

decrease.

The issue is that we should allow tourists to use this area. In my own opinion i think this is an issue because the Grand Canyon is an area of natural beauty and we should not stop them from seeing the area but they are abusing it by throwing litter which can cause visual pollution and can also harm the species there. They can also cause air pollution and noise pollution which can scare away wildlife. A sustainable solution is the answer to the issue so that tourists can enjoy the Grand Canyon without running or harming the wildlife in it for future generations.

I consider the best sustainable solution for this is the park and ride because it decreases air pollution. By getting more people on a bus it can reduce this issue. Also another sustainable solution for littering is that they can build a campsite like log cabins to prevent littering and if they continue to litter they should have their permits taken away and get kicked out.

Park ranger, Phil Kemp said that he is against tourists at the Grand Canyon because they continue to litter all around the national park which can cause pollution and damage the wild life and the natural beauty. But he says he enjoys working at the national park because that's what he wanted to since a young age and it gives him an opportunity to share this great experience with everyone. The tourists need to learn how to respect the park.



The above image is a picture of 'Phil Kemp' the Park Ranger at the Canyon.

The Indian chef of the tribe Hualapai Antony James, Said that he is against tourists at the Grand Canyon because they cause noise pollution which can frighten animals away and can destroy the natural beauty and its diverse habitat. But he said he was also for tourists at the Canyon

because it generates a lot of income for the tribe by building the sky walk. This means his tribe are going to become wealthy and they are going to have jobs. This is important to the tribe as not many of them have had an education to get a good job. The elders don't agree with the sky walk because they think it will destroy the tribe.



The above image is a picture of 'Antony James, the Indian chef of the tribe Hualapai.

I also interviewed the environmentalist, Laura white and asked her what she thought of the tourists being at the Grand Canyon. She said that she was against it because she believes that by driving there it's the most damaging form of transport when it comes to climate change and global warming. It also causes air pollution and noise pollution which can scare wild life away. Large numbers of tourists can damage the areas that

ecotourism seek to protect. Also it has an impact in the culture and tradition of the local residents because they lose their meaning about the Grand Canyon and simply become entertainment for tourists.



The above image is a picture of 'Laura White' the environmentalist.

Tourists bring a lot of income to the area, this can be spent on improving facilities in the area or as in the case of the Grand Canyon. The Hualapai tribe benefit from building the sky walk and tourists pay to use it and it provides the tribe with much more needed jobs. They can also spend it on improving their lifestyles and their homes. By bringing jobs to the area this can also benefit the whole of the USA. This is because local residents are working which mean they are paying taxes. The money paid then goes to the government and can be used in improving schools, leisure centres etc. The more tourists come to visit the area providing jobs for everyone causes the employment rate to

Footpath erosion as most tourists use the same trails this looks ugly and destroys plants. The most popular trail is the Angel trail. A sustainable solution for this is to only allow a minimum amount of people to go through certain paths. Or you can plan new routes for tourists to go through, put signposted routes, or have artificial surfaces laid.



The above image shows the popular trail 'Angel Trail'.

They remove rocks for souvenirs. This has an impact on the Grand Canyon because it increases erosion when a stone is removed because it reaches the ground it exposing bedrock. A solution for this is to zone it.



The above image shows rocks removed for souvenirs in the Grand Canyon.

Tourists can go to the edge of the paths to view points. This has an impact on the Grand Canyon because severe erosion is taking place at popular view points making the canyon edge unstable. A solution for this is to allow a minimum amount of people at the view point so erosion doesn't take place or stop them from viewing it and create a different view point.



The above image shows one of the view points in the Grand Canyon.

As well as problems tourists can bring many benefits like jobs in tourism like tour guides and waiters. When tourists visit the Grand Canyon they bring money which they spend in the local area this is called the positive multiplier effect so the whole area benefits.

The Grand Canyon is important to the area because it's a tourist's destination. Tourists generate income to the Grand Canyon and, at the same time, provide much

needed jobs for the residents. This has an impact on the Grand Canyon because the money can be used to help provide medical care for the locals, or promote and protect the Grand Canyon for future generations.

