

3.3- Part 1

Freshwater Ecosystems

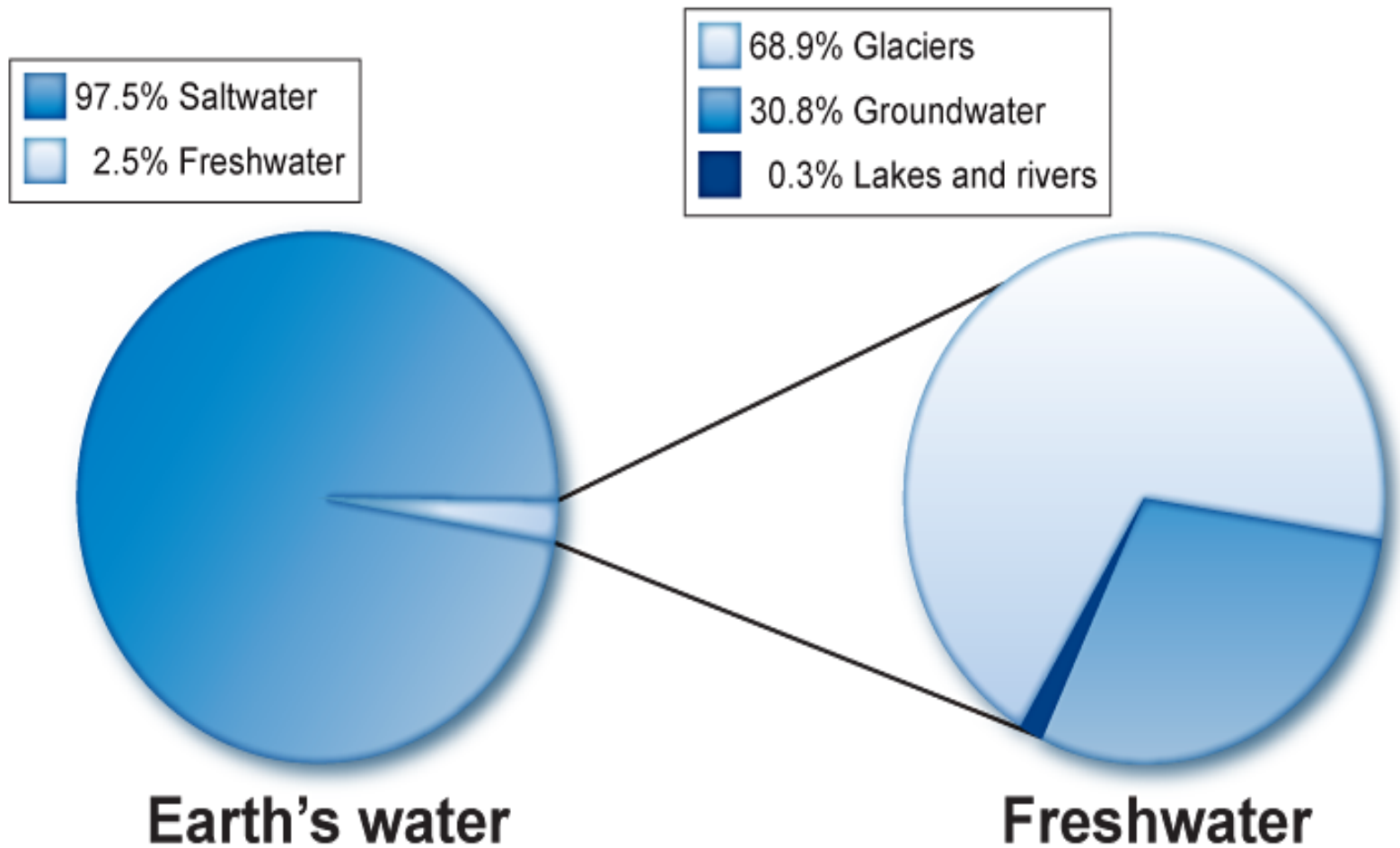
Freshwater- without salt

ex: river, lake

marine- with salt

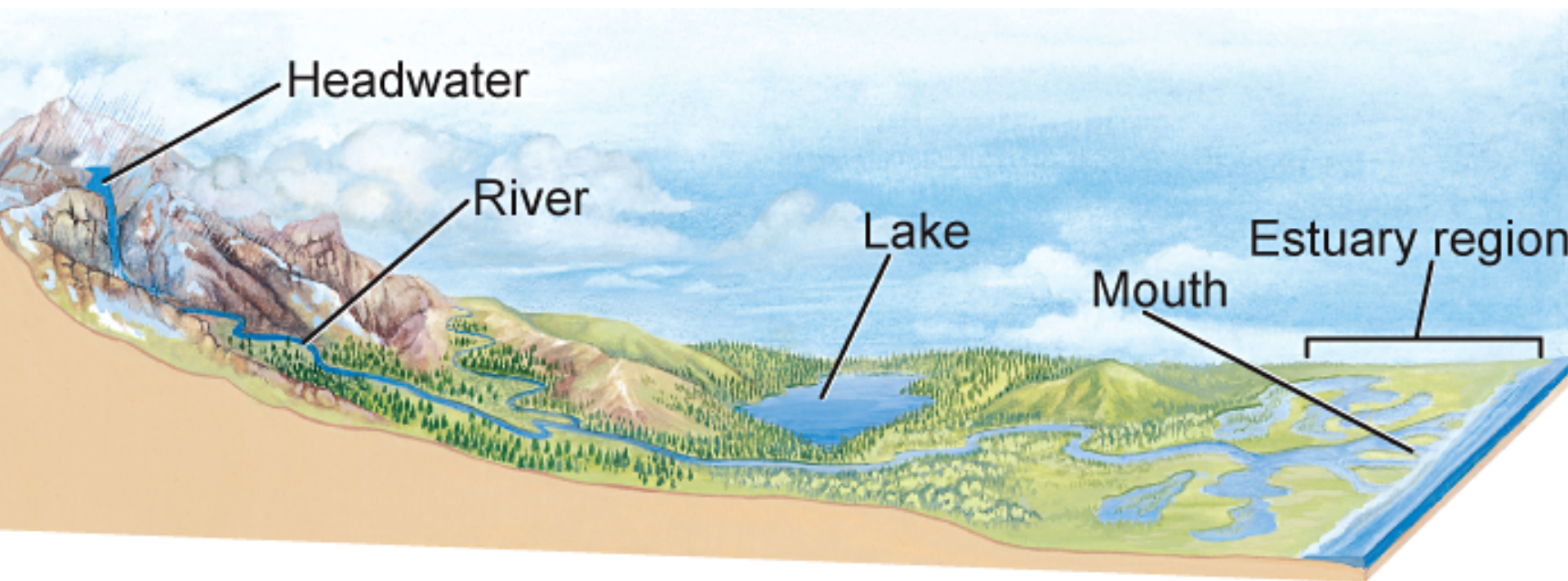
ex: ocean

-Only 2.5% of the water on Earth is freshwater.



Rivers and streams

- Water flows one direction.
- Slope determines the direction and speed
- **Sediment** material deposited by water, wind, or glaciers.



