# H H Z H R D S FACING Lower Elwha Klallam 7ribe

2010 LEKT Tribal Hazard Mitigation Plan









glenn@nwtemc.org nwtemc.org





## What are hazards?

- A hazard is a situation that poses a level of threat to life, health, property, or environment.
- Natural or Man-made



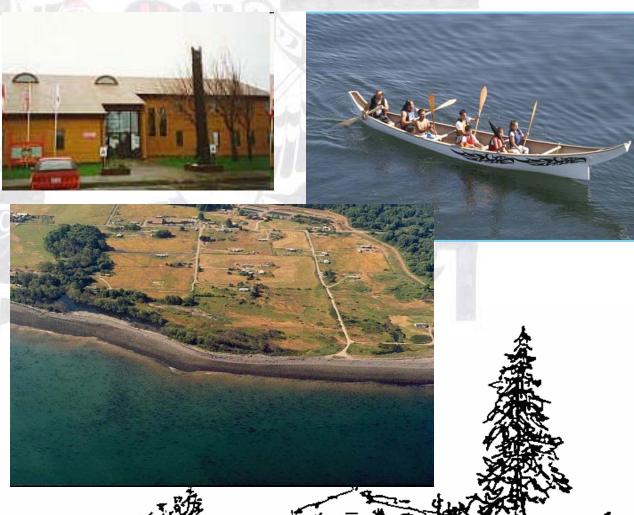
## What are hazards? (cont.)

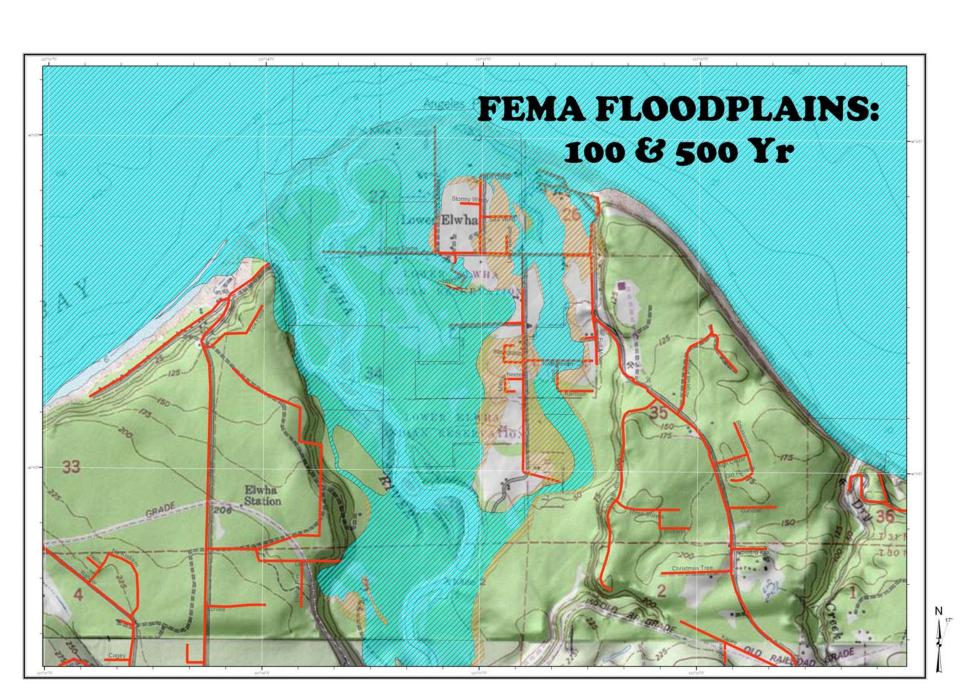
 It is important to note that naturally occurring geological events are not hazards themselves, but only become so when they adversely affect people and their property.

