Preliminary Estimate for Loss of Life in Clallam County

Cascadia Subduction Zone event is expected to create five waves of fatalities.

	Low HITRAC
1. Earthquake effects– structural collapse and debris strikes**	300-3,000
2. Tsunami impact on coastal areas*** & **	1,000 -5,000
3. Entrapment & Isolation (1.5x-3x initial death toll due to lack of timely search and rescue)***	2,700 - 5,500
4. Loss of service for fragile population or Special Needs (Oxygen etc.)*	200 – 4,000
5. Exposure and lack of Food/Water (range of 2%-9% of population)***	1,400 – 6,500
Range of Losses	5,600 – 24,000

Fatalities in the County are between 1 in 12 to 1 in 3**

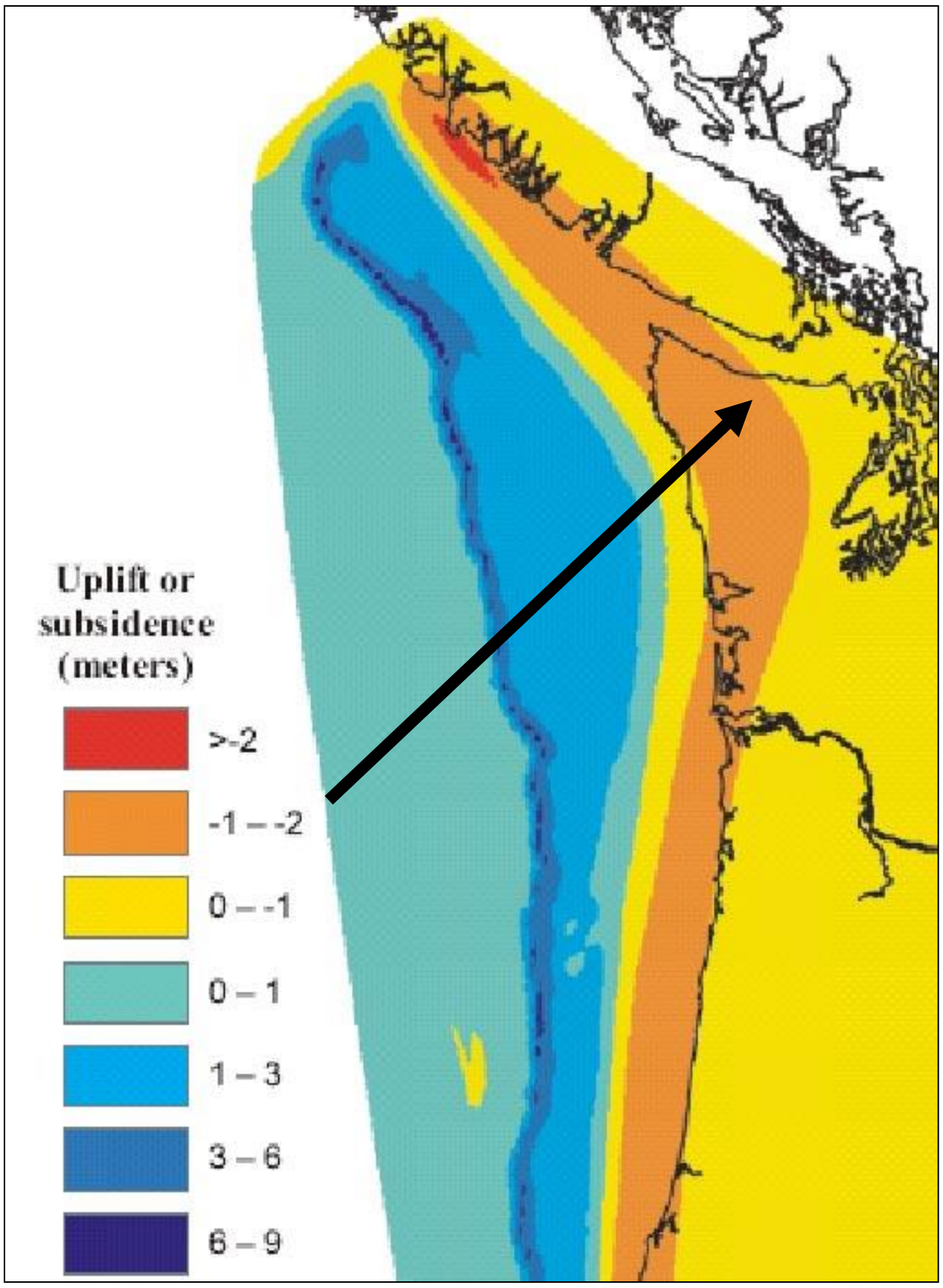
Estimated Clallam County losses could be from 6% to near 33% assuming a base county population of 72,000. That % is expected to vary depending on time of year, weather, tourist population, and success of mitigation/preparation efforts.**

