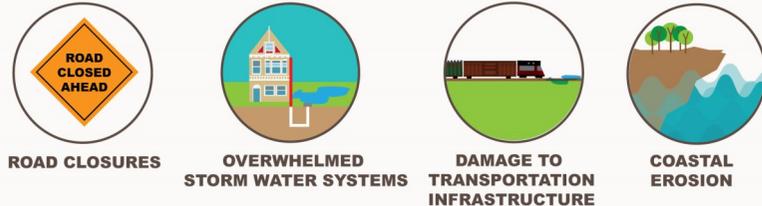


Sticky Knowledge:

- To know the features of the water cycle.
- To know what factors cause a river to flood.
- To know how humans can affect the river basin.
- To know the impact of floods on people and their environment.

WHAT ARE THE IMPACTS ?



ROAD CLOSURES

OVERWHELMED STORM WATER SYSTEMS

DAMAGE TO TRANSPORTATION INFRASTRUCTURE

COASTAL EROSION

WHAT IS AT RISK?



NEARLY 200,000
PEOPLE LIVING IN
LOW-LYING COASTAL AREAS*



873 MILES
OF COASTAL ROAD
ARE AT RISK FROM FLOODING
DURING KING TIDES, STORMS, AND OTHER
PERIODS OF ELEVATED SEA LEVEL*

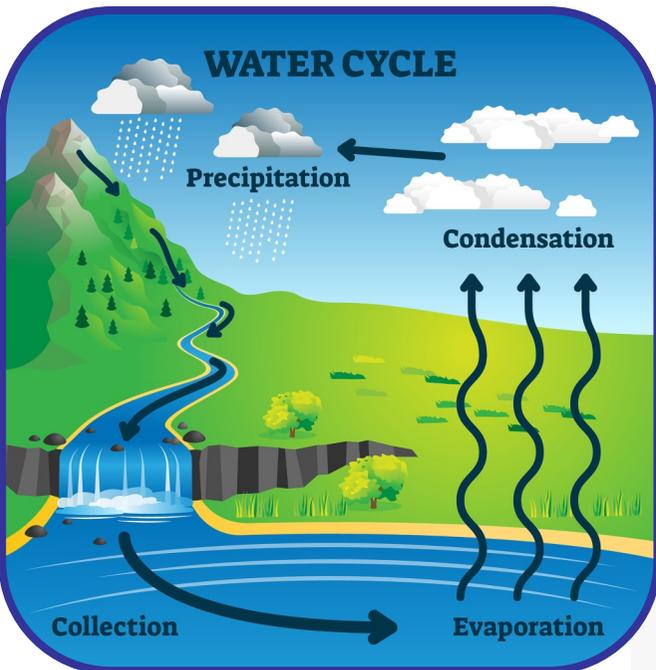


COASTAL TOURISM ACCOUNTING FOR
39%
OF CALIFORNIA'S
\$17.6 BILLION
OCEAN ECONOMY**



\$662 BILLION
IN WAGES &
\$1.7 TRILLION
IN GDP FROM
CALIFORNIA'S COASTAL ECONOMY**

WHEN IT FLOODS, WORK & TOURISM ARE INTERRUPTED.



**CAUTION
FLOODING
AHEAD**



PERMEABLE SURFACE



IMPERMEABLE SURFACE

Glossary:

- **Condensation** - the conversion of a vapour or gas to a liquid
- **Precipitation** - rain, snow, sleet, or hail that falls to or condenses on the ground
- **Evaporation** - the process of turning from liquid into vapour
- **Infiltration** - when water moves into the ground from the surface and begins to soak into the soil and rock
- **Impermeable** - not allowing fluid to pass through
- **Permeable** - allowing fluid to pass through
- **Surface** - the outside limit or top layer of something
- **Runoff** - precipitation that did not get (infiltrated) absorbed into the soil or did not evaporate
- **Channel** - a length of water wider than a strait, joining two larger areas of water
- **Floodplain** - nearly flat surface close to the bed of a river or stream
- **Deforestation** - used to describe the actions of humans in removing forests from the planet
- **Confluence** - meeting of two or more waterways
- **Embankments** - a wall or bank of earth or stone built to prevent a river flooding an area
- **Flood barrier** - a barrier built across a river, stream, or estuary to retain water



HOW FLASH FLOODS OCCUR

