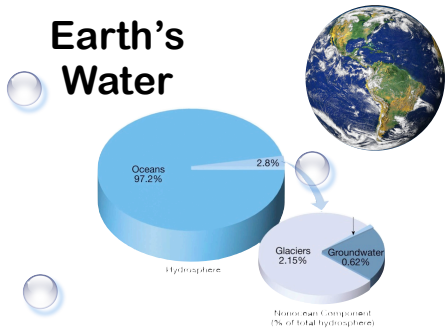


# Surface Water

Streams and Rivers

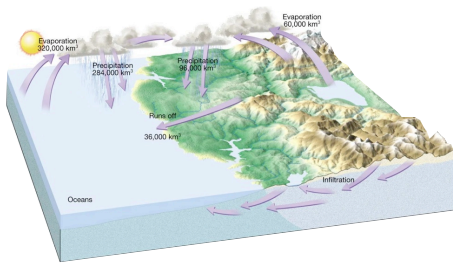
1

## Earth's Water



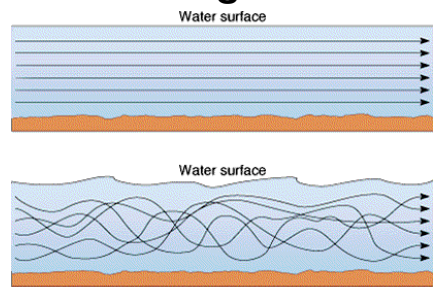
2

## The Water Cycle



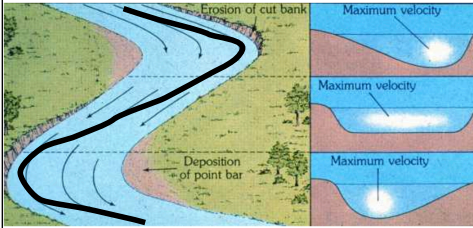
3

## Flowing Water



4

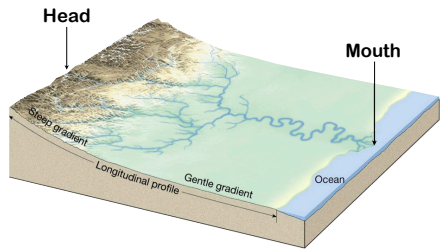
# Water in Streams



Position of Maximum velocity

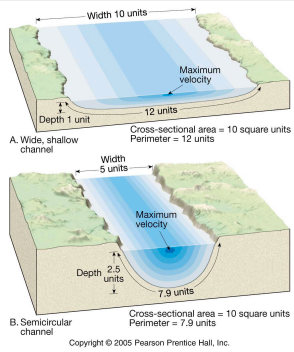
5

# Stream Gradient



6

# Size, Shape, Roughness

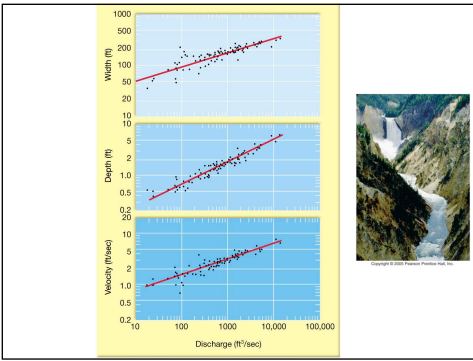


7

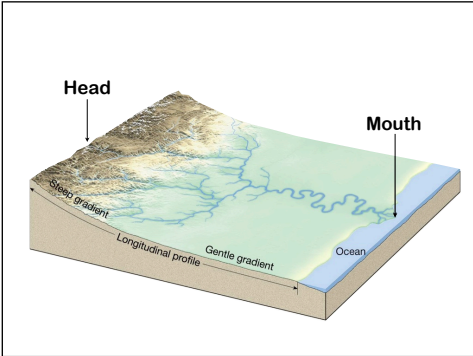
# Stream Discharge

$$D = \frac{m^3}{t} = \frac{f^3}{t}$$

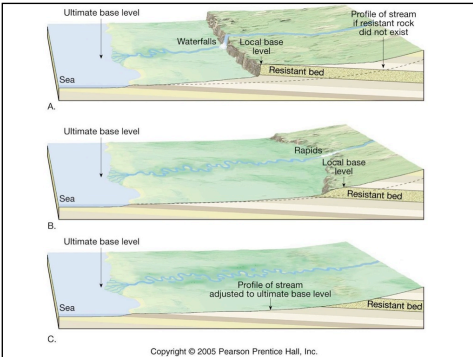
8



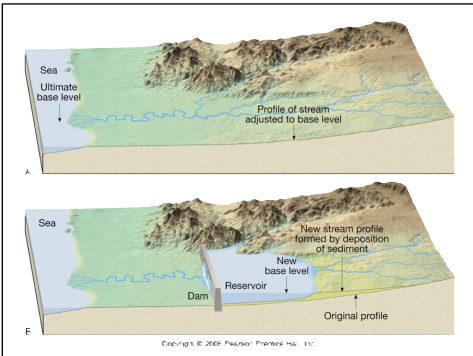
