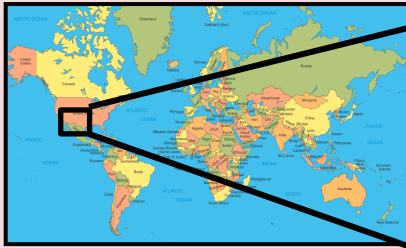


Case study of the opportunities and challenges of developing in hot desert environments = Western Desert

Where?



The USA's Western desert region is made up of 3 different hot deserts:

1. The Mojave desert
2. The Sonoran desert (part of it)
3. The Chihuahuan desert (part of it)

Opportunities:

Extreme temperatures	Native Cocopah people lived in earth houses that naturally kept cool. When migrants first arrived they build houses with flat roofs to collect rainwater, small windows to stop sunlight from getting in and whitewashed walls. People nowadays still whitewash walls but everyone has air conditioning.
Water supply	The Colorado River has been dammed and Lake Mead created to hold water. It is then transported via aqueducts and pipes such as the Central Arizona Project to where it is needed. With a growing population in the Western desert and thirsty golf courses there is a water security problem and Lake Mead is at record low levels.
Inaccessibility	Roads are rough and the extreme temperatures make it dangerous if your car breaks down. There are little road signs and off-roading can be perilous – an elderly couple died of dehydration from doing so in 2015. There are some railways which connect cities like Las Vegas with other major cities but most people fly – Las Vegas airport receives 40 million people each year – much safer than driving.
Lack of rainfall	People wanted green lawns but the watering was draining the limited water supplies in the desert. People have switched to fake grass lawns and having desert planting like cactuses that don't require much water.

Farming	In the rural areas of the Western Desert people make their money from agriculture. The warm temperatures and sunlight are good for growing but water is an issue. Therefore irrigation is important. Agriculture makes up 10% of the economy.
Mineral extraction	The Western Desert is rich in minerals like copper, uranium, lead, zinc and coal. Not all of these minerals have been exploited because they think it will cause conflict with local farmers. Copper mining has taken place in the Sonoran Desert near Ajo, Arizona. Open cast mining takes place on a large scale here.
Energy - solar	The Sonoran Solar Project in Arizona is a new solar power plant project that will produce energy for 100,000 homes. Jobs will also be created in construction on this project.
Tourism	<ul style="list-style-type: none"> • The National Parks offer tourists the chance to see the Grand Canyon and the Joshua Tree National Park. • Las Vegas attracts 37 million tourists per year. • People enjoy boating on Lake Mead. • The heritage of Native Americans are celebrated at the Colorado Museum in Parker, Arizona.

