

# FLORIDA SPRINGS





## WHAT IS A SPRING ?????

Any natural aquatic environment where fresh water flows from an aquifer to the earth's surface

Aquifer: underground layer of water-bearing permeable rock, rock fractures or unconsolidated materials (gravel, sand)

Body of rock and/or sediment that holds groundwater



## HOW ARE SPRINGS FORMED ?

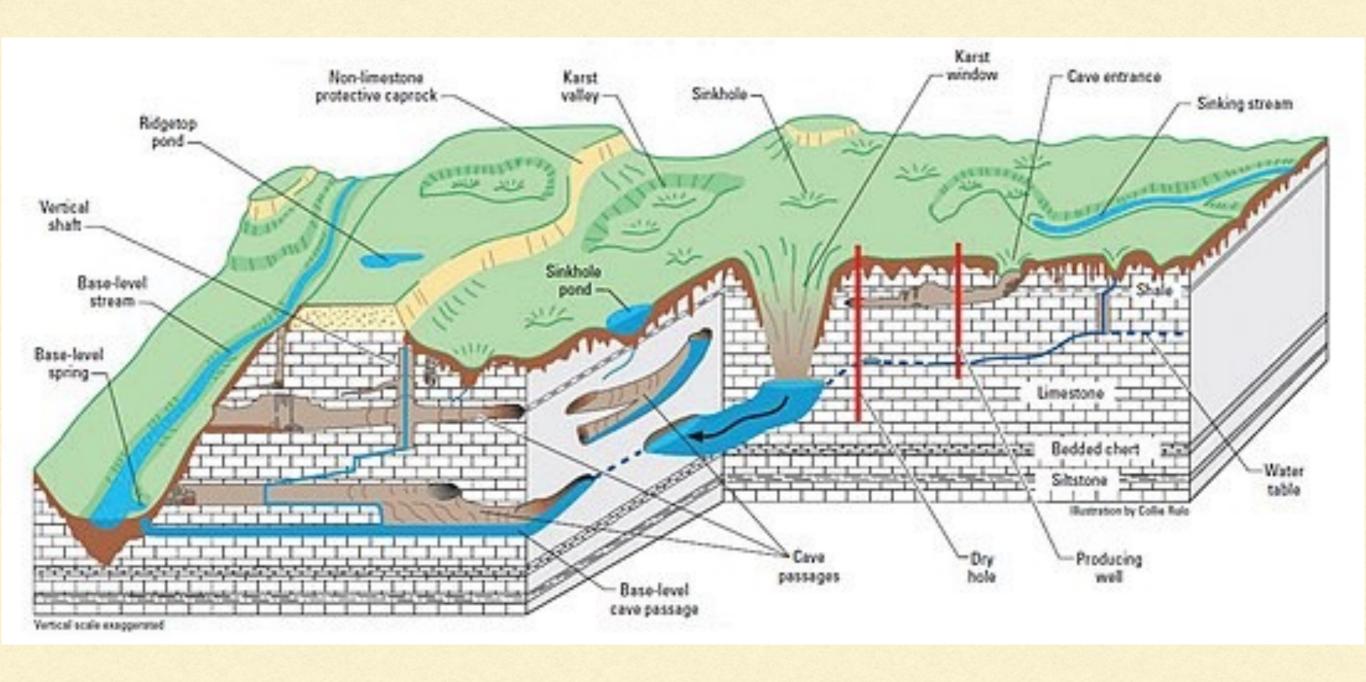
Geographical structures force large amounts of water to the surface

