

Characteristics of Natural Streams

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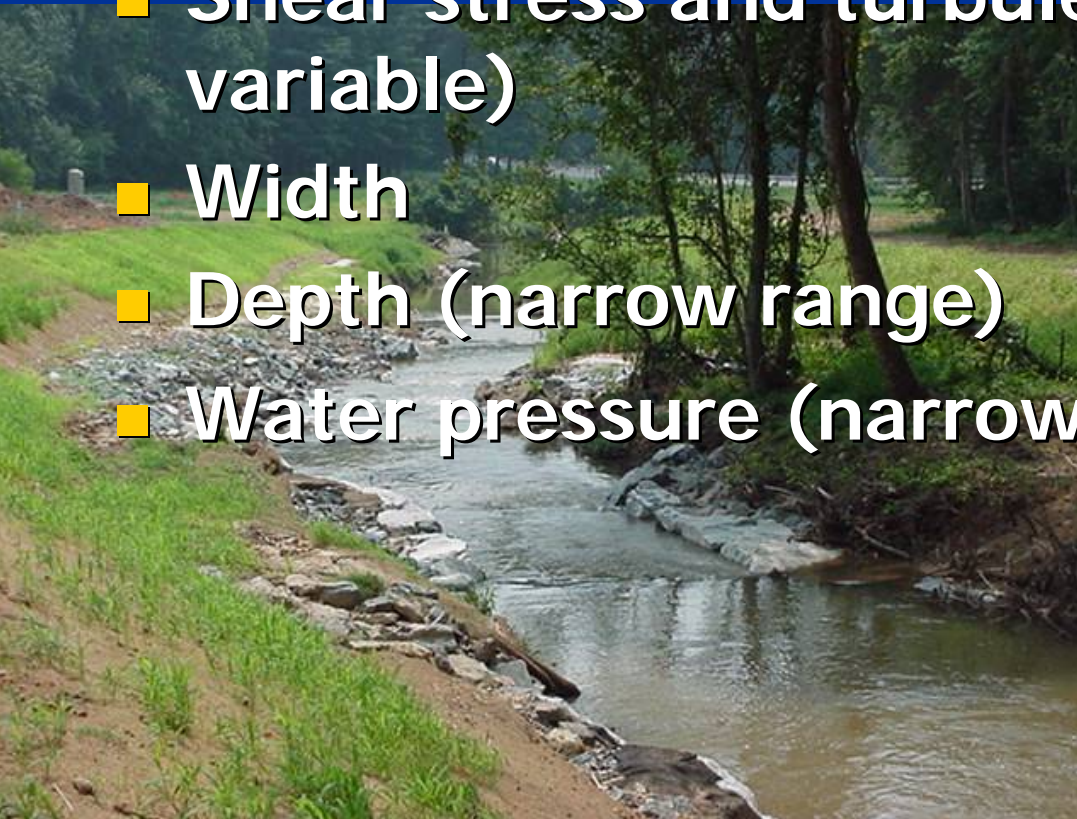
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Physical Factors in the Water Column

- Unidirectional flow (highly variable)
- Shear stress and turbulence (highly variable)
- Width
- Depth (narrow range)
- Water pressure (narrow range)



Physical Factors Associated with the Substrate



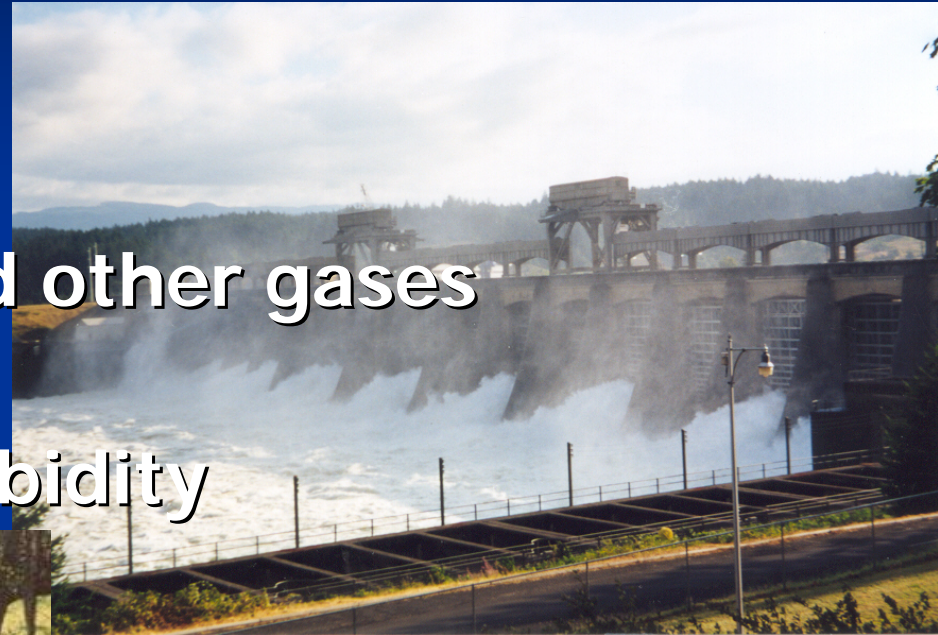
- Sediment size composition
- Uniformity of sediments

- Sediment transport
- Debris transport
- Aquatic vegetation
- Contaminants



Chemical Factors in the Water Column

- Temperature
- Dissolved Oxygen and other gases
- Dissolved solids
- Suspended solids/turbidity
- Contaminants

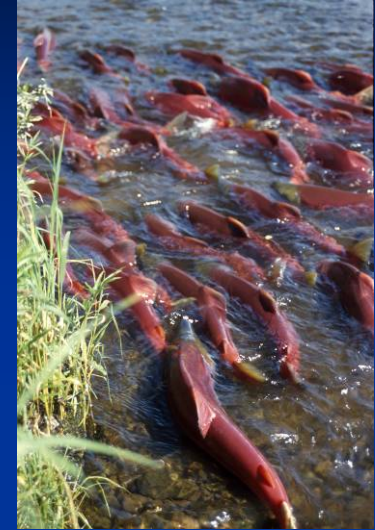


Biological Factors in the Water Column and Substrate



- Habitat for residents

- Macrophyte beds
- Boulders/cobble
- Silt



- Corridor for upstream and downstream passage

- Passive drift (macroinvertebrates, fish eggs and larvae)
- Active movements (riverine fish, anadromous/catadromous fish, diving birds, reptiles, and mammals)



Competing Uses of Natural Streams

- Recreational boating and commercial navigation
- Swimming
- Shoreline recreation
- Industrial withdrawals and discharges
- Aesthetics (visual and noise)

