

School Safety Initiative

FLOODS

A flood is an overflow or inundation that comes from a river or other body of water and causes or threatens damage. It can be any relatively high stream flow overtopping the natural or artificial resource centers in any reach of a stream. It is also a relatively high flow as measured by either gage height or discharge quantity.

Type of flood: -

There are three main types of flood

Flash flood: -

- Often happen in the small rivers or streams in the mountainous areas.
- Are usually the results of very heavy rains in sloping areas where trees and plants have been destroyed and water cannot be absorbed in to the soil.
- Start soon after the rain begins and it is difficult to determine where they occur.
- Can also happen when reservoirs or dams are broken.

River flood: -

- Are characterized by river water flowing faster and at higher level than normal.
- Are usually caused by heavy rains upstream.

Costal flood (sea surge)

- Occur when storm surges or sea waves arise suddenly in combination with high tides which break or over flow the sea dyke bringing sea causing sudden flowing.
 - Coastal floods often occur at the same time as low-pressure storm or typhoons near the shore.
-

Causes of Floods

Floods usually occur due to natural causes, but over the years, human activities have increased the incidence of, and damage due to floods

School Safety Initiative

Natural Causes

- Heavy Rainfall
- Rivers bursting their banks. This happens when the water level increases in the river due to various reasons.
- Blocking of river channels by landslides
- Narrowness of the river
- Change in the course of rivers

Human – made Causes

- Deforestation: Forest or Vegetation cover on the land helps to decrease the surface run off of water and thus less water reached the rivers. Deforestation leads to more water reaching rivers which lead to floods. All the silt carried by the water that passes through the watershed is deposited at the bottom of the river resulting in increase of the water level. Also this results in soil erosion
- Decrease in Wetlands: Water bodies like ponds, lakes or small water systems which store or have a huge potential to store rain water or excess water from the rivers are good natural way of preventing floods. But now a days new residential conversion of land is being done by reclaiming the wetlands. This increases the chance of floods