I have interviewed four local residents from the Grand Canyon and asked them whether they were against or for, tourists at the Grand Canyon.

The first person that I interviewed was Bill Jones, the manager of the Malton Hotel. He said that he was for tourists coming to the Grand Canyon because they generate a lot of income to the area, at the same time it provides much needed jobs for the residents such as, catering, cleaning, chef and many more. This means low unemployment rates in the area. It also makes money for the hotel so I can improve facilities.

The image below is a picture of 'Bill Jones' the Malton Hotel Manager.



They can site see, they can take part in sports like white water rafting, hiking and mule trekking. They can also enjoy the wildlife and plants.

Below are a few issues tourists can cause in the Grand Canyon.

They can also go mule trekking on the paths in the Grand Canyon. This means that the paths have to be blasted into the canyon sides and this is destroying habitats and looks ugly. Also by blasting into the canyon it causes an eyesore. A sustainable solution for this is to use natural paths instead of man made paths.



The above image shows tourists mule trekking.

Many Tourists pick rare plants. This has an impact on the Grand Canyon because some delicate ecosystems are being damaged and can cause some plants to become extinct. A sustainable solution to this is to re-plant the plants and build an attractive wooden fence so it doesn't create visual pollution and it's in

keeping with the environment to prevent tourists from picking the plants.



The above image shows tourists picking rare plants.

Over 6000 cars arrive in the park daily and this causes air pollution which can give problems to people with asthma. It can also cause traffic jams in the summer. A sustainable solution for this park and ride because it will decrease air pollution and by getting more people on a bus it will reduce the amount of cars arriving at the canyon park which will solve the issue of traffic jams.



The above image shows tourist arriving at the canyon.

Tourists can go White water rafting which brings thrills to the tourists but they leave litter and human waste in the river banks which can kill animals. Sustainable solutions to this to build a campsite like log cabins to prevent littering and if tourists continue to litter they can have their permits taken away.



The above image shows tourists white water rafting.

Noise pollution from helicopters taking tourists down into the canyon destroys animals in their habitat. Also it contributes to global warming. A sustainable solution for this is that you have sound detectors near the park and residential areas.



The above image shows a helicopter taking tourists down into the canyon.

TOURISTS HOLD NO RESPECT FOR THE CANYON

The Grand Canyon is located in the south west of the USA, in the state of Arizona. It lies on the river Colorado in Arizona State and borders the states of Nevada and California.



The above map shows a brief image where the River Colorado is located.



The above map also shows a brief image where the Grand Canyon is located.

Nearly two billion years of the earth's geological history have been exposed as the Colorado River and its tributaries cut their channels through layer after layer of rock while the Colorado plateau was uplifted. The canyon was created by the vertical erosion of the

Colorado River over a five million year period. The Canyon has very steep sides creating steep sided gorge created by hydraulic action where the sheer weight of the water cuts the river bed vertically creating a steep sided river valley. Tectonic action has also played an important part in its formation.

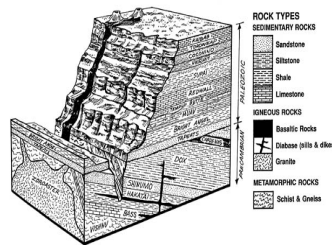


Figure 1 Block diagram showing the sequence of geologic formations and topography before the north rim of the Grand Canyon (Smith 1994 Fig. 2.5).

The above image shows a diagram of the formation of the Grand Canyon.

The features that attract most tourists to go to the Grand Canyon national park are that there are many rare plants and animals such as a condor, flora and fauna. They are also attracted to the big hole in the ground because it's very unusual and it is one of a kind. They also experience the great outdoors by being able to camp in the middle of nowhere.



The above image is a picture of a flora.



The above image is a picture of a fauna.



The above image is a rare animal called a condor.

Tourists are attracted to the Grand Canyon for many reasons.