CASE STUDY #7 - Wasatch Fault Zone, Salt Lake City, UT

Answer all questions and place annotation on the map as requested.
1. Draw a north arrow on the map.

2. What is the scale for this map?

3. Cottonwood Heights is a suburb of Salt Lake City, Utah. What is the seismic risk for this area?

4. The trace of the Wasatch Fault is drawn on the map. What type of fault is this?

5. Local real estate agents claim that the location of the Wasatch Fault always corresponds with the bedrock at the edges of the valley. Circle locations on the map where this is not true.

6. The Wasatch Fault is considered an active fault. In the 1970’s, new construction was forbidden (by zoning law) within a mile of the Fault. Mark (red) housing developments that may be at risk of damage if new movement occurs along the Fault.

7. Mark (blue) any municipal facilities that may be at risk if new movement occurs along the fault.

8. If you were the zoning commissioner in this area, would you have granted easements to allow construction this close to the Wasatch Fault? If new fault-related damage occurs, who do you think is legally responsible?

9. Locate Lower Bells Canyon Reservoir. Do you think this is a man-made feature? Why or why not?

10. There are two major canyons shown on the east side of the map (Big Cottonwood and Little Cottonwood). Evaluate a proposal to dam the mouths of both canyons to make reservoirs for Salt Lake City.