Effects of Flood: -

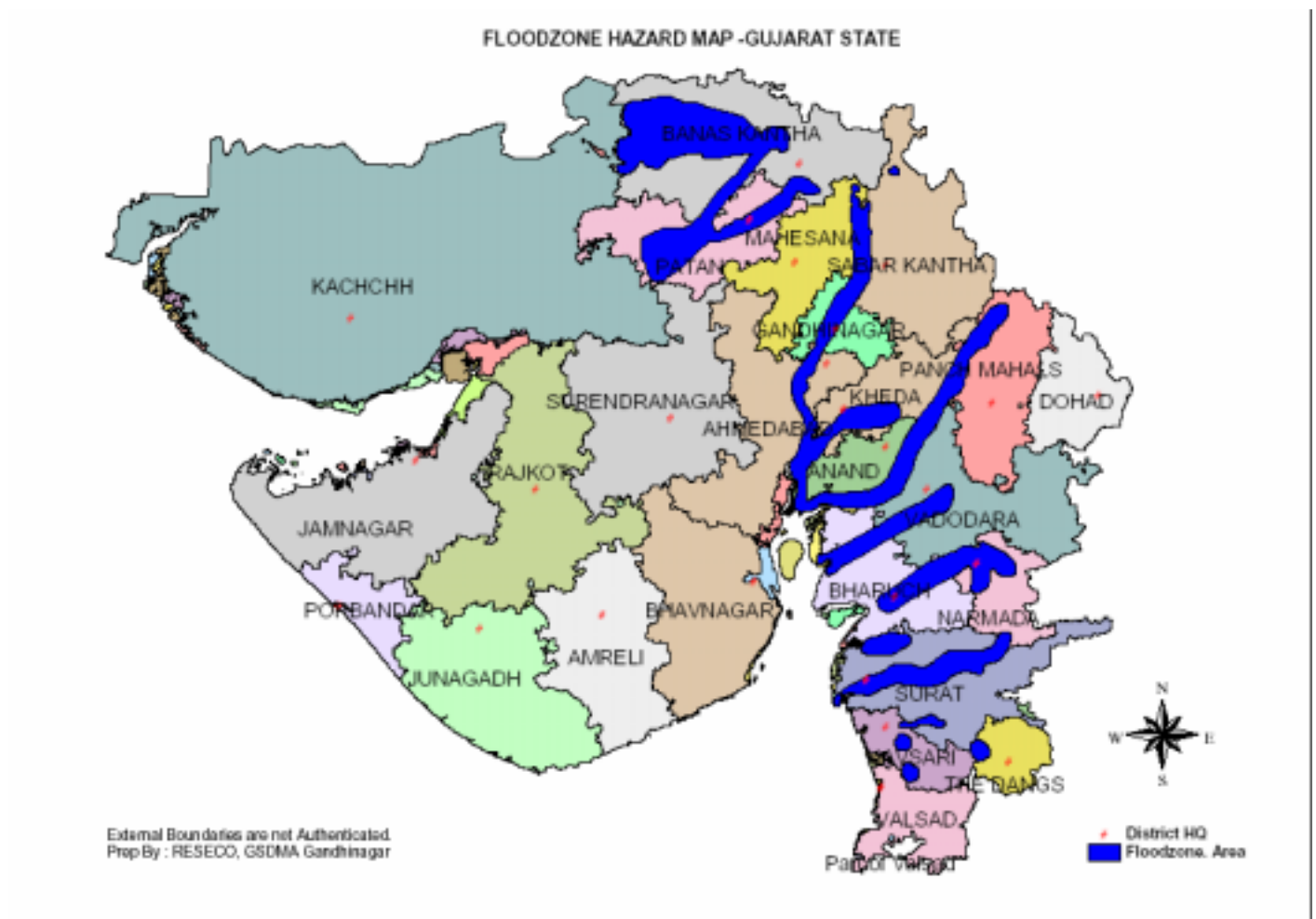
Flooding can be very dangerous only 15 cms of fast flowing water are needed to knock you off your feet. Floodwater can seriously disrupt public and personal transport by cutting off roads and railway lines as well as communication lines when telephone lines are damaged.

School Safety Initiative

Flood can distribute large amount of water and suspended sediment of over vast areas, restocking valuable soil nutrients to agricultural lands. In contrast, soil can be eroded by large amounts of fast flowing water, running crops, destroying agricultural land/buildings and drowning farm animals.



School Safety Initiative



Major Flood history of Gujarat: -

Sr. no.	Year	Land fall Point
1	1998	Surat
2	1997	Surat
3	1983	Saurashtra
4	1982	Saurashtra
5	1979	Morbi

School Safety Initiative

Flood Preparedness

Before the Flood

- If the area is low lying or flood prone then during the rainy season regularly listen to local radio or TV or flood warnings and advice
- Cleaning of Drains before the rainy season. Often these drains are either chocked or have been covered. So there is no passage for the rain water to flow. The local authorities should take care of cleaning the drains well before the rainy season starts
- Prepare an emergency kit that should have a first aid kit, strong ropes for tying things, a torch, an umbrella, water proof bags to store clothes and valuable items and a stick to measure water depth
- Identify areas that are higher than the surroundings and be aware of the safest route to reach there.
- Learn to swim

In the event of Flood

- Do not walk into water of unknown depth and current. Use the stick to know the water level before moving ahead.
- Be calm and listen to elders
- Check your emergency kit
- Keep a check on the warning issued by the local authorities
- If your house is in danger move out to the identified shelter.

After the Flood

- Clean and disinfect you home and surrounding
 - Do not eat food which has been in contact with flood water
 - Help to rescue the victims , if any
 - Beware of snakes, which may have moved to drier areas
 - Boil water until the supplies have been declared safe.
-

School Safety Initiative

MAP SHOWING FLOOD ZONES IN INDIA

