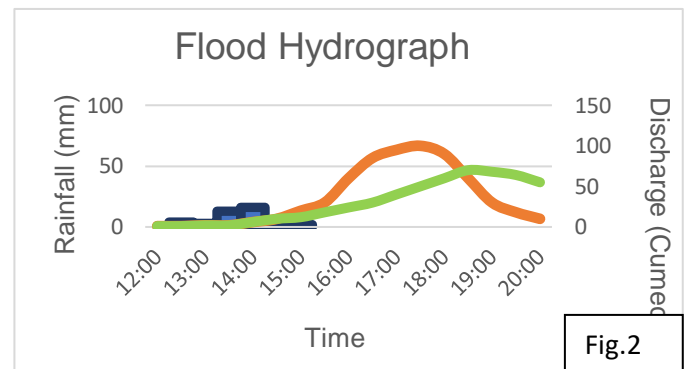
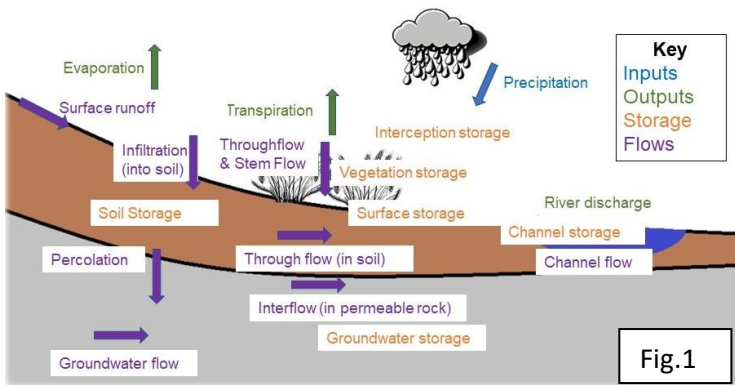


Student Activity:

Factors Influencing Variations in Runoff: Soil Structure and Infiltration

How might farmers be impacted by extreme weather events such as flooding?



Consider Figures 1 and 2. The hydrograph shows data from two drainage basins in the same region. The soil type and underlying rock is the same in both basins. Analyse the different land management practices that might explain these differences.

Record your field work findings using this table. (If practical work has not been completed, please use the example data set for the remaining questions.)

Location	Location Description	Water Infiltration Time	Soil Structure Score
1			
2			
3			
4			
5			

Look at the data. Which location most strongly indicates that it may be more prone to generate surface runoff? What are the possible causes?

Suggest how that area might be managed to reduce the amount of surface runoff.

A farmer implements a range of strategies to reduce runoff. What additional benefits might arise because of this change? Consider productivity, biodiversity and other environment factors.

