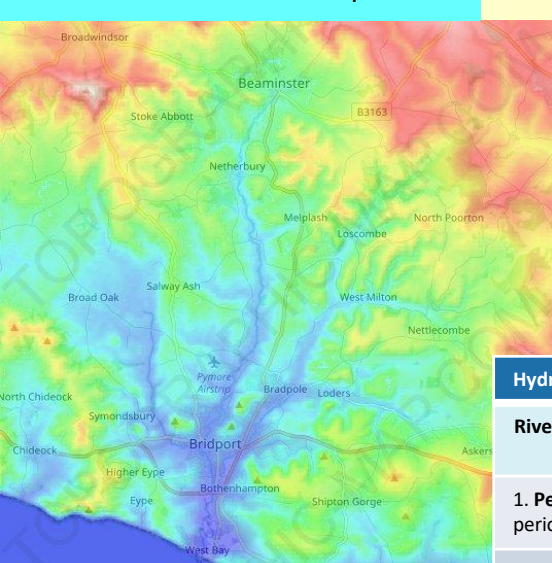


The source of the River Brit is just to the north of Beaminster. It flows south to Netherbury and then Bridport. At Bridport it is joined by two tributaries, the River Asker and the River Simene. Its mouth is south of Bridport in Lyme Bay. Its course is just over 15km.

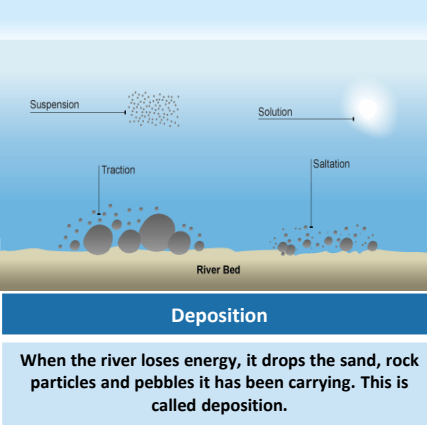
In 2020 a £1.5 million scheme was built to stop the river from flooding in the area near Parkdean holiday park. The river used to be heavily polluted from the rope industries and sewage. The river environment has been improved.



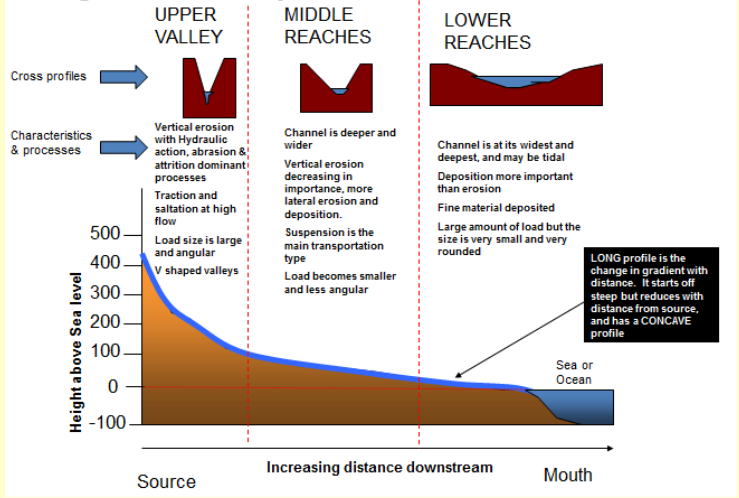
Impermeable rocks – do not allow water to soak into them e.g. clay.

Processes – Actions that lead to changes in a place.
Landforms – natural features made by nature e.g. waterfalls

	1 Erosion	2 Transportation
	The break down and transport of rocks – smooth, round and sorted.	A natural process by which eroded material is carried/transported.
Attrition	Rocks that bash together to become smooth/smaller.	Solution Minerals dissolve in water and are carried along.
Corrosion	A chemical reaction that dissolves rocks.	Suspension Sediment is carried along in the flow of the water.
Abrasion	Rocks hurled at the base of a cliff to break pieces apart.	Saltation Pebbles that bounce along the sea/river bed.
Hydraulic Action	Water enters cracks in the cliff, air compresses, causing the crack to expand.	Traction Boulders that roll along a river/sea bed by the force of the flowing water.



