

Natural Riparian Resources



Water

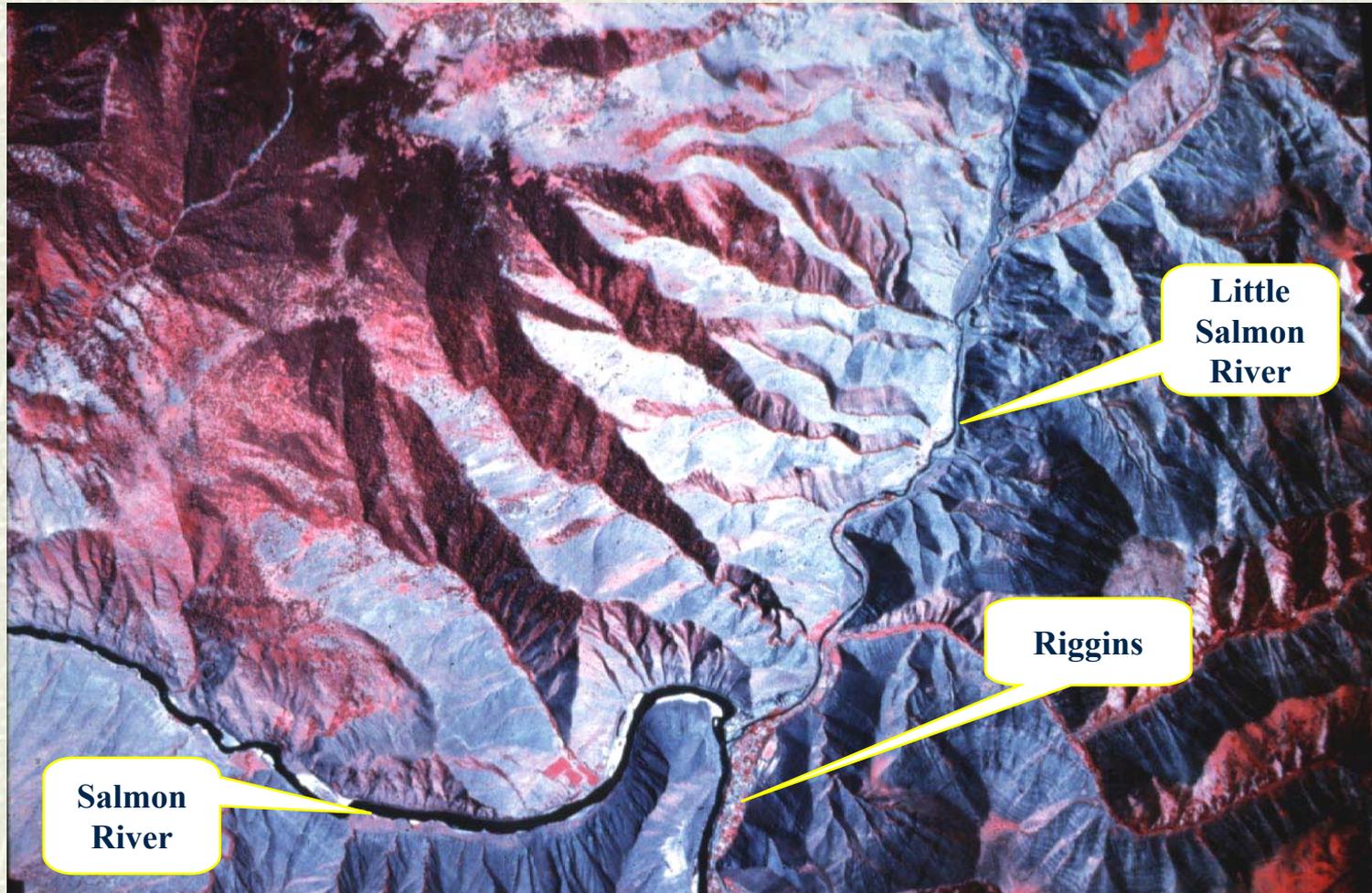


Landscape/Soil



Vegetation

Landform



Clover Creek



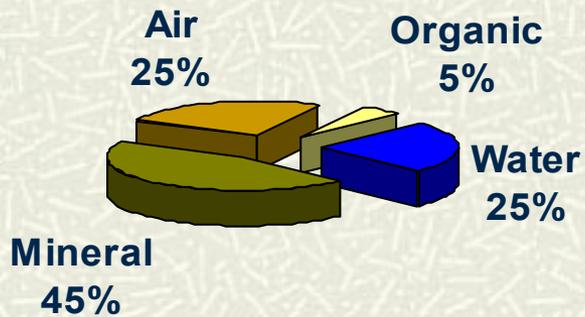
5 21 '98

Riparian Soils

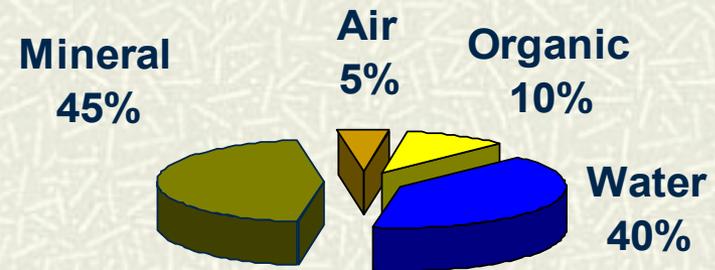


Volume composition of a silt loam surface soil

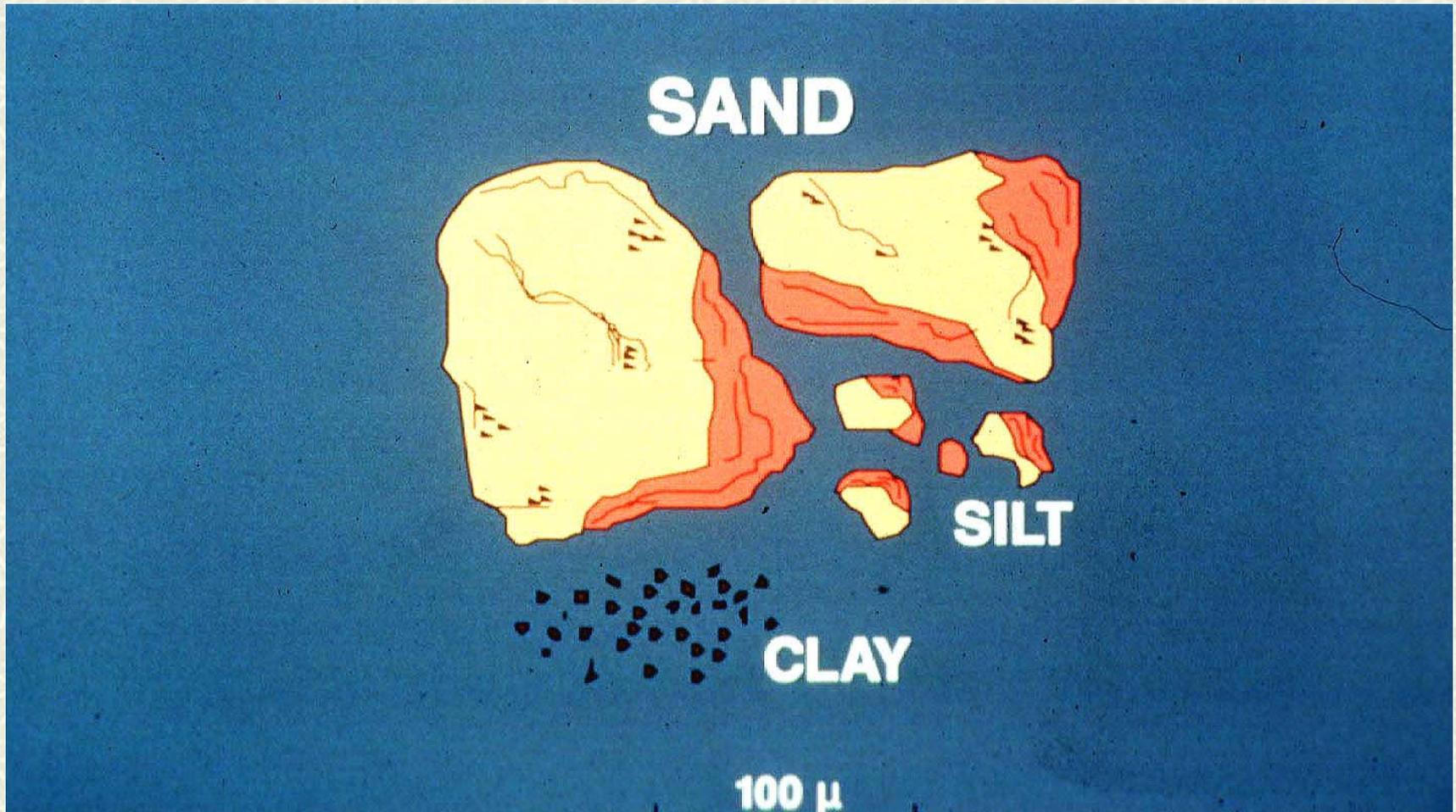
Dry soil



Saturated Soil



Soil Particle Size

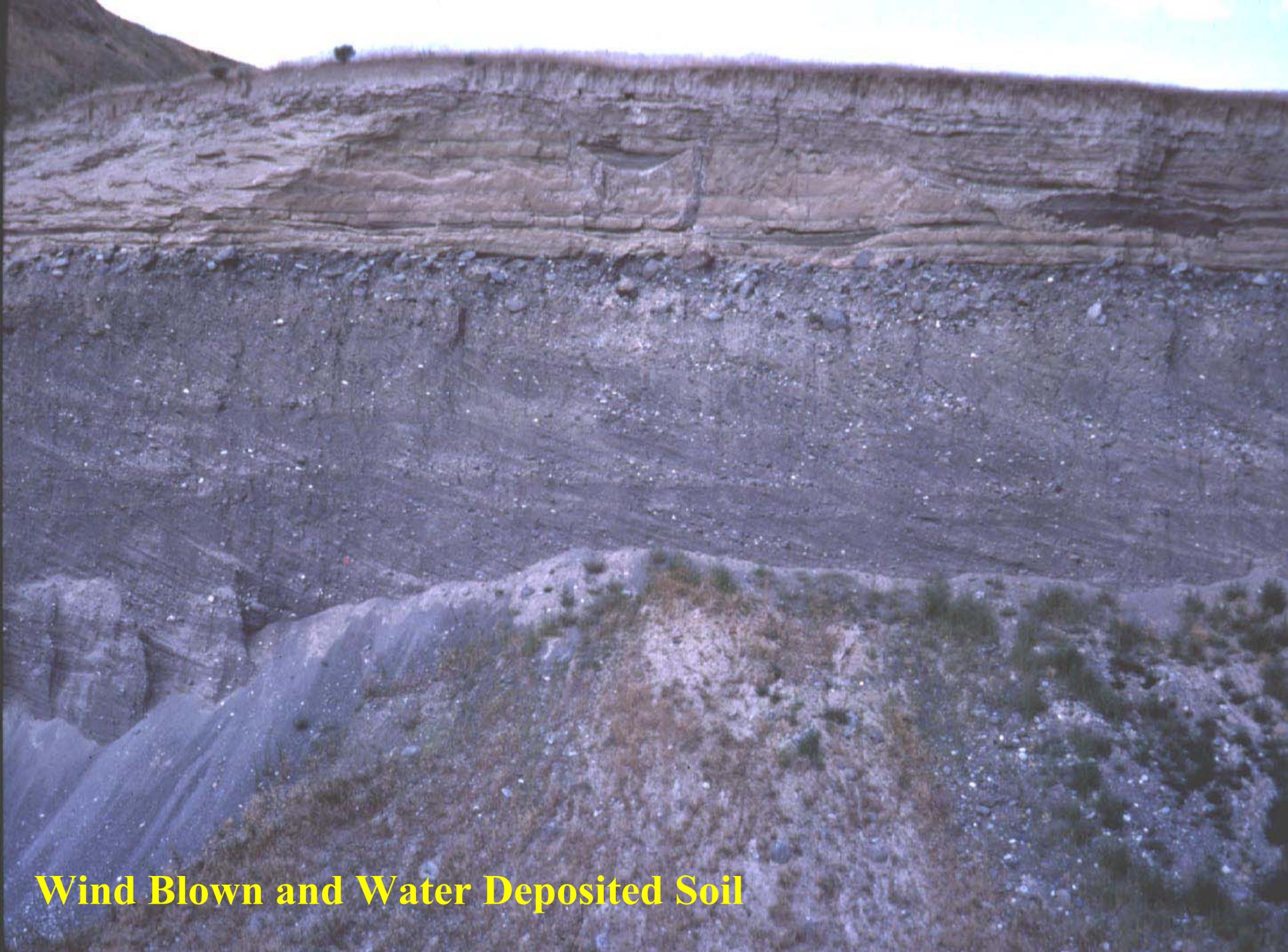


Granite



Basalt





Wind Blown and Water Deposited Soil

Boulder Creek

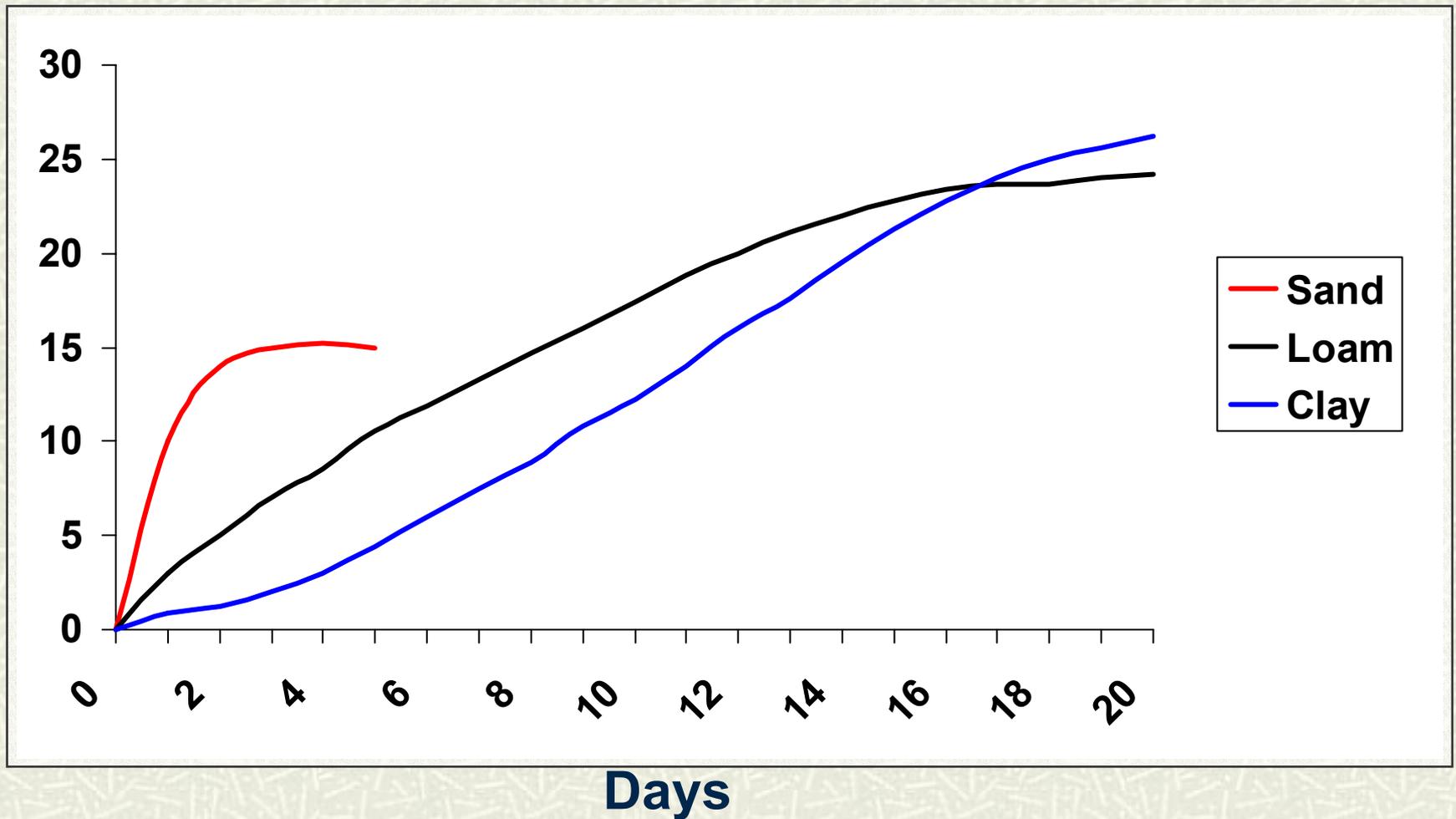


8/26/97

Harney Lake



Upward Movement of Water in Soil





Wetted Soil

8 27 '98

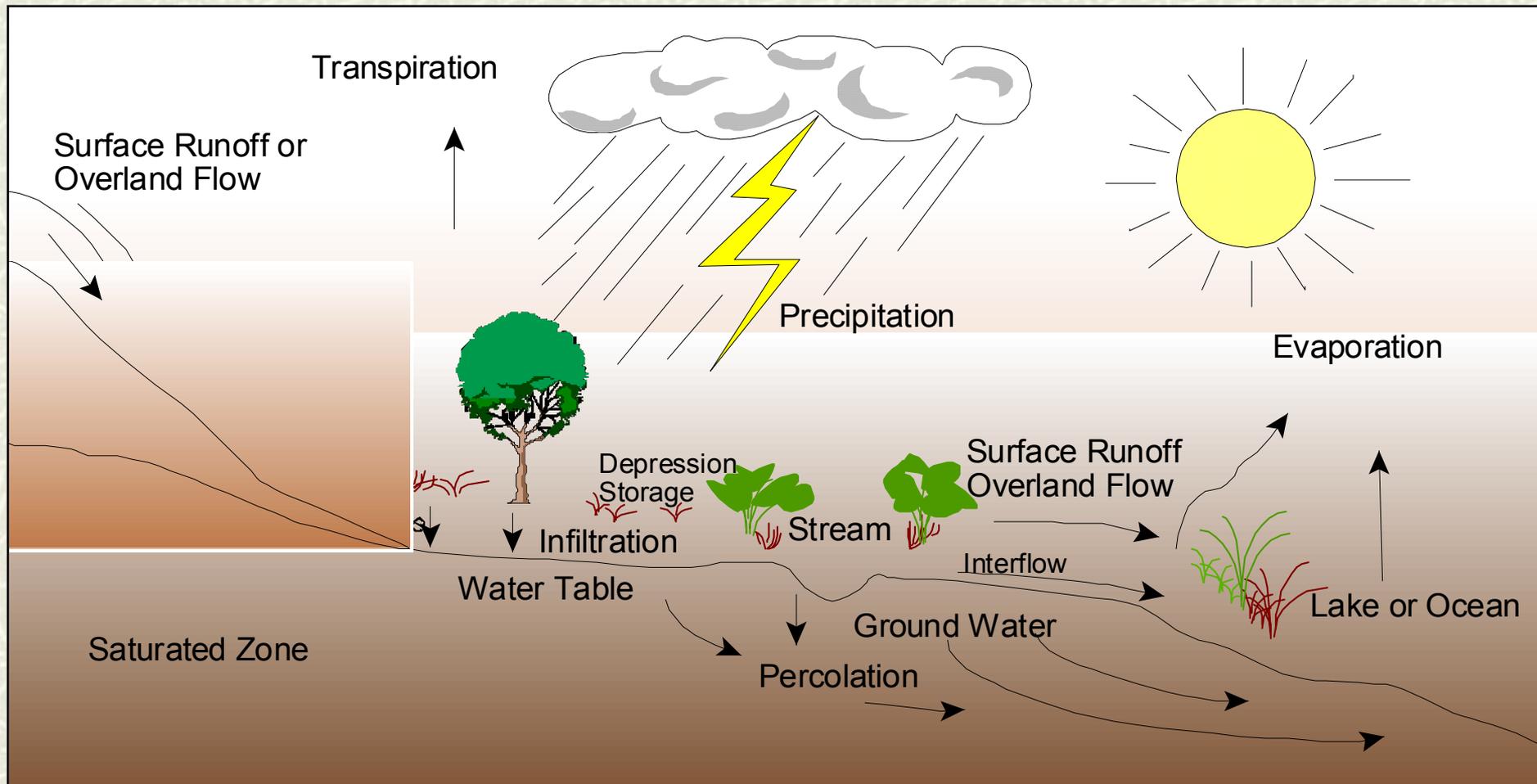
Partridge Creek



Henry's Fork Snake River



