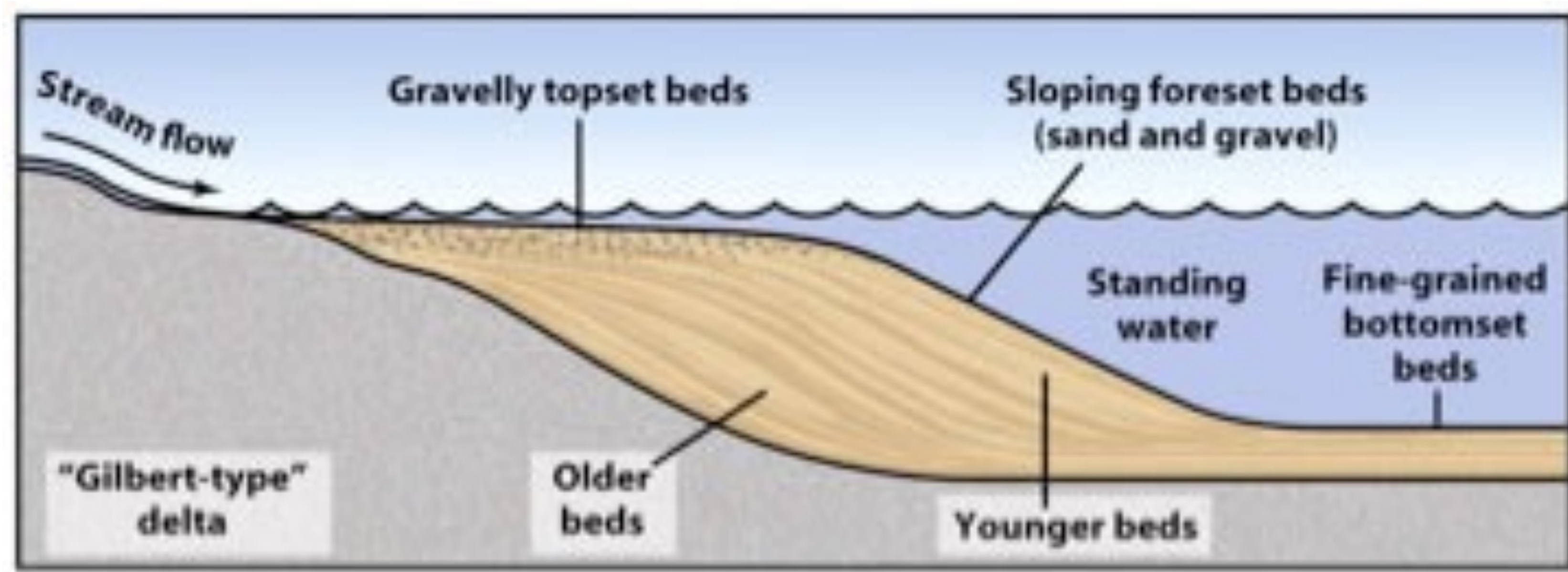




School of Geosciences

Early description

- In 1890, American geologist **Grover Karl Gilbert** recognized that the deposition of finer-grained material farther away from the shoreline also created a distinctive vertical sequence in delta deposits.



- The resulting foreset layer is thus graded from coarse nearshore to fine offshore.

- The bottomset layer consists of the finest material, deposited far out.

- As this material continues to build outward, the stream must extend its length and forms new deposits, known as topset layers.



Early description

- In 1899, the geologist John D. Foster described the position of finer-grained sequences in the lower part of the formation.