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10



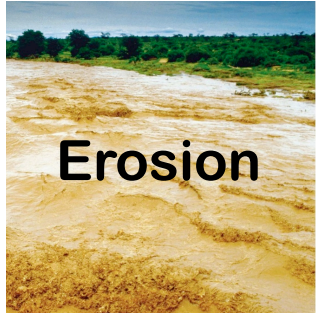
11



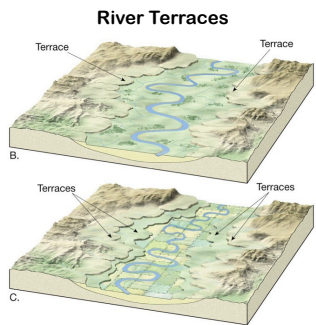
12

# Stream Processes

13



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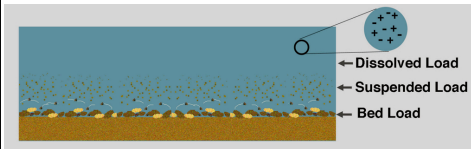


15



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# Transportation



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# Competence & Capacity

A streams' ability to carry solid particles is measured by these two criteria.

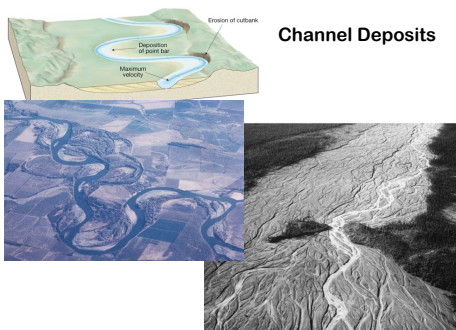
In general, most of the erosion and transportation that goes on in a stream channel occurs during flood stages when velocities and discharges are the highest.