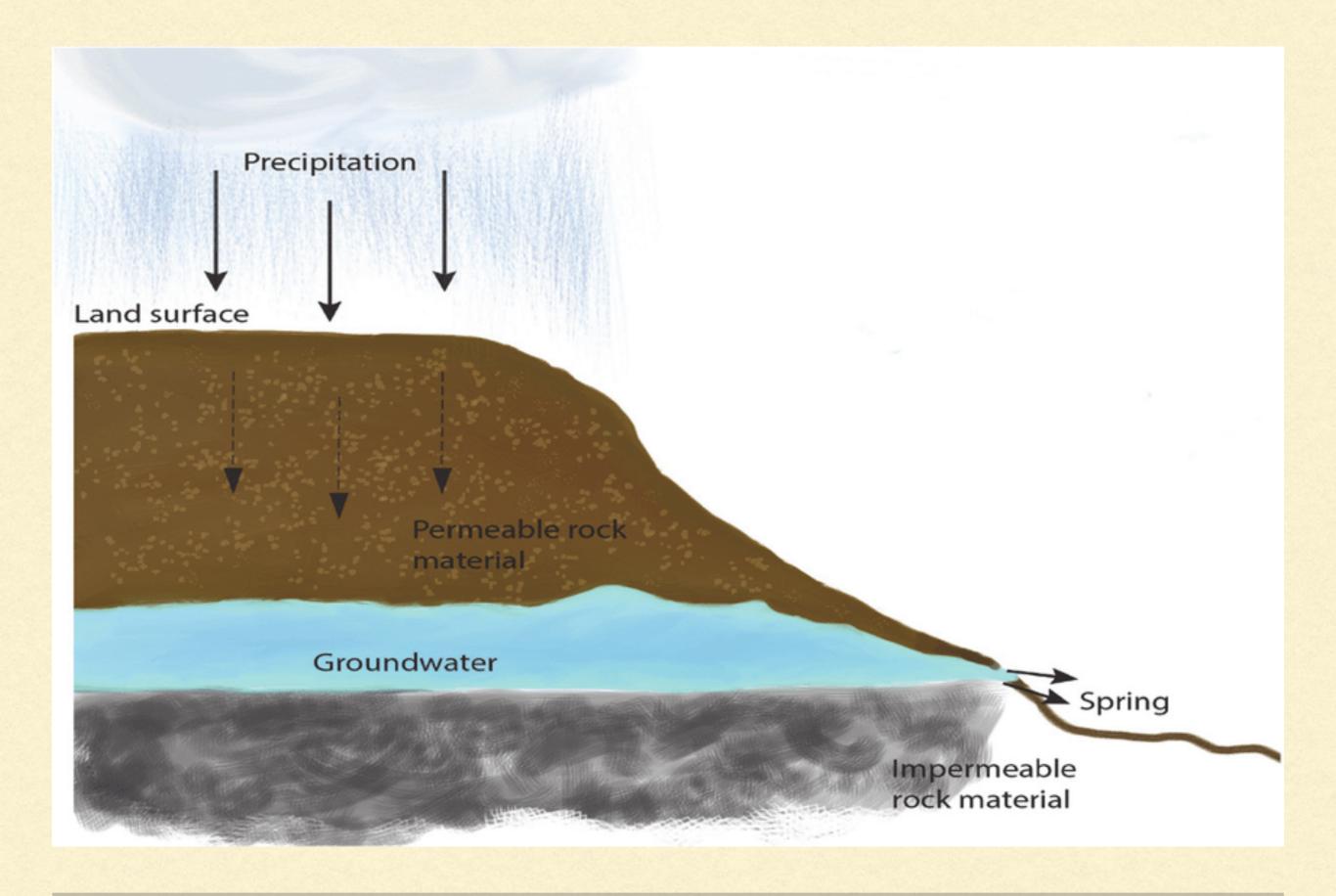
- I. Water soaks in
  - 2. Percolates & filters through
    - 3. Saturation drives water to surface
      - 4. Takes few days to hundreds of years

Sinkhole

Karst 20% of US

Ceynote







## CLASSIFICATION & TYPES

Flow: 1st Magnitude 65 mil gallons / day ...33 in Florida
2nd Magnitude 6.5-65
3rd Magnitude .65-6.5
8 Magnitudes

Types:

Shore

Boat

Drift



# THERMOCLINES & HALOCLINES

Thermocline: Water temp changes abruptly with depth

Haloclines: Water type changes abruptly at depth (salinity)



## WHY DIVE IN A SPRING?

#### Advantages:

Accessibility
Less expensive ???
Visibility (Tanic)
Constant temp...72

#### **Disadvantages**:

Overhead environment
Silt
Crowds
Flow...in & out
Emergencies



# EQUIPMENT

Extras

Lights (allowed?)

Tarp or mat

Lines, reels, floats, flags

Cutting tool

First aid, O2, AED

Save-A-Dive kit



## SAFETY

Conservative

Phone

Streamline gear

EAP

Silting

Cert level

Flow rate

Water

Overhead

Finning & falling

Buoyancy



## PLANNING

Type of spring... equip accordingly

Private? Park?

Cert level and cards

Contingency planning

**Facilities** 

Logistics

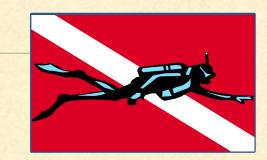


### CAVERN OR CAVE?

Can you see the exit ????

Training required !!!!





# WHATTO DO & SEE

Refresher

Clean your gear

Check new gear

Practice buoyancy

Check serviced gear

Practice skills



Fossils

Carvings

Bones

Fish

Turtles



## LOCAL SPRINGS

Madison Blue

Alexander Springs

Ginnie Springs

Juniper

Blue Grotto

Manatee

Peacock Springs

**Devils Den** 

Rainbow Springs

Blue Spring

Crystal Springs

Weekie Wachee