***Kitsap Public Health Study Medical Dependent15.4K - May 2015 25% High End Loss**

****Consistent w/10K dead scenario region wide with 8.0 Quake partial rip FEMA estimates.**

***** Requires Mitigation Efforts by local government**

Subsidence



Map of uplift and subsidence along the Cascadia subduction zone for earthquake scenario 1A. Negative numbers indicate subsidence.

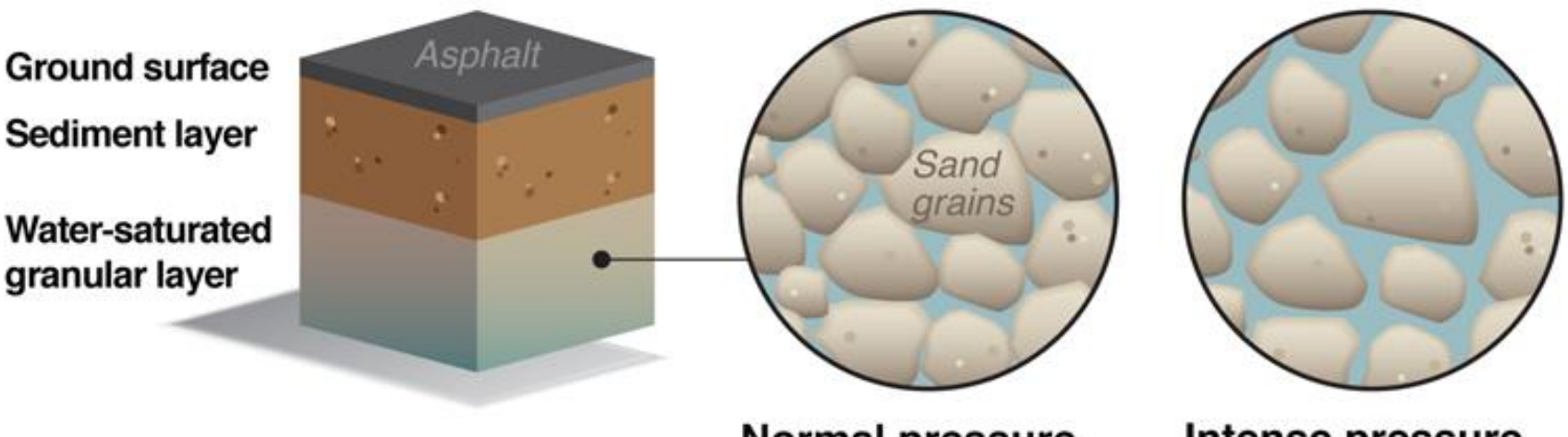
Most of the western **Olympic Peninsula is predicted to sink three to six feet** with the rest of western Washington sinking as much as three feet.

A significant portion of the **sea floor off the coast could rise three to ten feet** with a smaller ridge along the subduction zone rising by as much as thirty feet.