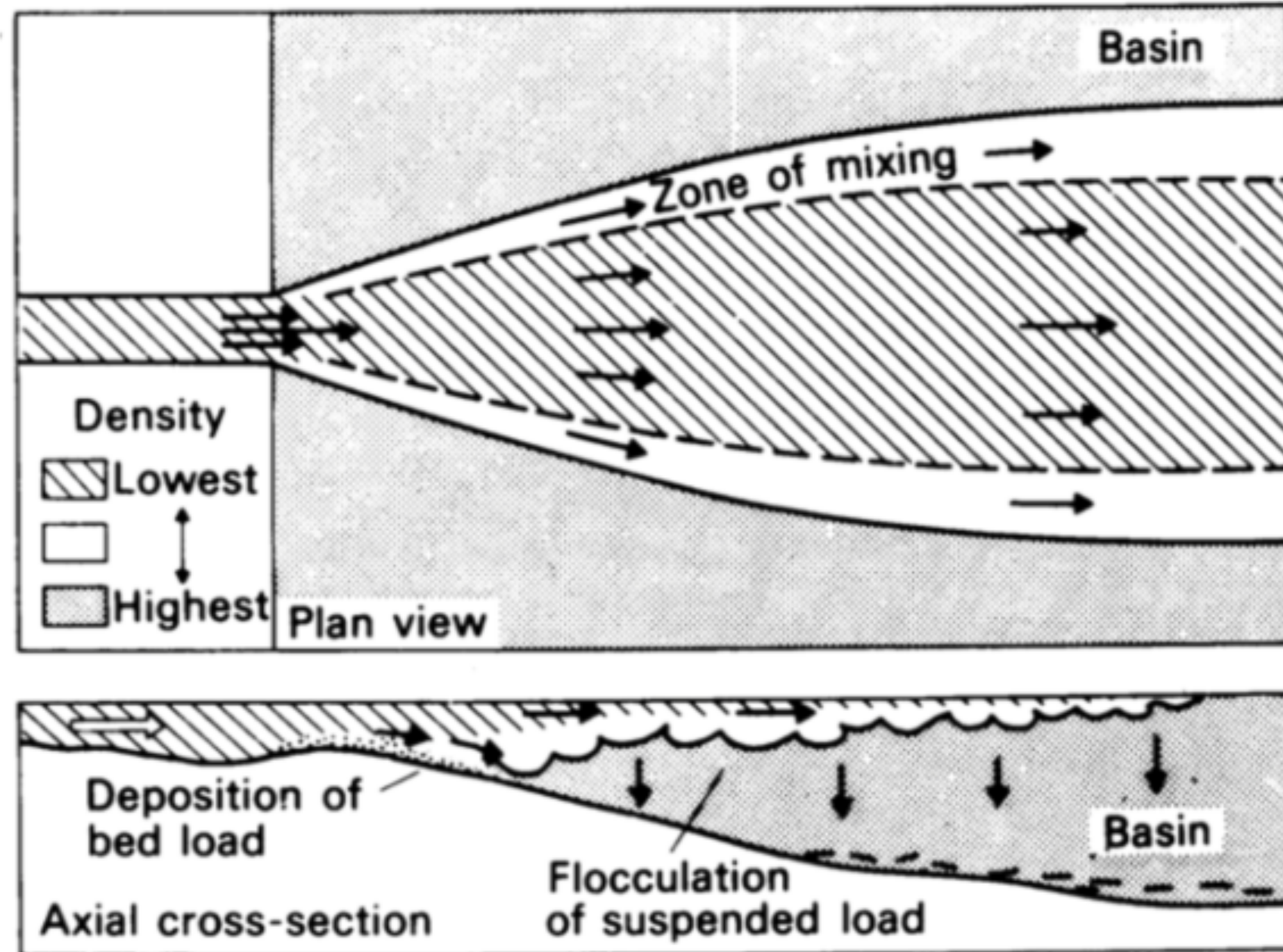


sition of finer-grained sequences in the lower part of the formation.