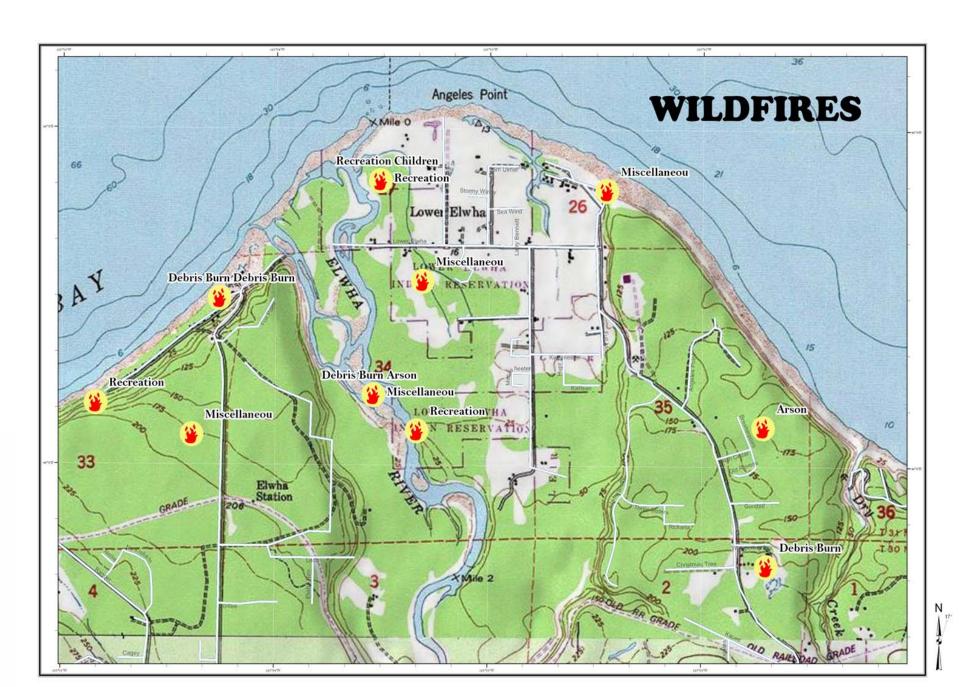


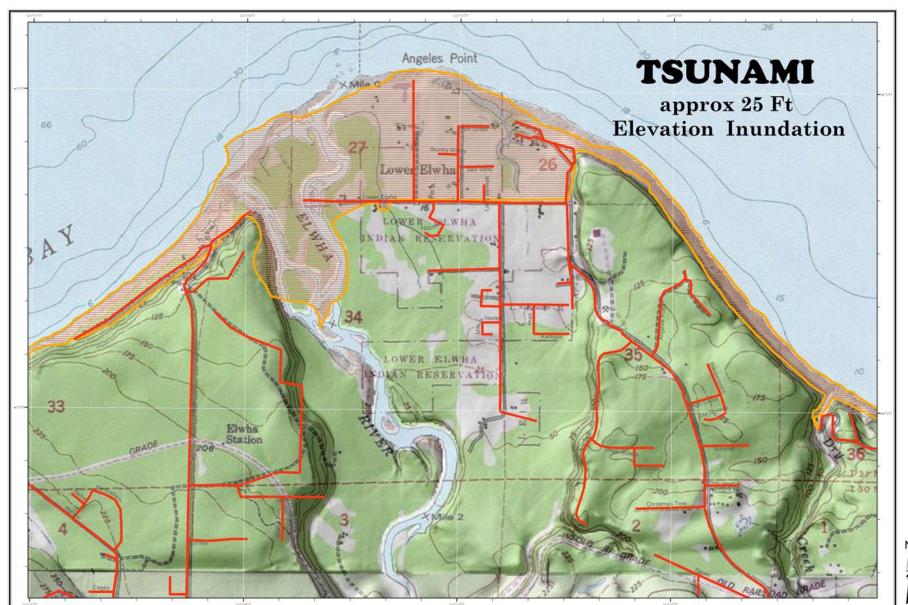
# Hazards Affecting Lower Elwha Klallam Tribe:



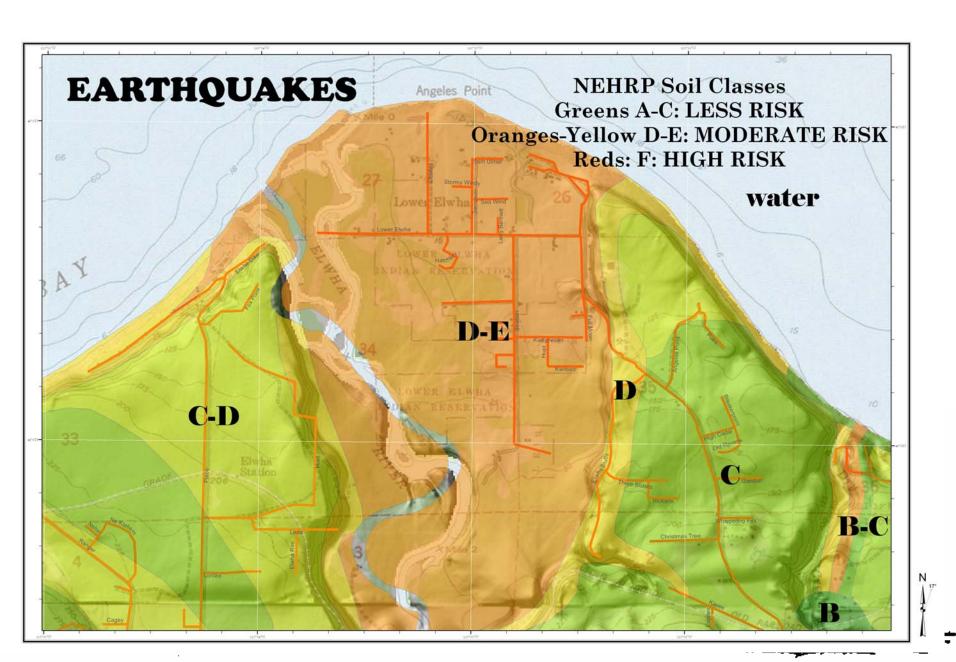






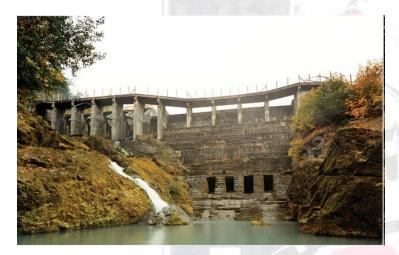


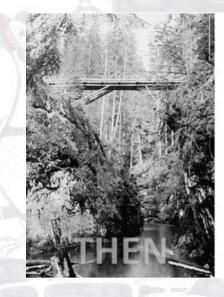
Z

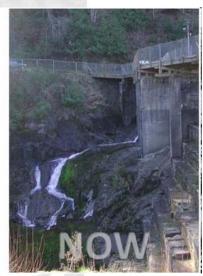


## Dams:

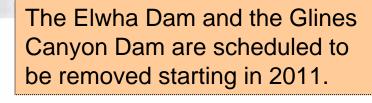
## Elwha River and Glines Canyon Dams











#### The spread of smallpox in the Pacific Northwest

From the late 1700's to 1863

SMALLPOX EPIDEMIC(S)

The earliest documented evidence points to smallpox appearing in the Pacific Northwest in the late 1700s, followed by outbreaks throughout the 1800s.

BRITISH

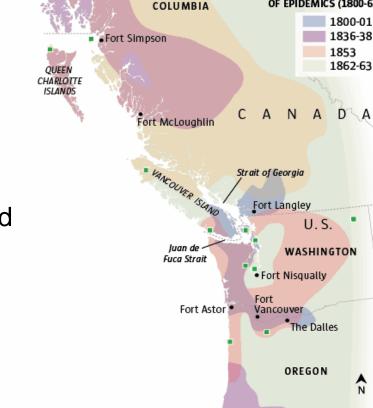
### **Public Health Hazards**

#### H1N1 SWINE Flu

REPORT TO THE PRESIDENTON U.S.
PREPARATIONS FOR 2009-H1N1
INFLUENZA released Aug 25th.:

#### The Report notes (p.14):

"Certain populations appear to be at elevated risk of severe outcomes, including Native American groups.





Sources: "Handbook of North American Indians," Vol. 7, North west Coast, Wayne Suttles (Smithsonian Institution, 1990.); "The Coming of the Spirit of Pestilence," Robert Boyd (University of Washington Press, 1999.); "Pox Americana, The Great Smallpox Epidemic of 1775-82," Elizabeth A. Fenn (Hill and Wana, 2001.)