Liquefaction

Soil liquefaction

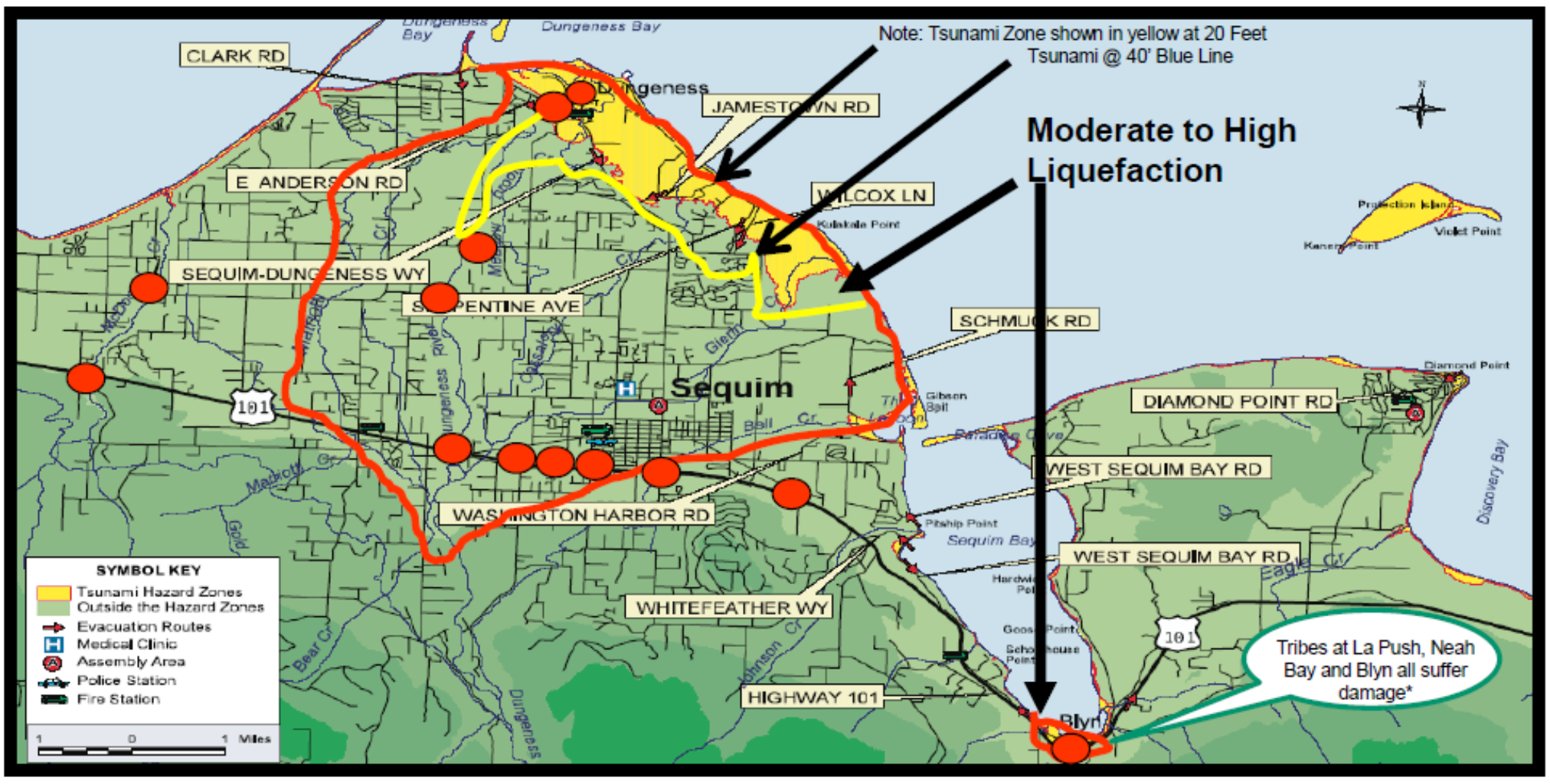
Liquefaction is a phenomenon in which water-saturated sandy layers of earth act like liquids due to the pressure created by earthquakes.



