

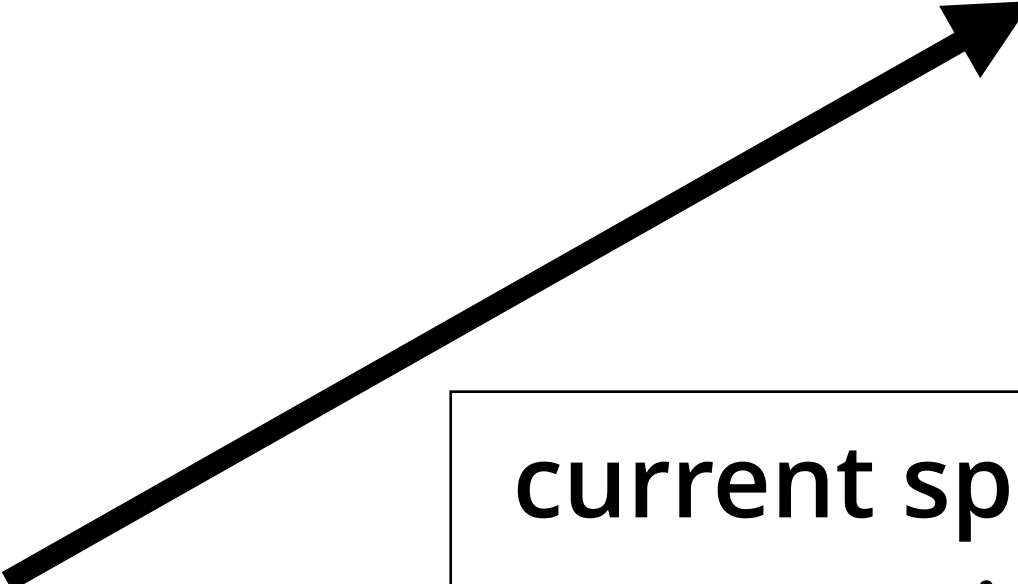
(a)

relationships between grain size and

averaged current speed to order them



non-cohesive sediments



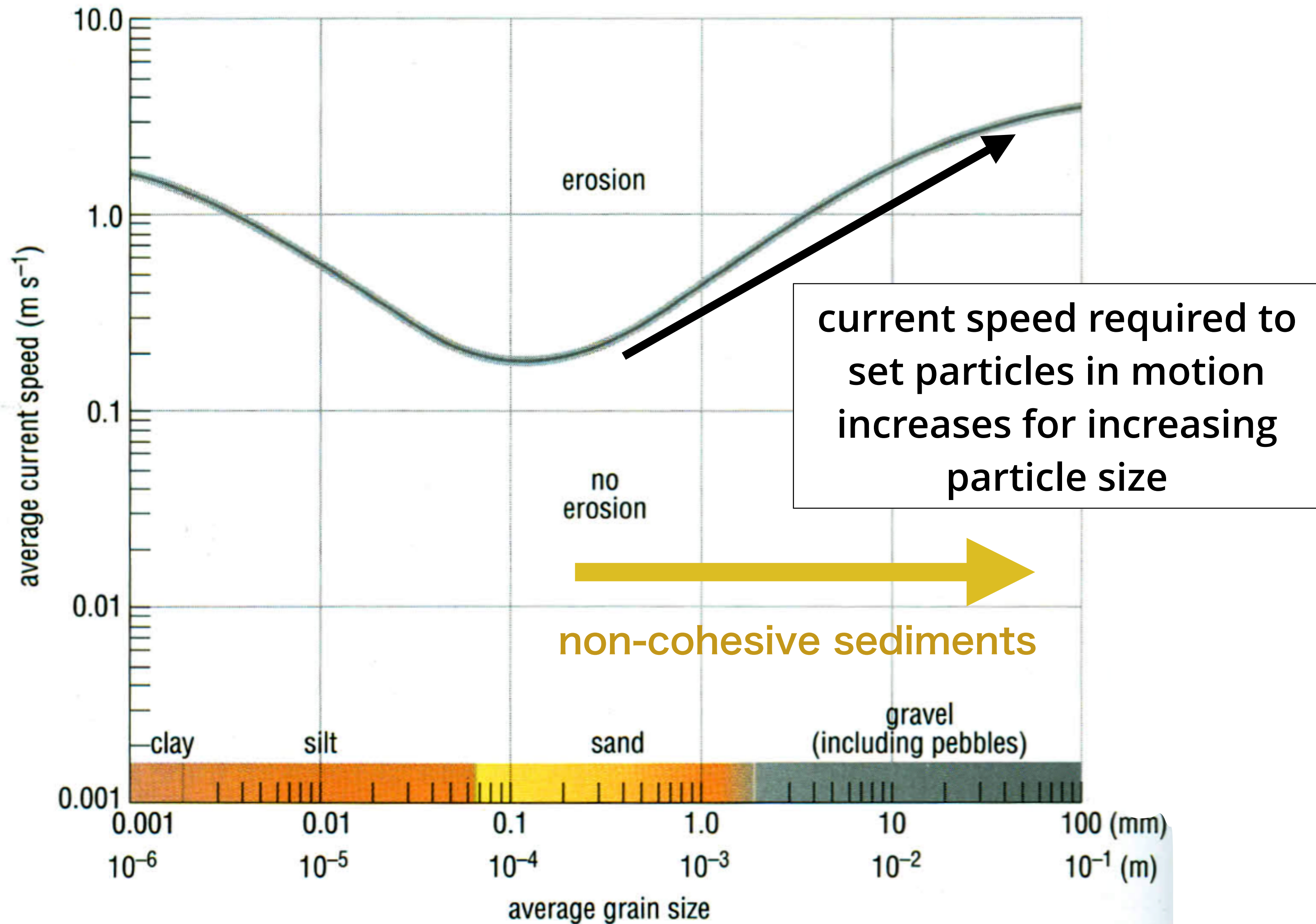
**current speed required to
set particles in motion
increases for increasing
particle size**

