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# FROM EDITOR'S DESK

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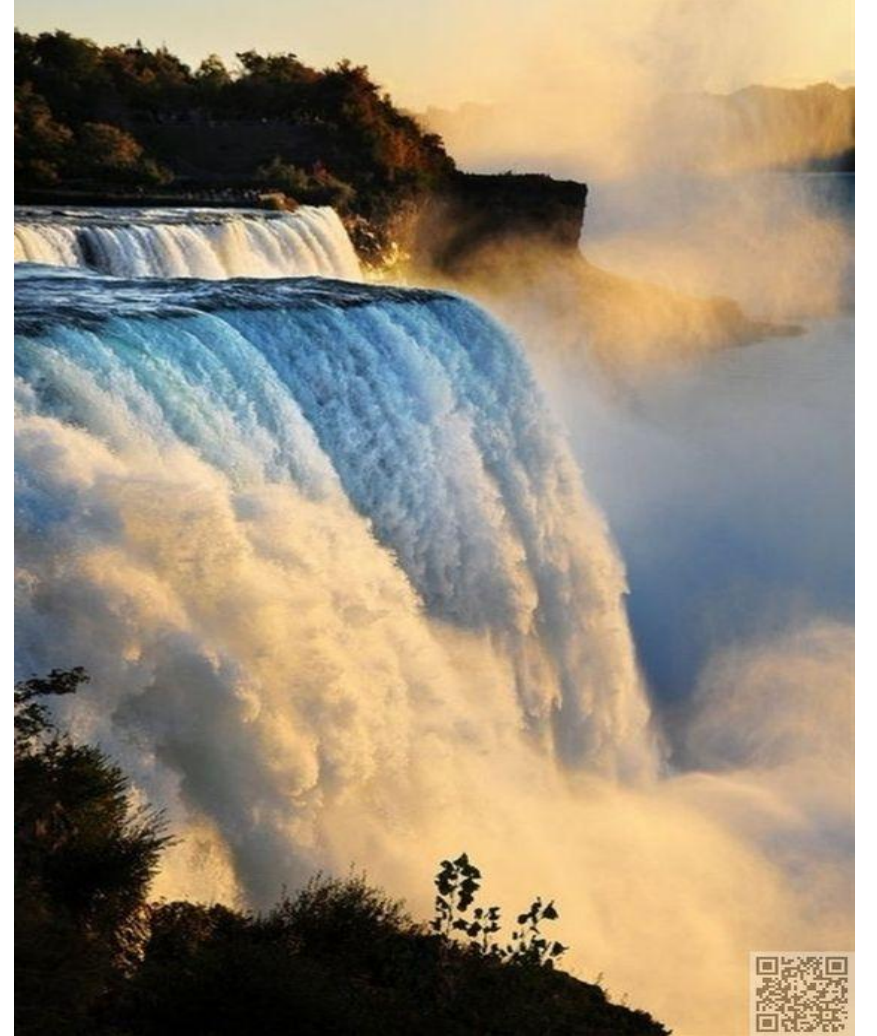
Guest editor

Er . Pooja .R. Pailwan.

जिव्हाळा

ऋतु हिरवा, सतत हवा हवा,  
निसर्गरम्य वनराईचा ठेवा,  
पक्षी पाखरांसाठीचा तो मेवा,  
चला करूया आज त्यांची सेवा.

नसे अनुभव हा चार भिंतींतही निराळा,  
हिरव्या रंगासंगे असे सान्यांचाच लळा,  
आठवणीतही आहे बालपणीचा मामाचा मळा,  
नावात नाही नुसता हृदयातील हा जिव्हाळा  
परस्परातील हा जिव्हाळा.







“ When we heal the earth,  
we heal ourselves.

[www.bigenter.info](http://www.bigenter.info)

# Impact of Flood

Flood is a natural phenomenon and has both positive and negative impacts. However the anthropogenic activities has enhanced the negative impact of floods.