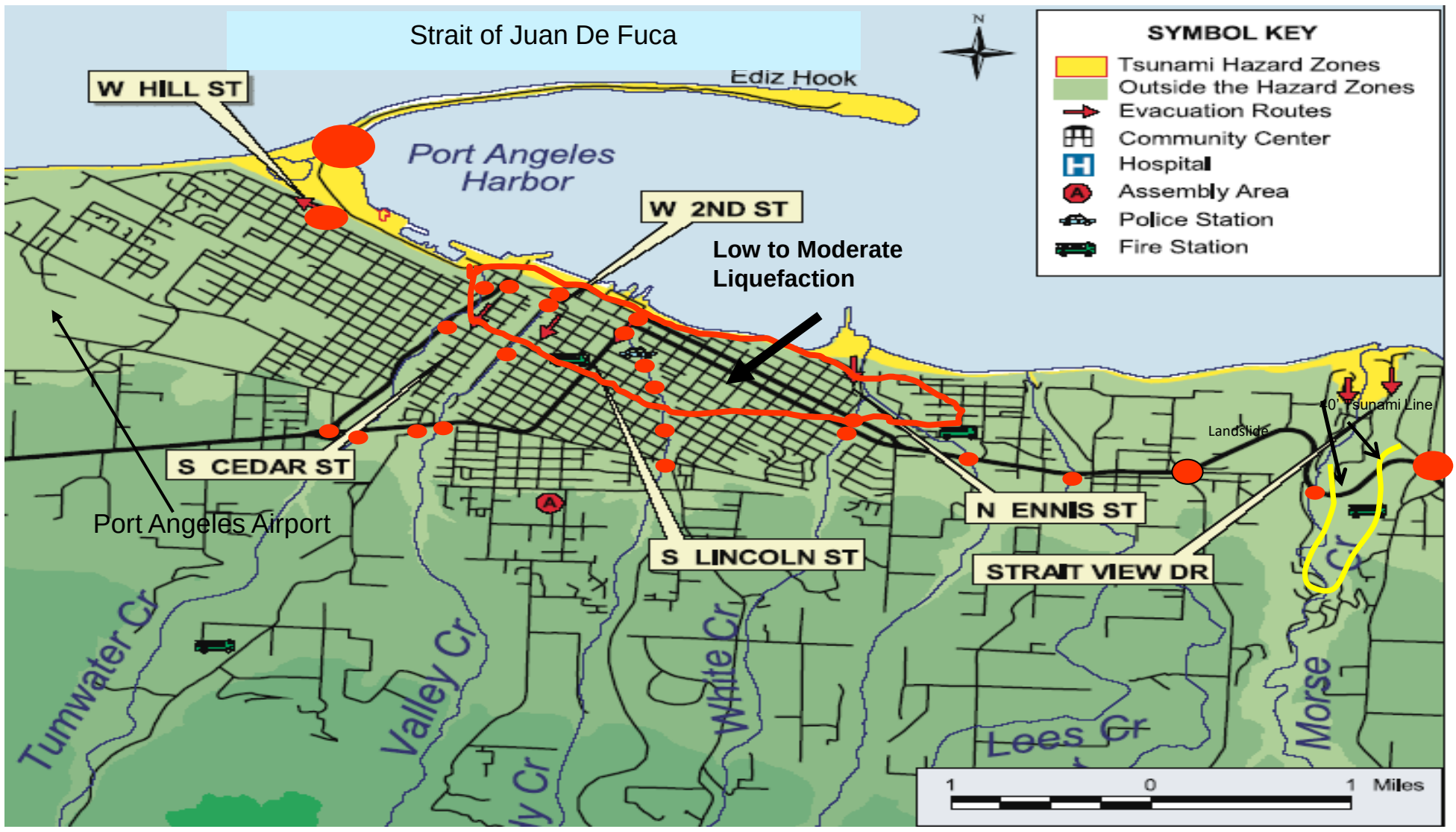
Source: California Watch research

BRIAN CRAGIN / CALIFORNIA WATCH

Damage Summary – East Clallam

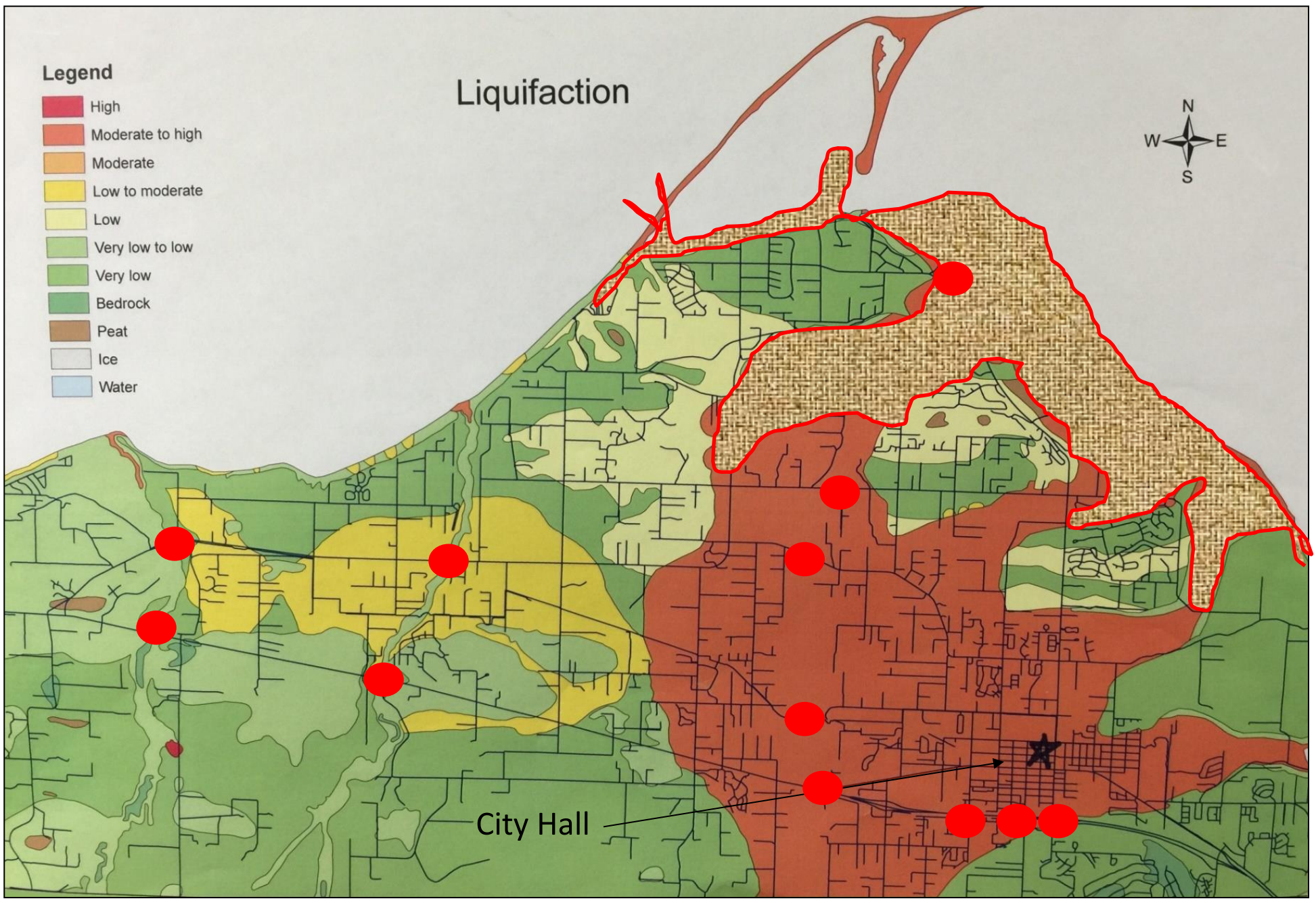


Damage Summary – Port Angeles



Red Dots = Destroyed/Damaged Bridges

Sequim Dungeness Map Liquefaction



Close-Up Sequim Tsunami Zone

Sequim Lowlands (below 40 feet elevation)