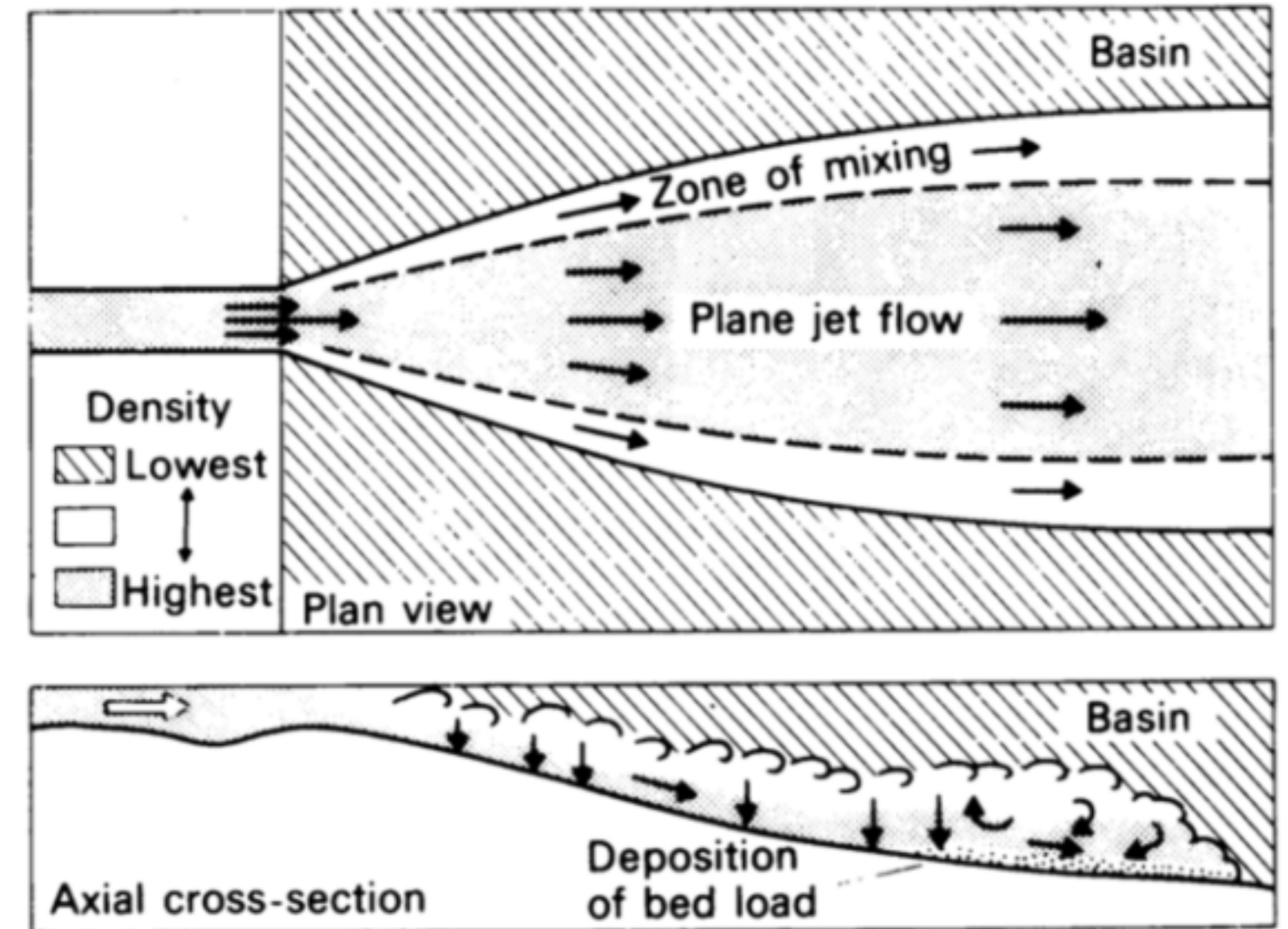
- The result is thus a nearshore environment.

continues to the stream must be formed and forms new as topset layers.

Influence of grain size



Hypopycnal : inflowing water has a lower density than basin water (buoyancy), leading to separation of bed load and suspended load.



Hyperpycnal : inflowing water has a higher density than basin water, leading to inertia-dominated density currents.