## **Positive effects of floods:**

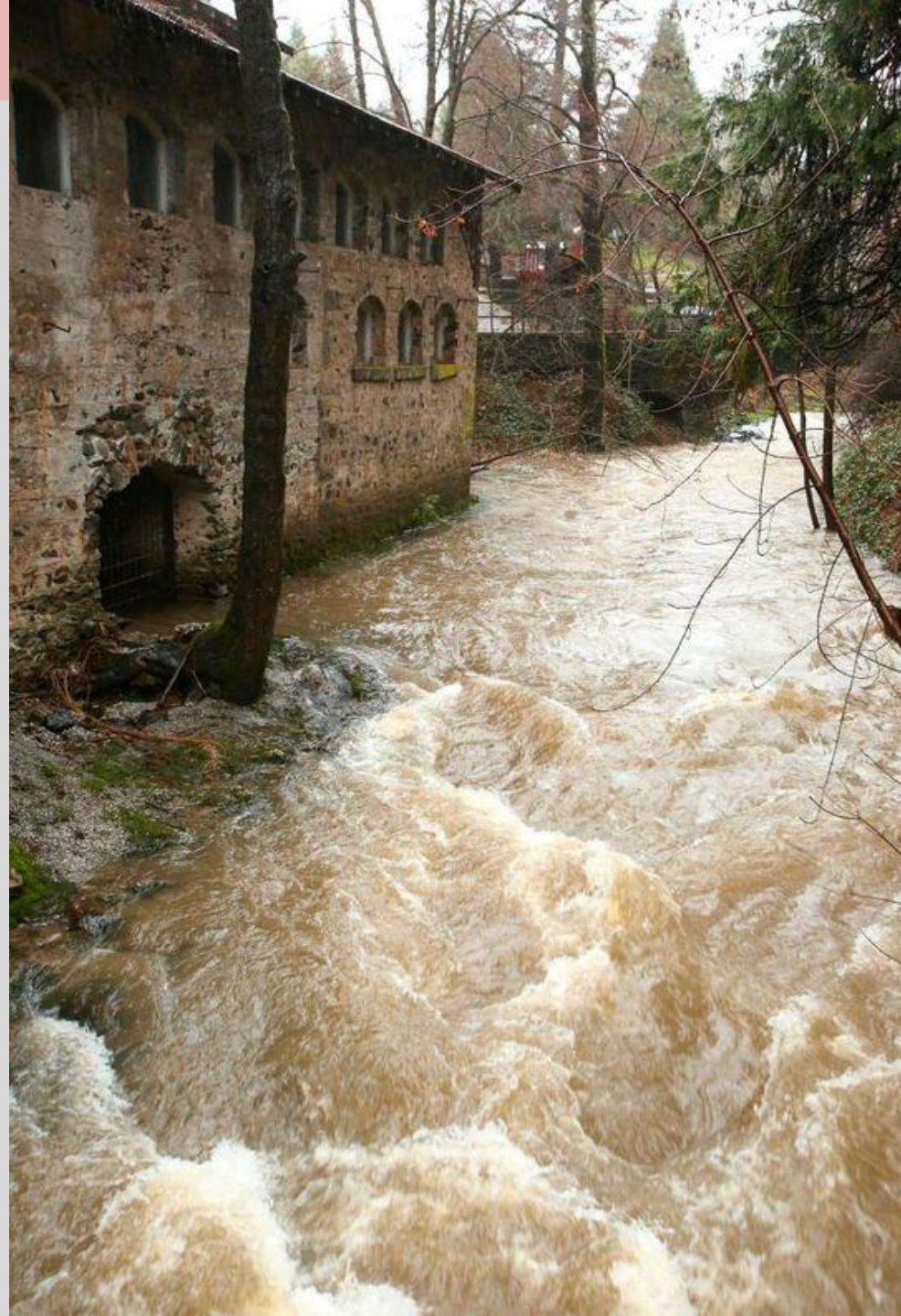
1. Recharge of ground water
- 2, increases soil fertility
3. Renovation of wetlands
4. Renew the fish stock
5. Maintenance of soil structure
6. Water hyacinth cleaning and better conditions for birds
7. Improves water transport





# Positive effects of flooding

- In many rural regions around the world, the livelihoods of many communities depend on annual flood cycles. Examples include riverine settlements along the Amazon forest like Peruvian and Colu supplying sediment to deltas, recharging underground water levels, and balancing the health of wetlandsmbian communities. This is because floods facilitate transportation, fish migrations and make the soil fertile.
- Thus, seasonal flooding has many positive effects such as making the land fertile, adding nutrients to the sea, dislodging accumulated debris.