Hydrologic Cycle



Aerobic vs. Anaerobic

Boulder Creek



97/05/31
Boulder Cr.
P.O. 1000
Township #17
Dunsmuir

Orange flag

Standard Checklist (lotic)

Yes	No	N/A	Erosion/Deposition
			13) Flood plain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
Rationale:			
			14) Point bars are revegetating with riparian-wetland vegetation
Rationale:			
			15) Lateral stream movement is associated with natural sinuosity
Rationale:			
			16) System is vertically stable
Rationale:			
			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)
Rationale			

13) Flood plain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy

Proper function lotic riparian-wetland areas must dissipate energy

- Appropriate channel size and shape
- Fully developed floodplain
- Adequate roughness
- Appropriate vegetation cover



JUL 25 2002

- # Is the floodplain fully developed (see question 1)?
- # Is there sufficient overflow channels, vegetation, rock, and woody debris to handle high flows without degrading?
- # Is the floodplain capable of growing woody species?
- # Are woody riparian species present on the floodplain and/or streambanks?
- # Is the sinuosity and width/depth ratio appropriate for the site (see Question 3)?



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14) Point bars are revegetating with riparian-wetland vegetation



- # Is there a distinct and relatively continuous line of stabilizing riparian vegetation on the point bar?
- # Is there sprout and/or young woody species on the point bar?
- # Is herbaceous stabilizing riparian species expanding?



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Question 15 - Lateral stream movement is associated with natural sinuosity

- # The channel is appropriate for the landform and in balance with normal processes
 - Channel movement is a slow process
 - Appropriate vegetation and/or streambank cover
 - Channel aggrading
 - Multi-thread channel vs. single thread channel



- # Does the streambanks have an adequate amount of stabilizing vegetation (see Questions 9 & 11)?
- # Is there evidence of rapid point bar growth (see question 3)?
- # Is the channel widening? Is the channel aggrading?
- # Is the channel multi-thread (“D” channel type)?
- # Is sinuosity appropriate for the valley type (see Question 3)?



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16 - System is vertically stable

- # Is the down-cutting within natural rates or accelerated
- # Accelerated erosion, down-cutting
 - Headcut
 - Potential to move up through a wetland
 - Lower water table

Flat Canyon Creek

- # Is there a head cut capable of moving upstream within or below the reach?
- # Are there hydrologic modifiers such as abandon beaver dams, logs, or structures that have water moving under them?
- # Is sediment or debris accumulation causing the water to flow out of the channel?

Sage Creek

- # Is there a head cut capable of moving upstream within or below the reach?
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17 - Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

- # Streams transport water and sediment
- # Increases or decreases in water
 - Channel degradation
 - Sediment transport
 - Channel erosion
- # Erosion increases sediment
 - Channel
 - Upland or side channels



- # Is there evidence of increased water flow such as channel degradation or channel erosion (see Question 5)?
- # Are there mid-channel bars, sediment filled pools, sand/silt/clay channel bottoms (see question 3)?
- # Is there channel braiding?
- # Are streambanks stable (see Question 11)?

James Creek

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