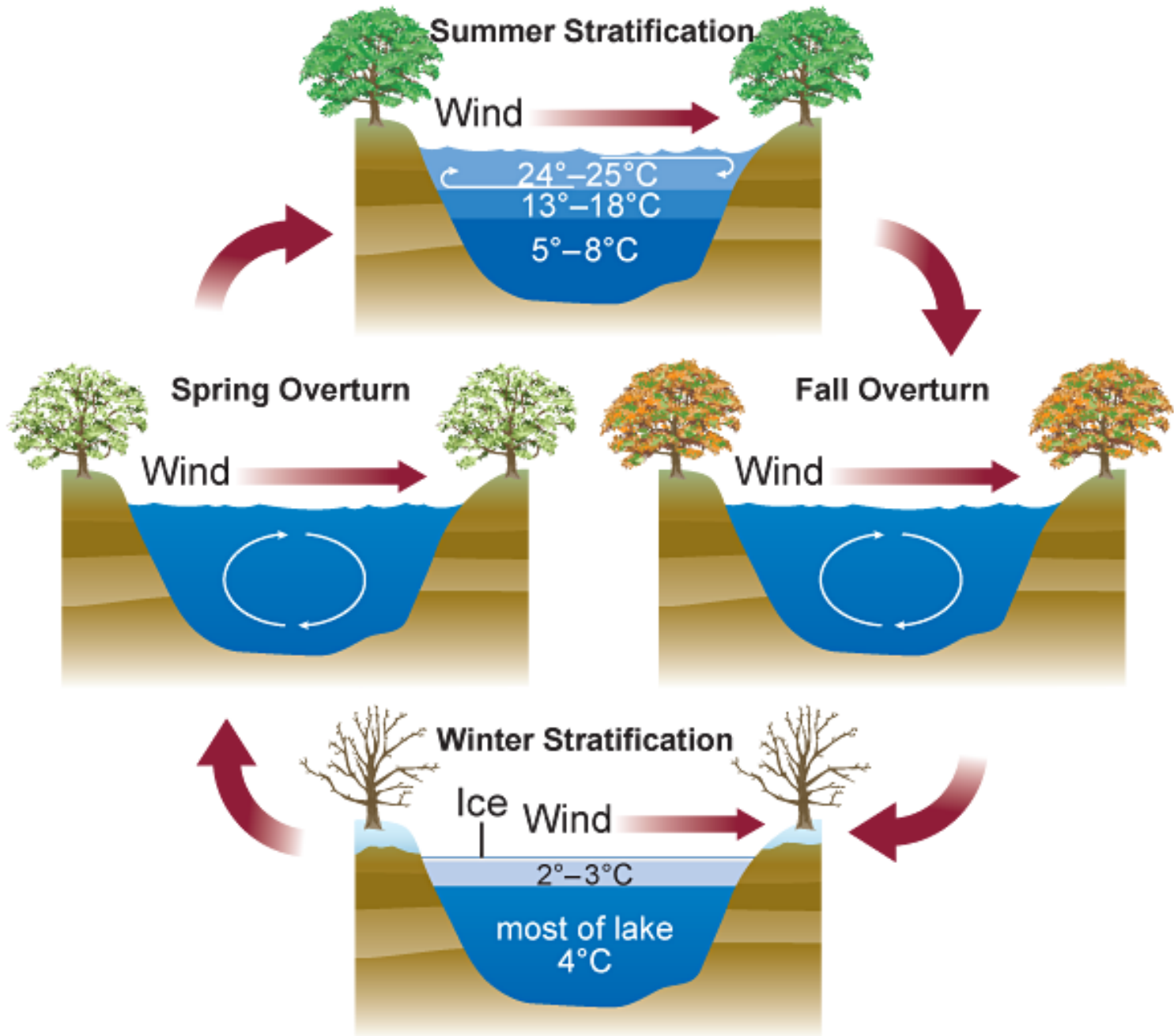
Interactions between land
and water result in

