

Effects of Earthquakes:

1. Fire--breakage of natural gas and flammable liquids pipelines (San Francisco, 1906)
2. Structural damage to infrastructure—buildings, roads, dams
3. Tsunami
 - Causes of tsunami:
 - (1.) volcanic explosions (Krakatoa, 1883)
 - (2.) landslides
 - (3.) meteor impact
 - (4.) earthquakes
4. Landslides
5. Cracks in the ground
6. Changes in sea level
 - a. Tides—daily rising or falling of sea level caused by:
 - (1.) gravitational attraction of the moon
$$F \text{ (gravity)} = k(m_1m_2/r^2)$$
 - (2.) centripetal force generated by earth's rotation on its axis, as increase the radius of rotation, you increase the centripetal force

(3.) gravitational attraction of the Sun

$$F (\text{gravity}) = k(m_1 m_2 / r^2)$$

(4.) centripetal force generated as the Earth-moon system revolves around the Sun

The 2 largest tides are in the Bay of Fundy in Nova Scotia and the Knik Arm near Anchorage, Alaska

b. Eustatic—world wide as amount of water in the oceans increase or decreases. Tied up on land in the form of glaciers, then sea level goes down. When the glaciers melt, then sea level increases. Geologic data indicates that during the last ‘ice age’, sea level was about 350 feet lower than we see today.

c. Tectonic—local in nature, land area goes up or down. Sea level world-wide is not affected. Land which was below sea level is now exposed above sea level. Land which was above sea level is now below sea level. Earthquakes make this change

7. Sound