Long and cross profiles on a TYPICAL river



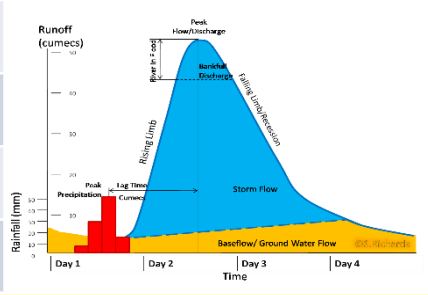
What are physical landscapes like in our local area?

Physical and Human Causes of Flooding.	
Physical: Prolong & heavy rainfall Long periods of rain causes soil to become saturated leading runoff.	Physical: Geology Impermeable rocks causes surface runoff to increase river discharge.
Physical: Relief Steep-sided valleys channels water to flow quickly into rivers causing greater discharge.	Human: Land Use Tarmac and concrete are impermeable. This prevents infiltration & causes surface runoff.

Hydrographs and River Discharge

River discharge is the volume of water that flows in a river. Hydrographs who discharge at a certain point in a river changes over time in relation to rainfall

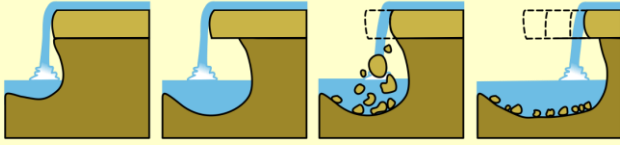
- Peak discharge** is the discharge in a period of time.
- Lag time** is the delay between peak rainfall and peak discharge.
- Rising limb** is the increase in river discharge.
- Falling limb** is the decrease in river discharge to normal level.



River Management Schemes

Soft Engineering	Hard Engineering
Afforestation – plant trees to soak up rainwater, reduces flood risk.	Straightening Channel – increases velocity to remove flood water.
Land-use zoning – planning what the land next to rivers is used for e.g. parks not housing	Artificial Levees – heightens river so flood water is contained.
Ecological Flooding – naturally let areas flood, protect settlements.	Deepening or widening river to increase capacity for a flood.

The formation of a waterfall



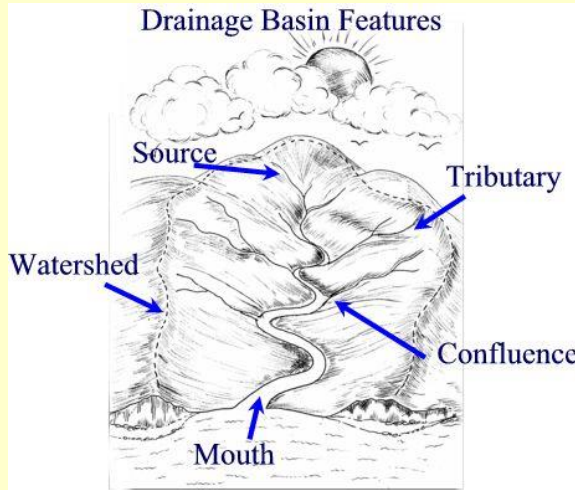
1. Waterfalls typically form in the upper stages of a river. They occur where a band of hard rock overlies a softer rock. Falling water and rock particles erode the soft rock below the waterfall, creating a plunge pool.
2. The soft rock is undercut by erosional processes such as hydraulic action and abrasion creating a plunge pool where water and debris swirl around eroding the rock through corrasion further deepening it and creating an overhang.
3. Hard rock overhang above the plunge pool collapses as its weight is no longer supported.
4. Erosion continues and the waterfall retreats upstream leaving behind a gorge.

