



## Flood management



**Description:** Flood management schemes

**QCA Geography Schemes of Work reference:**

Year 6 Unit 18: Connecting ourselves to the world

**National Curriculum Geography reference:**

**QCA ICT Schemes of Work reference:**

Year 6 Unit 6A: Multimedia presentation

**Learning Objectives:** Pupils should be taught an understanding of river management techniques and gain awareness of their effectiveness.

**Suggested activities:**

**Introduction:** For an actual flood case study discuss with the children what steps could have been taken to reduce the risk of flooding.

**Main:** Discuss with the children different flood reduction methods for an imaginary water catchment. Consider:

- increasing vegetation in upper catchment area to delay/reduce throughput and reduce erosional affect
- storage (reservoirs) to delay throughput and manage water release to lower catchment
- increasing river channel efficiency to allow more effective discharge
- production of temporary ponding areas which would be deliberately flooded
- development of flood channels to divert flow from main river
- constructing taller river embankments so as to increase channel capacity
- construction of tidal barriers to reduce coastal flooding
- dredging to reduce sediment build up.

For each consider the pro's and con's and how alleviating the problem in one place can increase the risk in another.

**Resources:**

Ordnance Survey maps.

Online maps: <http://www.streetmap.co.uk>, <http://www.multimap.co.uk>

**Learning outcomes:**

- Understanding that there is no simple solution to flood management
- That several measures may need to be combined
- That some solutions could increase the risk of flooding, albeit in another location
- That the whole river course must be considered when introducing any solution.

**Extension activities:**

Children should look at the course of selected river on an Ordnance Survey or online map. Ask them to mark on areas close to rivers that would be greatly affected by flooding – e.g. housing, factories, shops, hospitals. In the location which of the flood reduction measures could be put in place? Which would be most effective or safest and why?

Ask the children to create Powerpoint presentation and show their findings to the class.