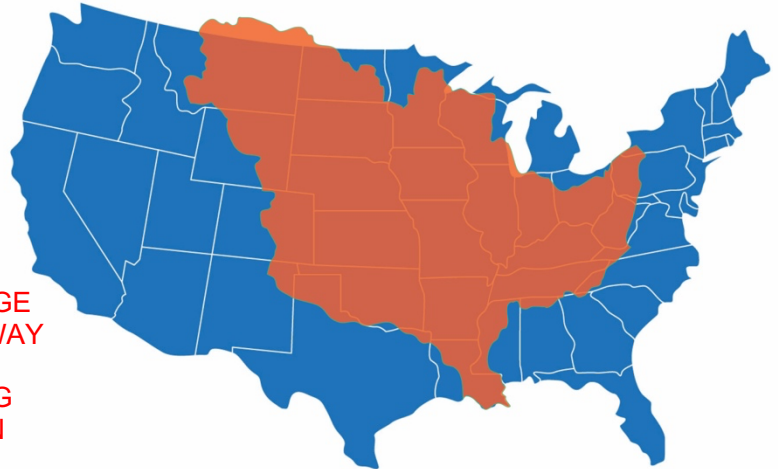


# River Deltaic Simulation

1. The 31 states colored in orange are part of the Mississippi River watershed, the largest in the country. Explain how rain, snow, and flooding events in places like Minnesota and New York could impact people in Louisiana.



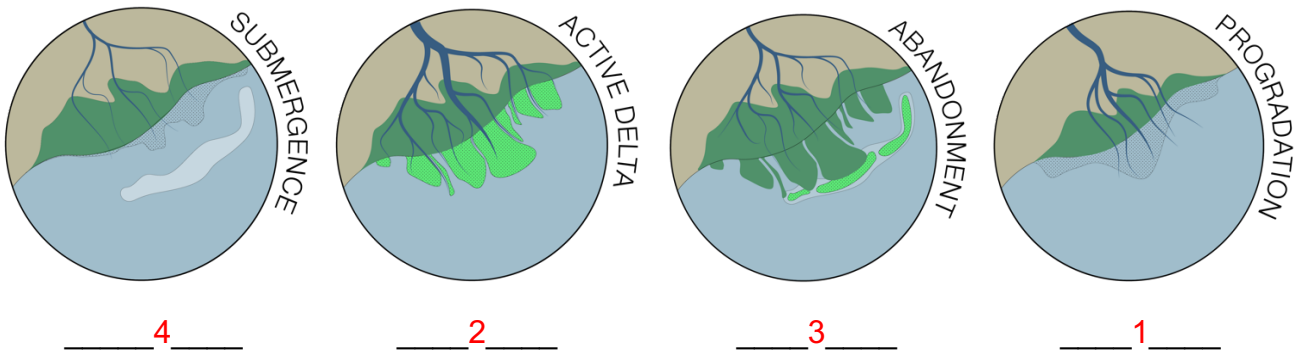
PRECIPITATION IN ANY OF THE ORANGE STATES WILL EVENTUALLY FIND ITS WAY INTO THE MISSISSIPPI RIVER VIA THE VARIOUS TRIBUTARIES. SO, FLOODING EVENTS IN NORTHERN AND WESTERN STATES ARE ALSO A CONCERN FOR LOUISIANA, BECAUSE THIS WATER EVENTUALLY JOINS THE MISSISSIPPI RIVER THAT FLOWS THROUGH OUR STATE.

 Part of the Mississippi River watershed

2. Sediment is also carried in the river water from these states. What happens to this sediment as the river slows as it reaches the Gulf of Mexico?

AS THE RIVER SLOWS DOWN, THE SEDIMENT BEGINS TO DROP TO THE BOTTOM AND ACCUMULATE IN PILES. OVER TIME, THIS DIRT ACCUMULATES INTO LARGE ENOUGH PILES THAT IT RISES ABOVE THE WATER LEVEL FORMING LAND. THESE NEWLY FORMED ISLANDS MAKE UP THE RIVER DELTA.

3. Similar to living things, a delta has a “life cycle”. It is born, grows and eventually dies back when the river takes a new course. Put the following illustrations in numerical order based on which happens first in the life cycle (1) to which happens last (4).



4. Why is a delta a good place to live?

DELTA PROVIDE EASY ACCESS TO THE GULF OR THE OCEAN. THE WETLANDS PROVIDE GOOD HABITAT FOR FISHERIES. THE PROXIMITY TO WATER IS GOOD FOR TRANSPORTATION OF GOODS. ALSO, DELTAS OFTEN CONTAIN OIL AND GAS DEPOSITS.

5. Why is a delta a bad place to live?

DELTA ARE DYNAMIC, MEANING THEY LIKE TO CHANGE OVER TIME. THEREFORE, THE DIRT THAT COMMUNITIES ARE BUILT ON MANY ERODE AWAY OVER TIME WHEN THE RIVER MOVES. THERE ARE ALSO EROSION CONCERNS FROM WAVES AND RIVER FLOODING.