- differences in erosion
- nutrient availability
- species diversity

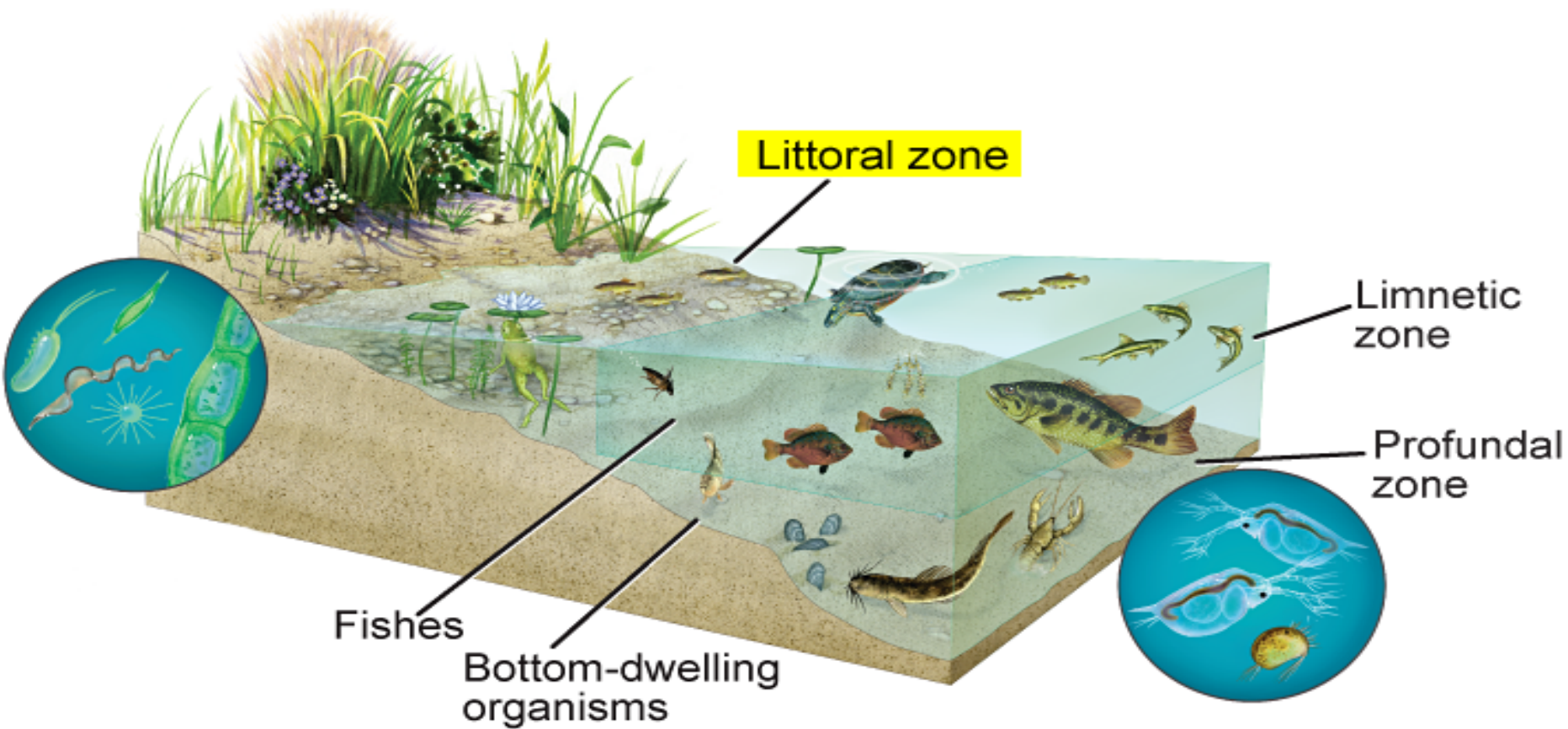
- Fast moving water: less sediment and organic matter; fewer species
- Slow moving water: sediment is deposited as mud, silt, and sand; supports a diversity of plant and animal species