18

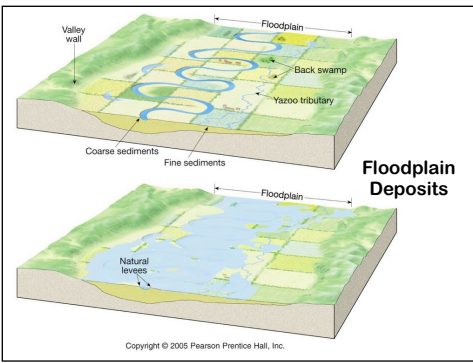
# Deposition

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## Channel Deposits



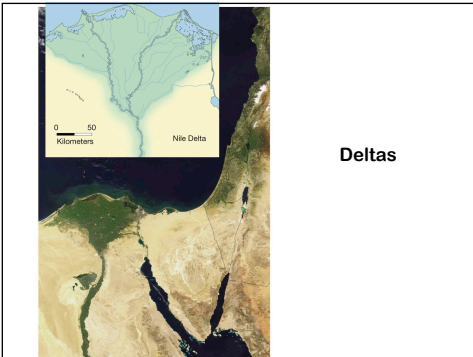
20



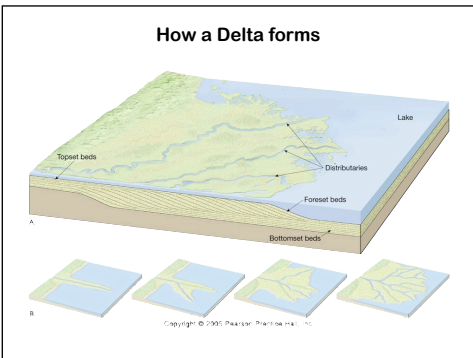
21



22

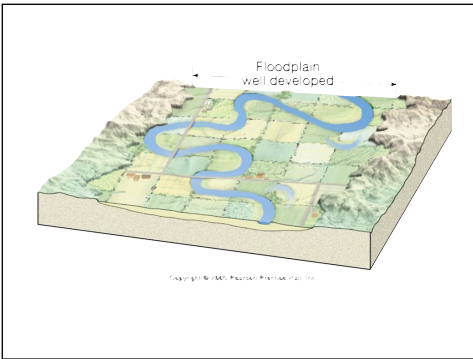


23

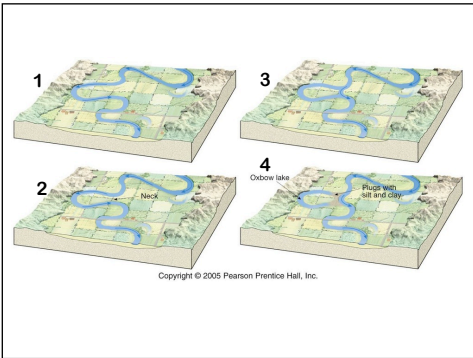


24

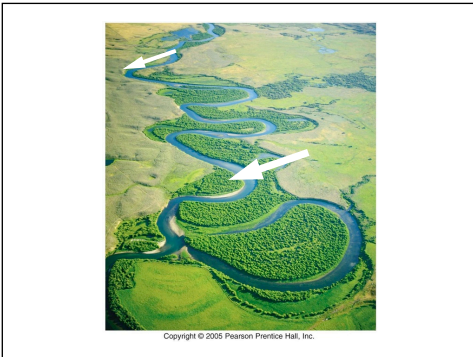




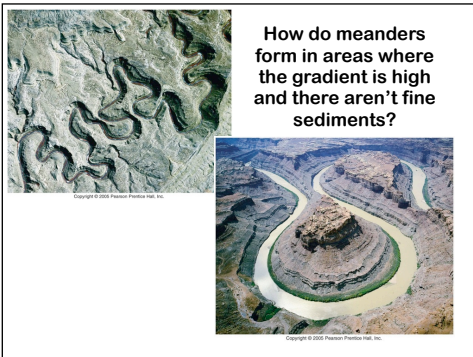
29



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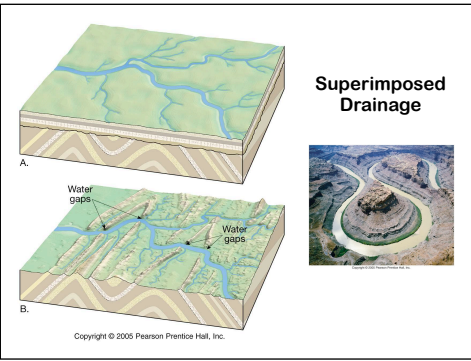


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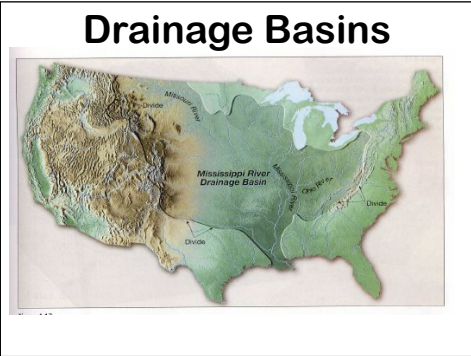


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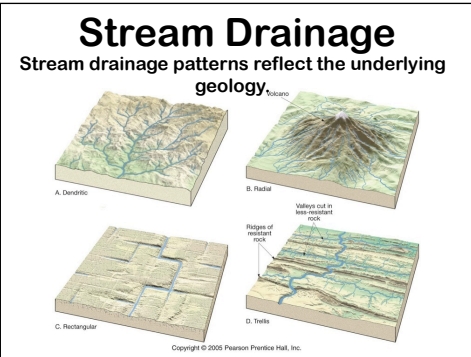




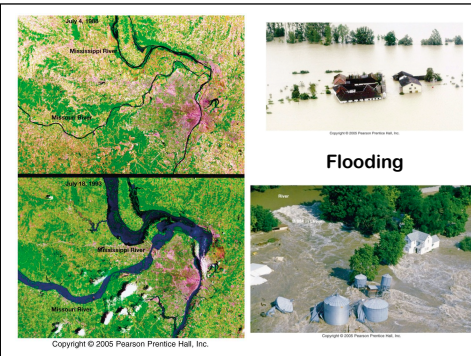
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**Next Lecture**

**Ground Water**



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