# 1. Flooding makes the land fertile.

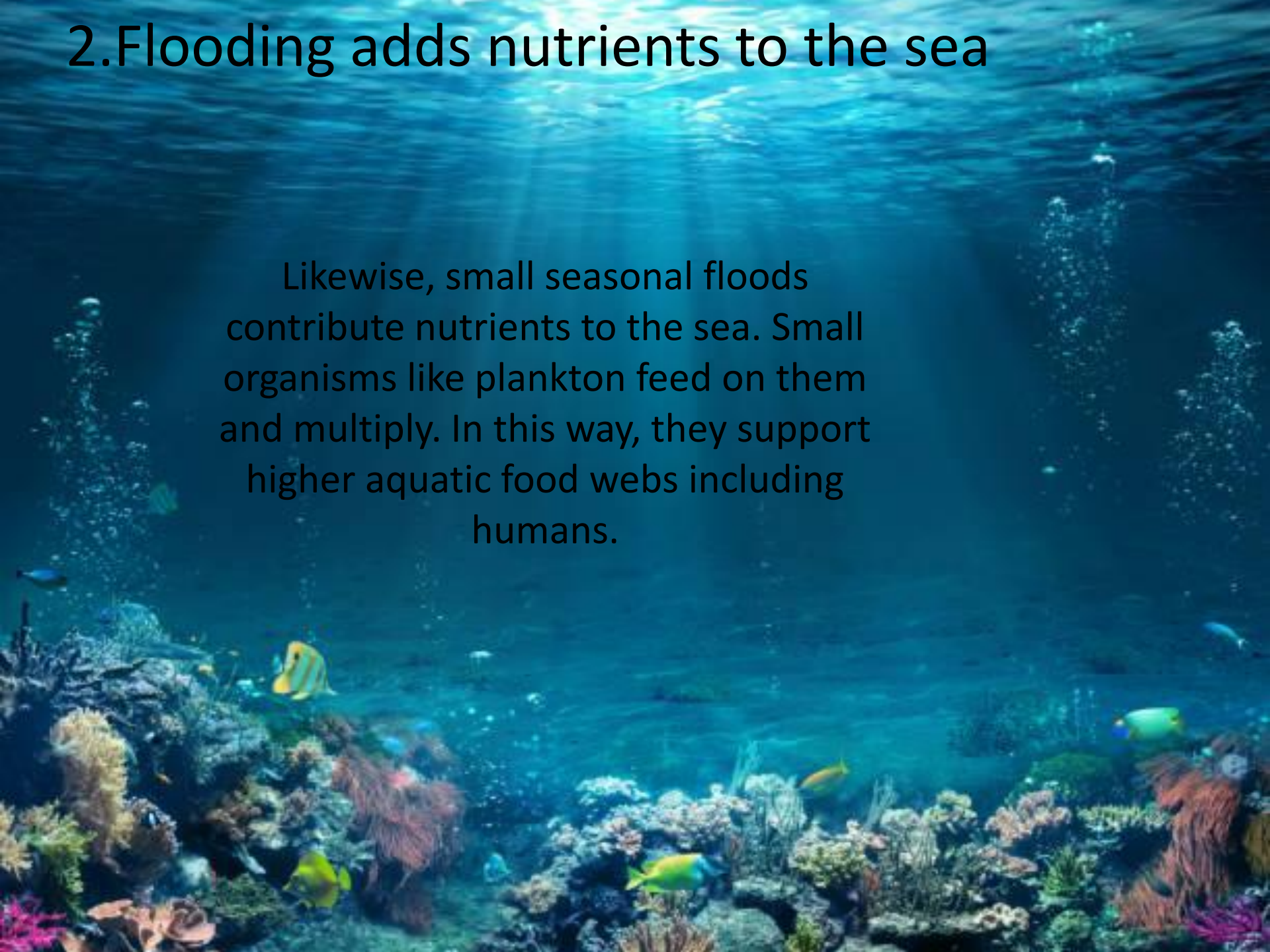
- Perhaps, one of the most recognized benefits of flooding is that it makes the land fertile. As the water eventually recedes, it leaves behind fine sand, clay, silt and organic matter. This is why floodplains are one of the most fertile agricultural areas in the world. Ancient Egyptians understood this principle well as they farmed along the Nile. They thus called episodic flooding of the Nile as 'The Gift of the Nile'.
- And additionally, the flooded soil environment allows the cultivation of many crops like rice. Asian communities traditionally cultivate rice in paddies which is the staple diet for nearly half the world's population.





