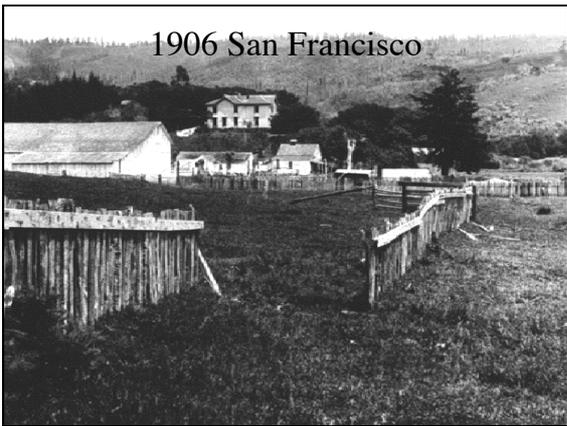


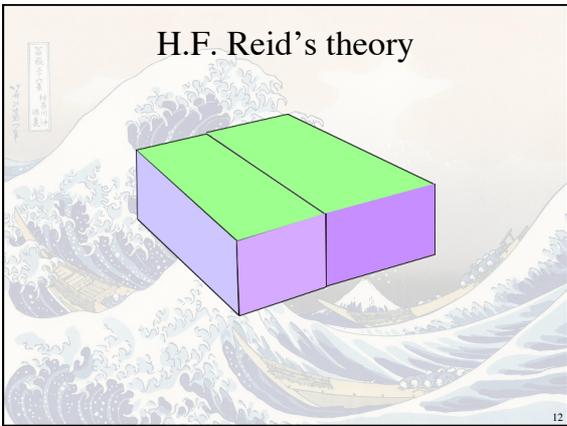
1906 San Francisco

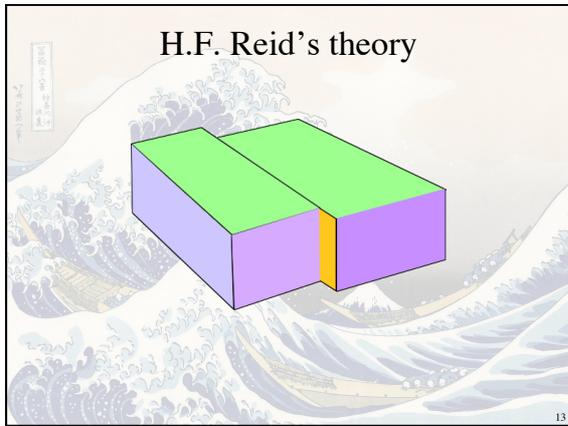


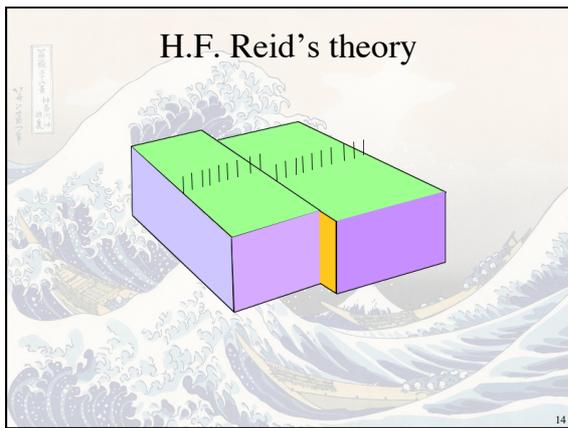
1906 San Francisco

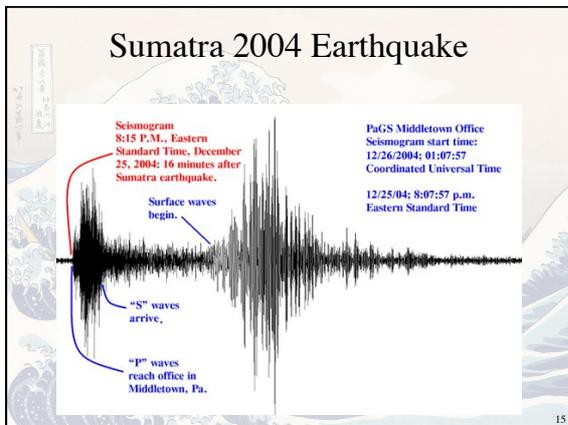


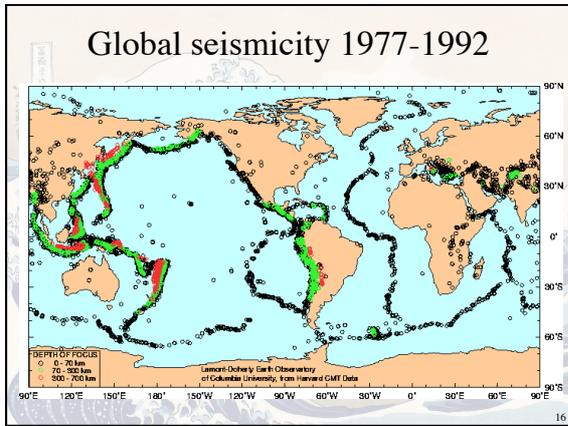
H.F. Reid's theory

