIONAL KNOWLEDGE

## 2012 HIGH SCHOOL PHOTO ESSAY CONTEST WINNER

American Samoa



Before: August 23, 1906. Dr. E. Schultz (photographer)

### Farrah Tulia

11th grade

Nu'uuli Vocational Technical High School

### Transportation

Born to the marvels and convenience of the modern age, I never thought that using cars to run errands could affect our climate, nor have I considered walking when I run errands; but from talking with the elders, I have learned that a lot has changed from then to now. In the past, people used their strength to walk from place to place, and to go to their destinations. This traditional routine did not cause pollution in the air. Now, people use cars to reach their destinations.

The use of cars causes pollution in the air and fuel shortages on the island, which pushes to import more fuel from other places. This does not only affect the air, but also the ocean. When fuel from ships spills, it affects the sea creatures and mostly everything in the ocean. When this happens, we will all be uncomfortably warm due to climate change.

The importance of culture and traditional knowledge is that it prevents and lessens pollution. Using our own strength and power to walk instead of using cars will not lead to climate change. It will also help us to become stronger and to be unwary. We are not only doing this for our health, but also for our planet.

It has been a long journey for our ancestors to keep our island beautiful. Let us have our own journey in trying to keep it pollution free. Let us ride less and walk more.

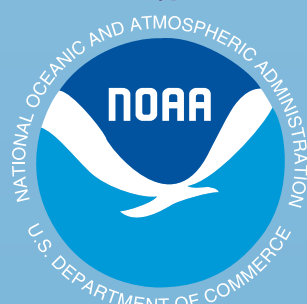


Today: Utulei gas station, April 24, 2012. Farrah Tulia (photographer)

COASTAL PEOPLES ADDRESS CLIMATE CHANGE  
**FIRST STEWARDS**  
[www.firststewards.org](http://www.firststewards.org)



**Western Pacific Regional  
Fishery Management Council**  
[www.wpcouncil.org/](http://www.wpcouncil.org/)



**NOAA Fisheries Service**  
Pacific Island Regional Office  
[www.fpir.noaa.gov](http://www.fpir.noaa.gov)



# MAY OUR ANCESTORS ESTEEMED WAY OF LIFE THRIVE

## 2012 HIGH SCHOOL PHOTO ESSAY CONTEST WINNER

Hawaii



Before: Mākāhā (sluice gates intact)

### Roice Gariando

11th grade

Ke Ana La'ahana Public Charter School



Today: Mākāhā (sluice gates used to separate the fish) were displaced and swept out to sea

## Hale O Lono Loko I'a and Kaiakahinali'i (Fishpond and Tsunami)

Before Captain James Cook landed Hawaii in 1778, a child of rank, power and purpose was born. At the birth of Kalaninui`iamamao, the Kumulipo (Hawaiian creation chant) was first recited. He was also given the name Lonoikamakahiki, which is one of the four major Hawaiian gods. His father built him a loko i'a (fishpond) as his place to bathe and fish. It was named Hale O Lono (House of Lono).

When Hawaii was occupied and turned into a state, Hale O Lono was neglected, turned into a restaurant and then an overgrown dump-site. In the 1990s, the Edith Kanaka`ole Foundation took the pond. Students now use it as a learning tool.

Recently, Hale O Lono was hit by two kaiakahinali'i (tsunamis, or tidal waves). The first was generated on February 27, 2010, when Chile suffered an 8.8 magnitude earthquake. Four places in the pond's outer rock wall were punched out. The pond was inundated with water and debris ranging from sticks to tires. The mākāhā (sluice gates used to separate the fish) were swept out to sea; plants were smashed and covered with sediment. About 70% of the mullet stock was lost, and new predatory fish were introduced along with invasive plant species like mangroves. The pond took three months to clean.

The pond was nearly recovered when Japan was rocked with a 9.0 magnitude earthquake on March 11, 2011. At Hale O Lono, two large chunks went missing from the outer wall, one mākāhā was displaced, and debris floated in. Today the pond is nearly back to normal with restored growth cycles of flora and fauna.

The kai (ocean) to the Hawaiians has great significance. It carried us to where we live now, we work it for our livelihood and respect it as one of our major gods, but it's full of dangers. A rising sea can destroy our coastline communities and significant places mentioned in stories passed on for generations. Hawaiians don't want to lose more of their culture.

An Hawaiian proverb ('ōlelo no`eau) states "Iliki ke kai i ka `ope`ope la, lilo; i lilo no he hawawa. The sea snatches the bundle and it is gone; it goes when one isn't watchful. A person who fails to watch often loses." In other words, know and understand what's going on in your environment so you are able to interpret it so you can be more prepared.

COASTAL PEOPLES ADDRESS CLIMATE CHANGE  
**FIRST STEWARDS**  
[www.firststewards.org](http://www.firststewards.org)



**Western Pacific Regional  
Fishery Management Council**  
[www.wpcouncil.org/](http://www.wpcouncil.org/)



**NOAA Fisheries Service**  
Pacific Island Regional Office  
[www.fpir.noaa.gov](http://www.fpir.noaa.gov)