www.internetgeography.net

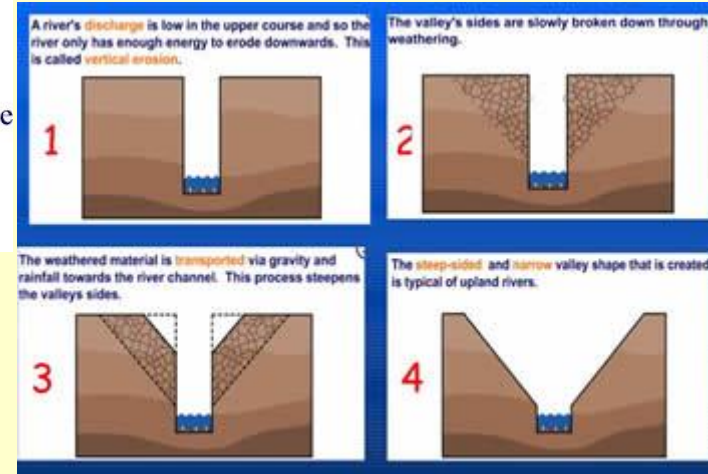
Physical features – Natural things like mountains, rivers, waterfalls, deserts.

Human features – Things made by people like roads, buildings, farms.

Sustainable development – Using rivers in a way that they will still be there for future generations to enjoy, whilst at the same time meeting the needs of local people. Soft engineering is sustainable.

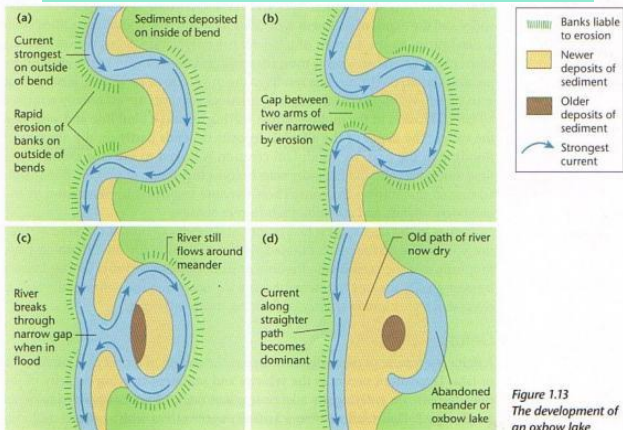


Formation of v-shaped valleys

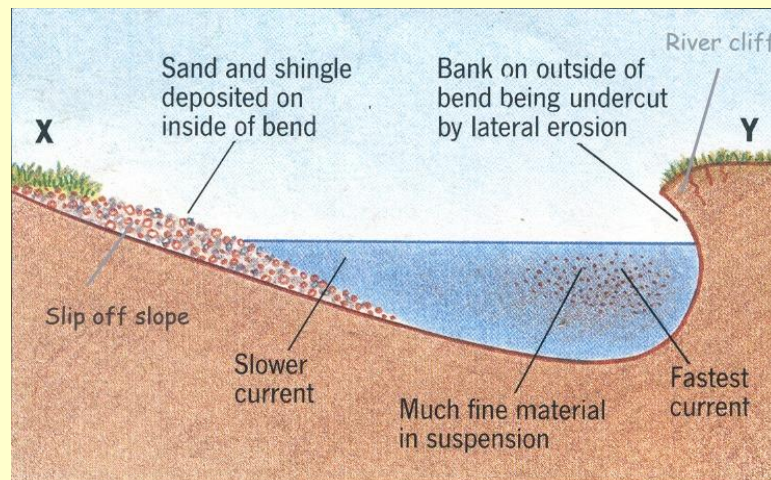


What are physical landscapes like in our local area?

Formation of ox-bow lakes



What happens at a meander?



Formation of Floodplains and levees

When a river floods, fine silt/alluvium is deposited on the valley floor. Closer to the river's banks, the heavier materials build up to form natural levees.

- ✓ Nutrient rich soil makes it ideal for farming.
- ✓ Flat land for building houses.

