

Flood prevention in the flume!

Set up the flume as shown. The sand should have been shaped with a river channel and at least two meanders.

Required props include model animals, trees, pebbles, lolly sticks, straws etc.

1. Run water through the river channel quickly and demonstrate how the river will flood – usually because sediment washed into the channel makes it shallow very quickly. Take a picture with a digital camera

2. Show students all the props: - straws / boulders / fences / trees / barriers etc. Get them to suggest how the flood could be avoided.

3. Eventually students should have been able, with little prompting to suggest and model all of the following:

- Forestation
- Dam building
- River bank reinforcement
- Revetments
- Diversionary spillways
- Channel straightening
- Dredging

Take digital images as each new strategy is introduced.

Follow up:

Make notes on the flood prevention strategies – could illustrate with actual examples.

In ICT room:

- (i) Label the digital photos of the flume using tools in Word. Alternatively make a PowerPoint that describes and explains the different aspects of the scheme.
- (ii) Research some pictures of dams / flood prevention schemes using the Internet.