Sediment erosion/transport/deposition

School of Geosciences

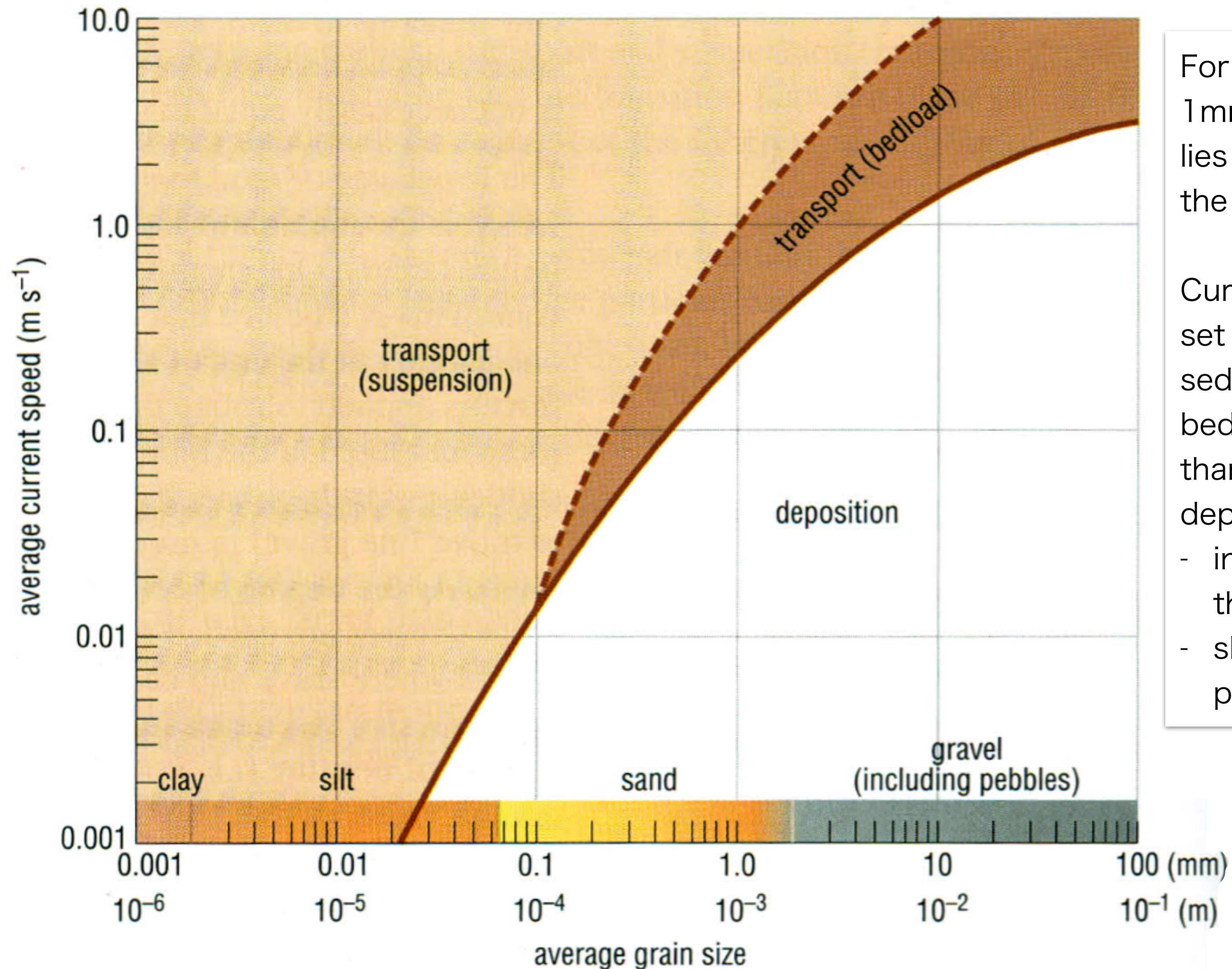
Sediment erosion/transport/deposition

relationship between averaged grain size and
averaged current speed required to erode them



Sediment erosion/transport/deposition

relationship between averaged grain size and averaged current speed above which sediments are transported and below which they are deposited



For particles larger than 1 mm the deposition curve lies close to but just below the erosion curve.

Current speeds required to set these non-cohesive sediments in motion in the bed load are slightly greater than those at which they are deposited due to:

- inertia of the particles on the bed and
- shelter effect of large particles on smaller ones.