Cascadia EarthScope Earthquake and Tsunami Education Program - CEETEP -

Breakout Session
Vertical Evacuation Structures
40 minutes
**Vertical Evacuation**

- Binder, pg. 267
- Hot off the press – want feedback!
- Multiple aspects and avenues for engagement
  - A. Reading – basic concepts about VE and design
  - B. Determining appropriate locations
  - C. Designing and constructing structure
  - D. Presenting and explaining
Not what we mean . . .
Brainstorm:

What are some design elements to consider?
Vertical Evacuation

* Pre-existing buildings? Retrofits?
* Location – where is it needed? High population centers, where high ground isn’t available, touristed areas
* Strong enough to withstand initial shaking and waves
* Accessibility
* Size of building and # of people it can support
* Supplies – island life
* Safety - of people, of supplies
* Communication
Vertical Evacuation

* FEMA/NOAA Video

* Could you use this with your audiences?

* How?
Part B: Where to put the thing?

* Physical Maps
* GoogleEarth

Need to know:
* Ground elevation
* Predicted wave height

But wait . . .

Does your area need one??
Or can a pre-existing building be used?
Maps – which ones?

Tsunami Inundation Zones – in your map roll!
  * Look carefully at wave elevation height info
  * Compare to contour lines on map
Vertical Evacuation

* GoogleEarth

* Best case – get .kmz file of inundation zones to overlay

* Can use Ruler Tool to measure length to determine square footage
Vertical Evacuation

* Part C: Construction process

* Math considerations:
  * 10 ft$^2$ per person
Vertical Evacuation

* Part D: Allow me to explain . . .
Vertical Evacuation

* How could YOU use this?