NEV.

CALIFORNIA

MARK NOWLIN / THE SEATTLE TIMES

 Locations of late 1770s smallpox documented by early explorers, missionaries and

> APPROXIMATE RANGE OF EPIDEMICS (1800-63)

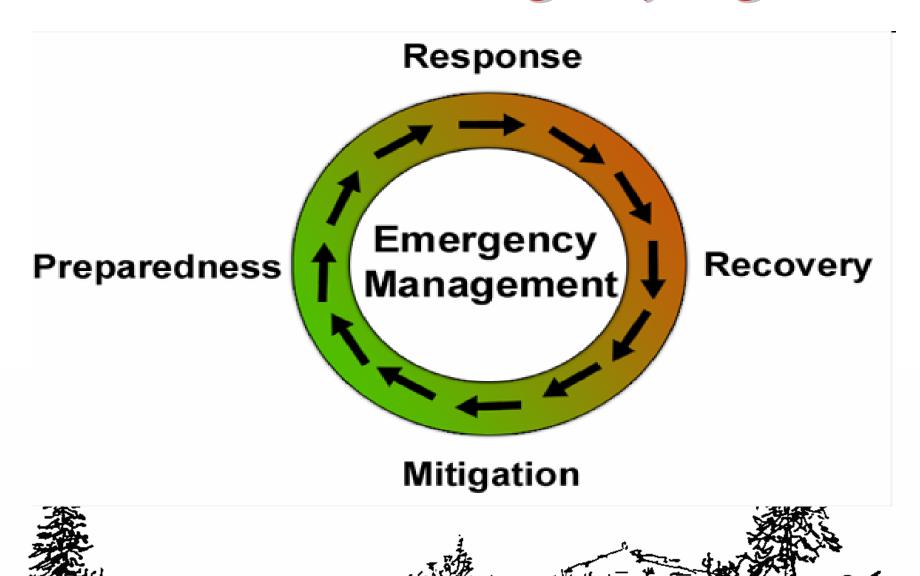
anthropologists

# How to reduce the effects of hazards?

### Emergency Management:

- is the discipline of dealing with and avoiding risks.
- It is a discipline that involves preparing for disaster before it occurs, disaster response (e.g. emergency evacuation, quarantine, mass decontamination, etc.), as well as supporting and rebuilding society after natural or human-made disasters have occurred.

## 4 Phases of Emergency Mgmt:



## MITIGATION

#### mit'i gate

v.tr. To moderate (a quality or condition) in force or intensity; alleviate. See Synonyms at relieve. v.intr. To become milder.

[Middle English mitigaten, from Latin mitigare, mitigat-: mitis, soft + agere, to drive, do; see act.]

- Mitigation efforts attempt to prevent hazards from developing into disasters altogether, or to reduce the effects of disasters when they occur.
- The mitigation phase differs from the other phases because it focuses on long-term measures for reducing or eliminating risk.

# 2010 LEKT Tribal Hazard Mitigation Plan

 Tribe has received a FEMA grant to develop a Plan that will reduce the effects of hazards to the Tribe in the future

 Need Community Support/Participation to be successful

# 2010 LEKT Tribal Hazard Mitigation Plan

### Plan consists of:

- Identifying Hazards to the Tribal Community
- Develop Strategies & Actions to REDUCE or REMOVE the Risk from these Hazards



# 2010 LEKT Tribal Hazard Mitigation Plan

### Strategies & Actions to Reduce Risk:

- Build outside of flood prone areas
- Build outside of high earthquake risk areas
- If you can't build outside these areas:
  - Elevate building from Flooding or make flood proof
  - Build Structure to withstand Earthquake Shaking and Sinking into soft soils

## Questions?

Glenn B. Coil

Homeland Security Coordinator

NW Tribal Emergency Mgmt. Council

glenn@nwtemc.org www.nwtemc.org

### **Questions regarding Hazard Mitigation Plan:**

PLEASE contact Glenn, Phil or

Matt Beirne

Environmental Coordinator Lower Elwha Klallam Tribe 2851 Lower Elwha Road 360-457-4012, ext 12