## 2. Flooding adds nutrients to the sea

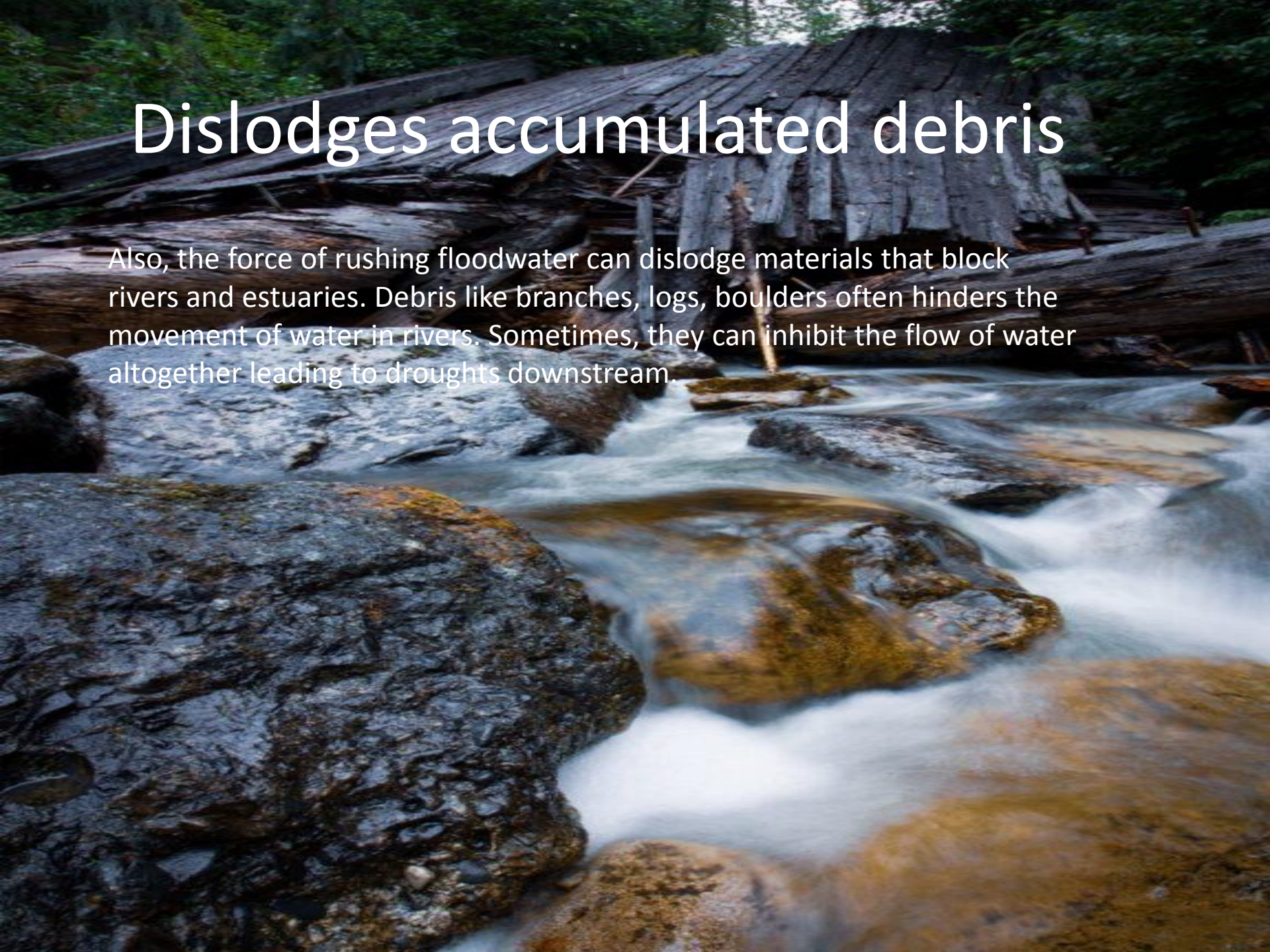
Likewise, small seasonal floods contribute nutrients to the sea. Small organisms like plankton feed on them and multiply. In this way, they support higher aquatic food webs including humans.