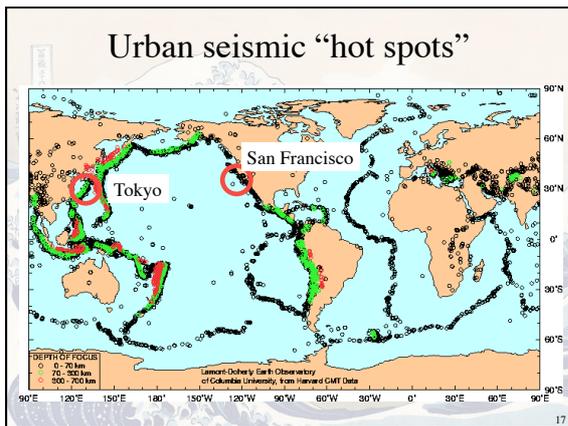


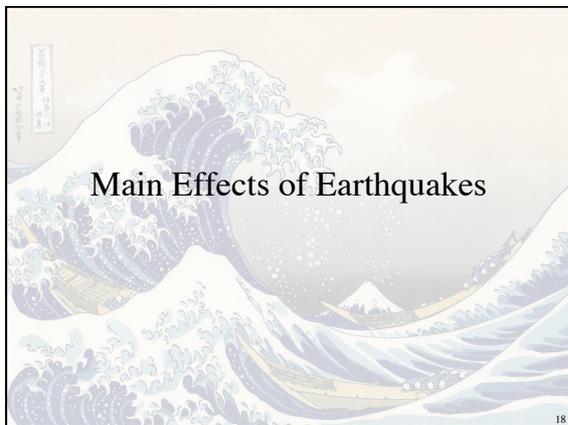






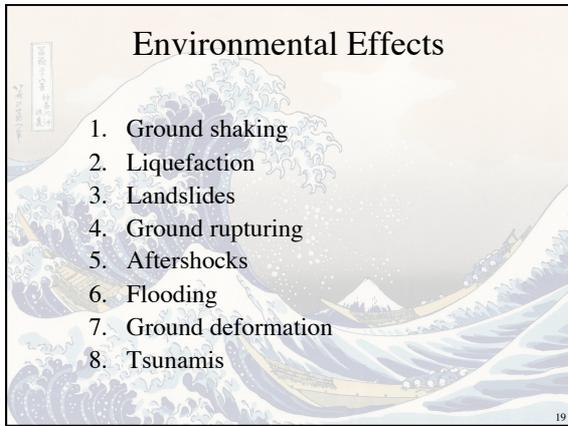






Environmental Effects

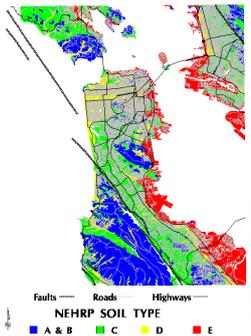
1. Ground shaking
2. Liquefaction
3. Landslides
4. Ground rupturing
5. Aftershocks
6. Flooding
7. Ground deformation
8. Tsunamis



