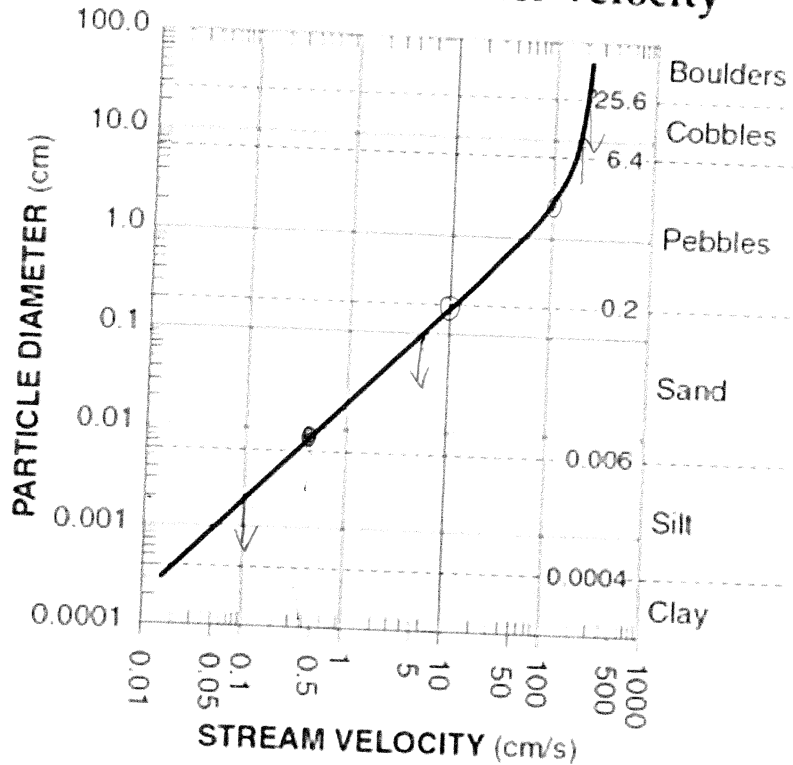


Relationship of Transported Particle Size to Water Velocity



This generalized graph shows the water velocity needed to maintain, but not start, movement. Variations occur due to differences in particle density and shape.

- As Velocity Increases, Carrying Power (Increases or Decreases)?
- As Slope Increases, Velocity (Increases or Decreases)?
- As particles increase in diameter, Velocity needed to move them (Increases or Decreases)?
- What type of relationship is shown above? DIRECT
- A Velocity of 100 cm/sec will move what type of particle? clay, silt, sand, most pebbles
- A Velocity of 10 cm/sec will move what diameter particle? clay, silt, sand (some very small pebbles) 0.2
- A Velocity of 0.4 cm/sec will move what diameter particle? clay, silt, sand 0.008
- What particle has a diameter between 6.4 cm-25.6 cm? cobbles
- What type of rock would be made from a particle diameter of 0.05 cm? SANDSTONE
- What velocity is needed to move a particle that is 0.1 cm in diameter? 5 cm/sec
- What velocity is needed to move a particle that is 10 cm in diameter? 200 cm/sec
- What velocity is needed to move a particle that is 0.002 cm in diameter? 0.1 cm/sec
- What velocity is needed to move a particle that is 30 cm in diameter? 210 cm/sec