# Dislodges accumulated debris

Also, the force of rushing floodwater can dislodge materials that block rivers and estuaries. Debris like branches, logs, boulders often hinders the movement of water in rivers. Sometimes, they can inhibit the flow of water altogether leading to droughts downstream.





## 4. Supplies sediment to deltas

- Deltas basically form when sediment accumulate across rivers faster than the sea removes it. They are very productive regions that also protect the coast against waves and storms. As floodwaters hit estuaries, they also deposit sediment on deltas, thus fortifying them.



## 5. Floods recharge groundwater

- Indeed, excess water from floods recharges groundwater supplies. Where the land is permeable, it infiltrates the ground through aquifers (loose rocks and sediment).
- This groundwater can then flow down to rivers or bust out the land surface as natural springs.





## 6. Flooding balances the health of wetlands

- Floods help enormously in balancing the health of wetlands by maintaining the chemical balance, restoring breeding grounds and increasing biodiversity stock.
- a. Helps to maintain chemical balance
- These marshes are, in fact, the natural sponges in our environment. They help to capture and store pollutants which then undergo various physical and chemical changes. Floodwater thus helps to restore the chemical balance in the marshes making them more effective in pollution control.
- b. Restore breeding grounds
- Additionally, wetlands are important breeding sites for a number of creatures like fish, shrimps and crabs. Actually, a number of organisms depend on wetlands to spawn and grow. As wetlands are relatively calm and sheltered, they are the safest places for juveniles to develop.
- Thus, when marshes flood, they bring in more nutrients. More food is then available for juveniles to develop and grow.
- c. Increase biodiversity stock
- In the same manner, the rich diversity of creatures (insects, clams, fish etc.) in marshes feed on the excess nutrients. They grow and multiply thus becoming food for other organisms like birds, salamanders, turtles etc. In this way, the outburst of food attracts a plethora of creatures into wetlands.
- Floods also help certain animals to migrate as well as disperse seeds of plants.

# 7.Humanity – Helping hand

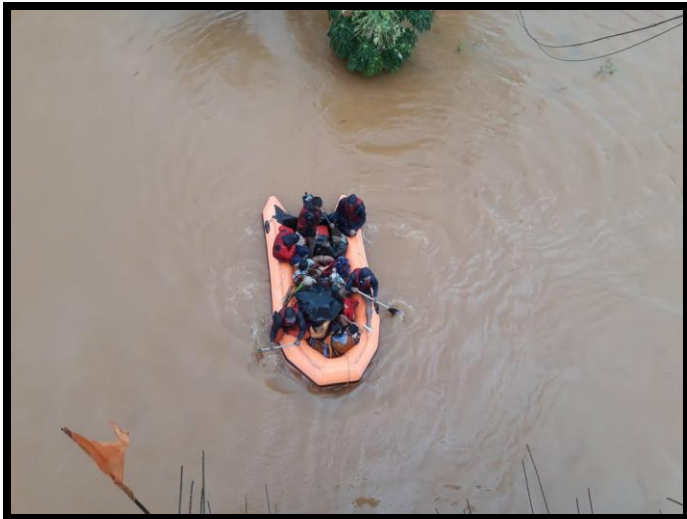




# 8. Let us care - Humanity – Helping hand



# Sangli and kolhapur flood Situation.







# 9.A memorable experience of flood.

Ar. Vaishnavi Waingade.

It was a memorable experience I had in my life. A village Prayag chikhali was completely under water, most disastrous situation. Roads were under water, no connection to neighbouring area, no lights, no food, there was water around us but still not for drinking. In such case NDRF team and Navy play a very crucial role. The most important thing I experienced is humanity and I had got a great chance to work with NDRF and Navy team.







## **POSITIVE EFFECTS OF FLOOD**

ER. Tanuja Magdum

- People have come to regard floods as disasters in terms of lives lost and property damaged.
- Humans have altered the flow of natural waterways to meet their needs but with sometimes disastrous consequences.
- Though floods can be devastating to population centers, they have always been an integral part of nature's renewal process, providing many long-term positive effects.

## **RENEWAL OF WETLANDS**

- Floods contribute to the health of ecologically important wetland areas.
- Healthy wetlands promote healthy water supplies and even affect air quality.
- Floods inundate wetlands with fresh waste. They also carry and deposit nutrient-rich sediments that support both plant and animal life in wetlands.
- In addition, flooding adds nutrients to lakes and streams that help support healthy fisheries.