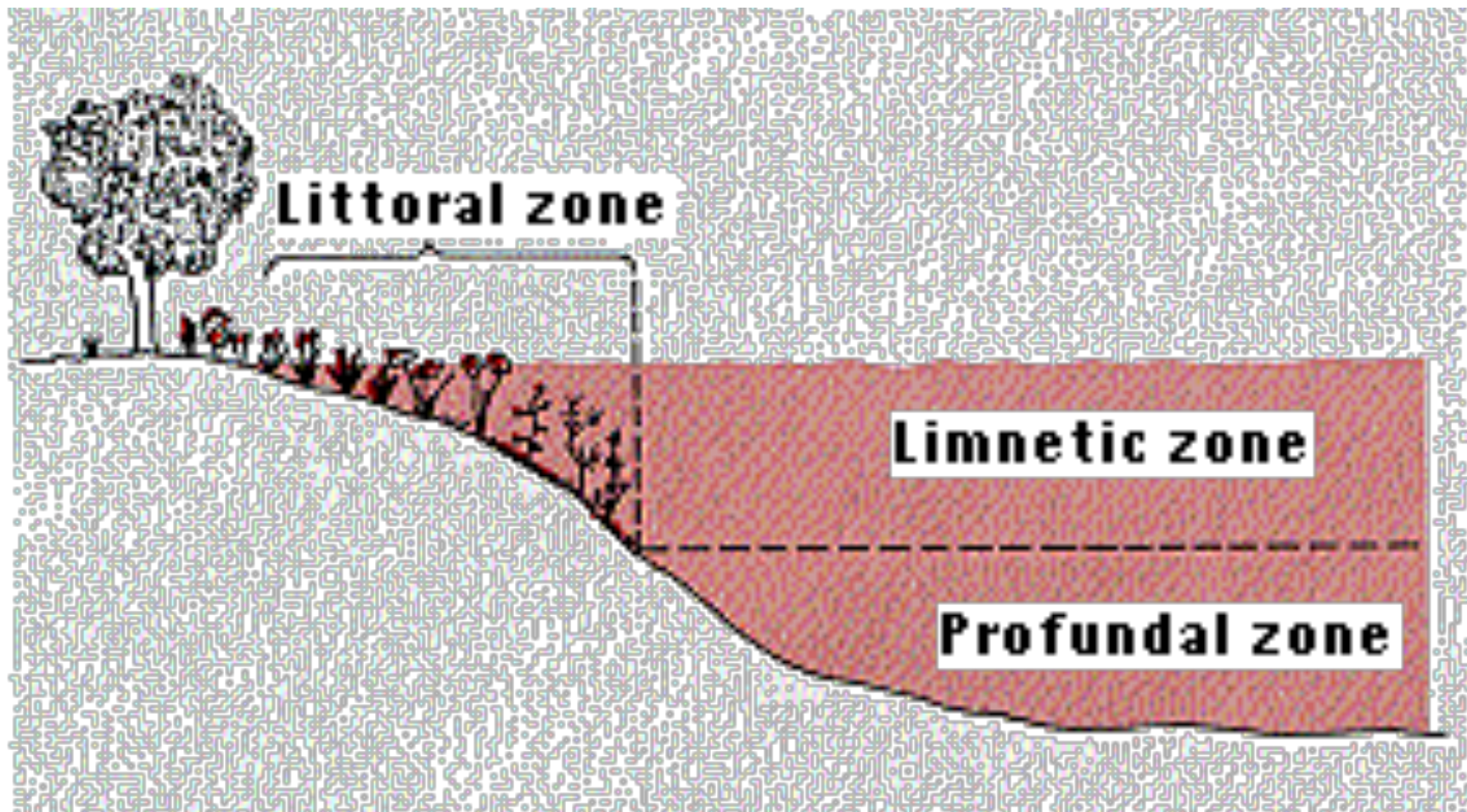
Lakes and ponds

- inland body of standing water
- Temperature varies with seasons.
- **Turnover** circulates nutrients and oxygen



Lakes and Ponds are divided into **three zones** based on the **amount of sunlight** that penetrates the water.





- **Littoral zone**

- Shallow- closest to shore
- sunlight reaches the bottom
- highly productive area with numerous producers

Limnetic zone

- open water, well lit.
- Phytoplankton are main producers
- Home to many fish

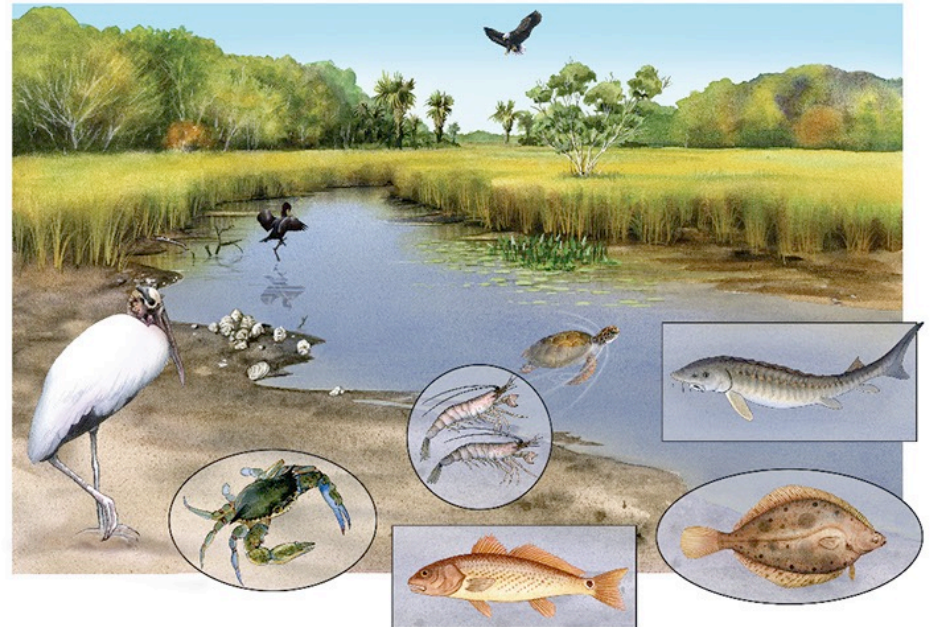
profundal zone

- deepest part.
- Little sunlight
- Colder and lower in oxygen

Transitional Aquatic Ecosystems

Wetlands areas saturated with water, home to aquatic plants. High level of species diversity.

ex; marshes, swamps, and bogs



Estuaries are where freshwater from a stream or river meets saltwater from the ocean.

