

ES473/573 Environmental Geology
Spring 2009 Academic Showcase and Class Project

Theme Session –

“Earthquake Hazards and Risk Mitigation in Western Washington and Oregon”

Project Notes – Draft 2 4/9/09

Topics

Name:

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|---|------------------|
| I. Overview of Earthquake Hazards and Risk Reduction in Western Washington and Oregon | Taylor |
| II. Geologic Framework for Earthquake Hazards in the Pacific Northwest | |
| A. Tectonic Setting | Ben Shivers |
| B. Surficial Geology and Earth Materials | Pat Stephenson |
| C. Seismic Sources and History | |
| 1. Cascadia Megathrust | Janelle Anzalone |
| 2. Intraplate Crustal Faulting | Matt Moore |
| 3. History of Active Faulting and Seismicity | Ryan Stanley |
| III. Earthquake-Related Hazards | |
| A. Ground Motion and Shaking | Thomas Van Nice |
| B. Ground Failure | |
| 1. Co-seismic Landslides | James McLeod |
| 2. Liquefaction | Amanda Tondreau |
| IV. Hazards Preparedness and Mitigation | |
| A. Techniques for Reducing Earthquake Hazards | Keoni Wong |
| B. Loss Potential, Preparedness, Risk Reduction, and Recovery | Gerritt Vincent |
| V. Site Case Studies | |
| A. Seismic Hazards in the Seattle Area | Brad Adams |
| B. Seismic Hazards in the Tacoma Area | DJ Jaeger |
| B. Seismic Hazards in the Portland Area | Izzy Pratt |
| C. Seismic Hazards in the Mid-Willamette Valley | Sarah Johnson |
| D. Seismic Hazards in the Klamath Falls Area | Gretchen Boyer |
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