## **RETURNING NUTRIENTS TO SOIL**

- Floods distribute and deposit river sediments over large areas of land.
- These river sediments replenish nutrients in topsoil and make agricultural lands more fertile.
- The populations of many ancient civilizations concentrated along the floodplains of rivers such as the Nile, the Tigris and the Yellow because periodic flooding resulted in fertile, productive farmland.
- The construction of the Aswan High Dam in Egypt prevented the Nile from flooding major population centers downriver, but it also depleted once fertile agricultural lands along the banks of the river.

## **PREVENTING EROSION AND MAINTAINING LAND MASS ELEVATION**

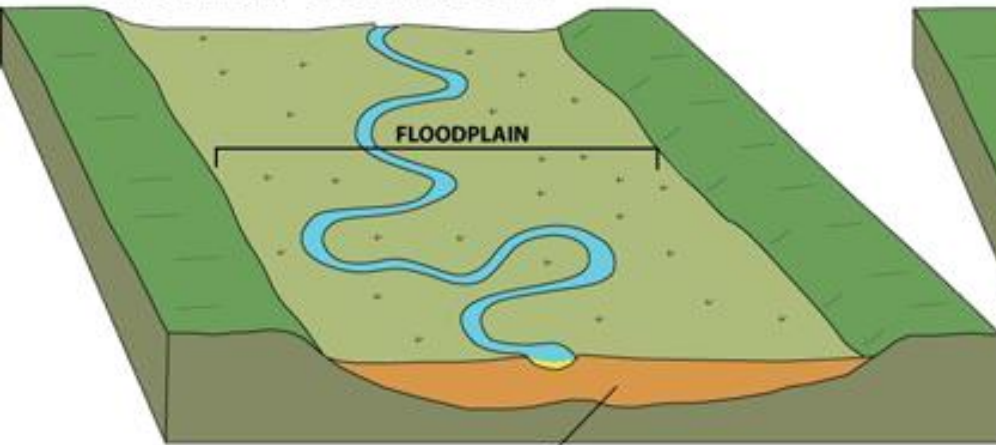
- Soil deposited by flood waters prevents erosion and helps maintain the elevation of land masses above sea level.
- The rapidly receding land of the Mississippi River Delta is a direct result of man-made flood controls and levees that prevent topsoil-replenishing sediments from being deposited in the delta.

## **RECHARGE AND REPLENISH GROUND WATER**

- Many population centers depend upon ground water and underground aquifers for fresh water.
- Flood waters absorb into the ground and percolate down through the rock to recharge these underground aquifers, which supply natural springs, wells, rivers and lakes with fresh water.

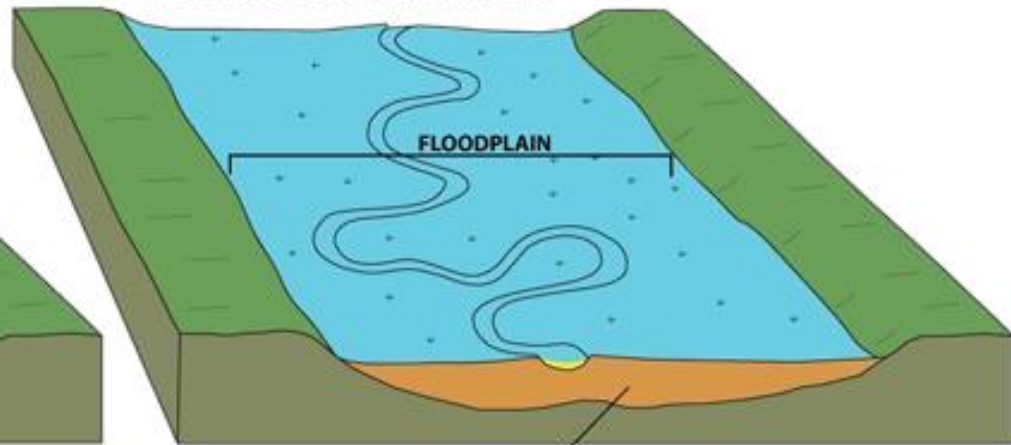


## Normal Conditions



older river channel and floodplain sediments

## Flood Conditions



older river channel and floodplain sediments

Sangli and  
Kolhapur  
floods



-Er. TANUJA









THANK YOU . . . !!