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1. Ground Shaking

Soil types in San Francisco bay area



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1. Ground Shaking



Cypress Structure, Loma Prieta, 1989

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2. Liquefaction



22

2. Liquefaction



23

3. Landslides



1959
Hebgen
Lake,
Montana

24

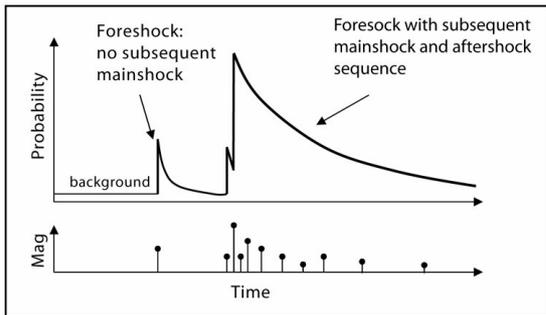
4. Ground rupturing



1987 New Zealand, M 6.6

25

5. Aftershocks



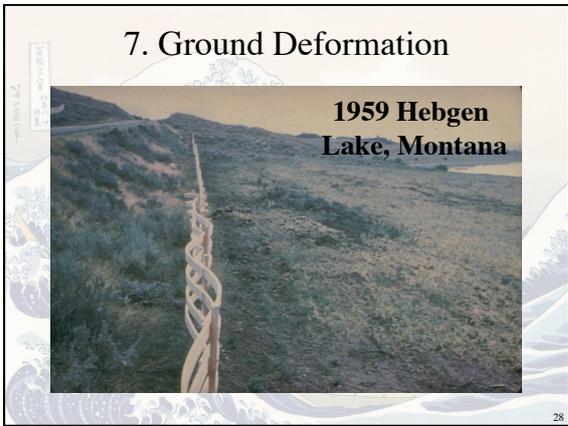
26

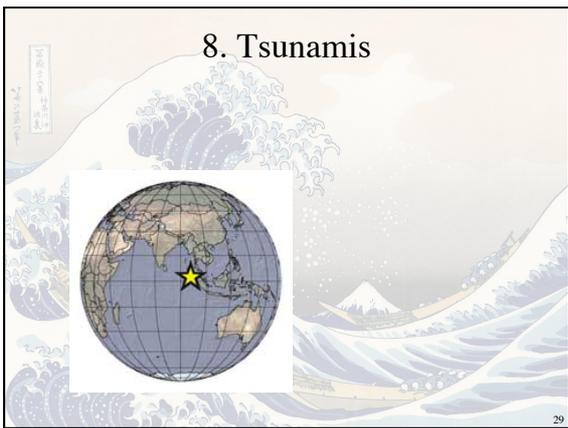
6. Flooding

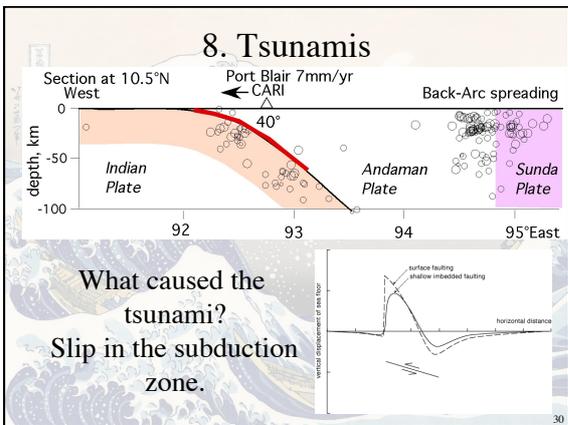


Puerto Montt,
Chile, 1960

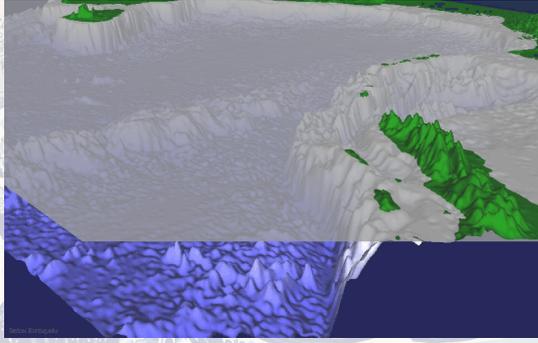
27





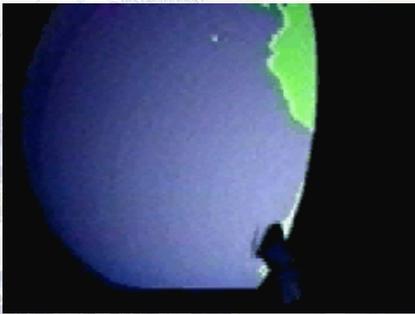


8. Tsunamis



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8. Tsunamis



32

8. Tsunamis

You cannot run away



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Damage to Humans

1. Damage to critical structures
2. Buildings collapsing
3. Flying objects
4. Fire
5. Destruction of communications
6. Destruction of industry
7. Destruction in tsunamis

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1. Damage to critical structures

Near-failure of a dam, 1971 California

35

1. Damage to critical structures

Fukushima Daiichi nuclear disaster

36

2. Buildings collapsing



37

3. Flying objects



38

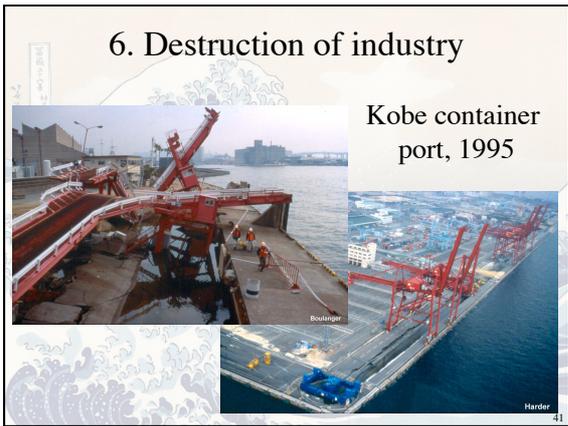
4. Fire

Kobe, Japan, 1995, M=6.9



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Who can contribute to hazard mitigation?

1. Seismologists
2. Engineers
3. Government
4. Citizens

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