Sequim Bay/Miller Peninsula Tsunami Zone

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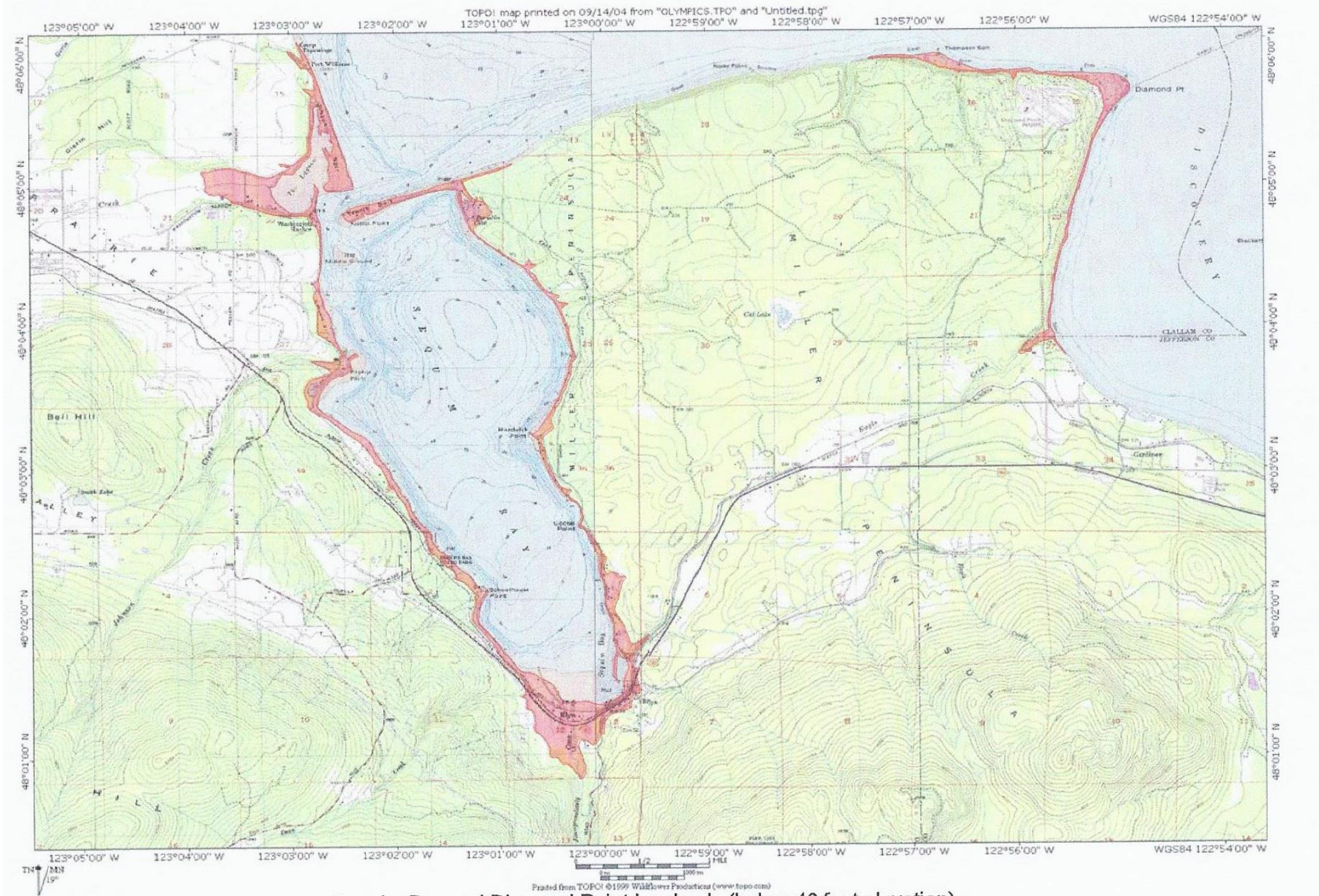
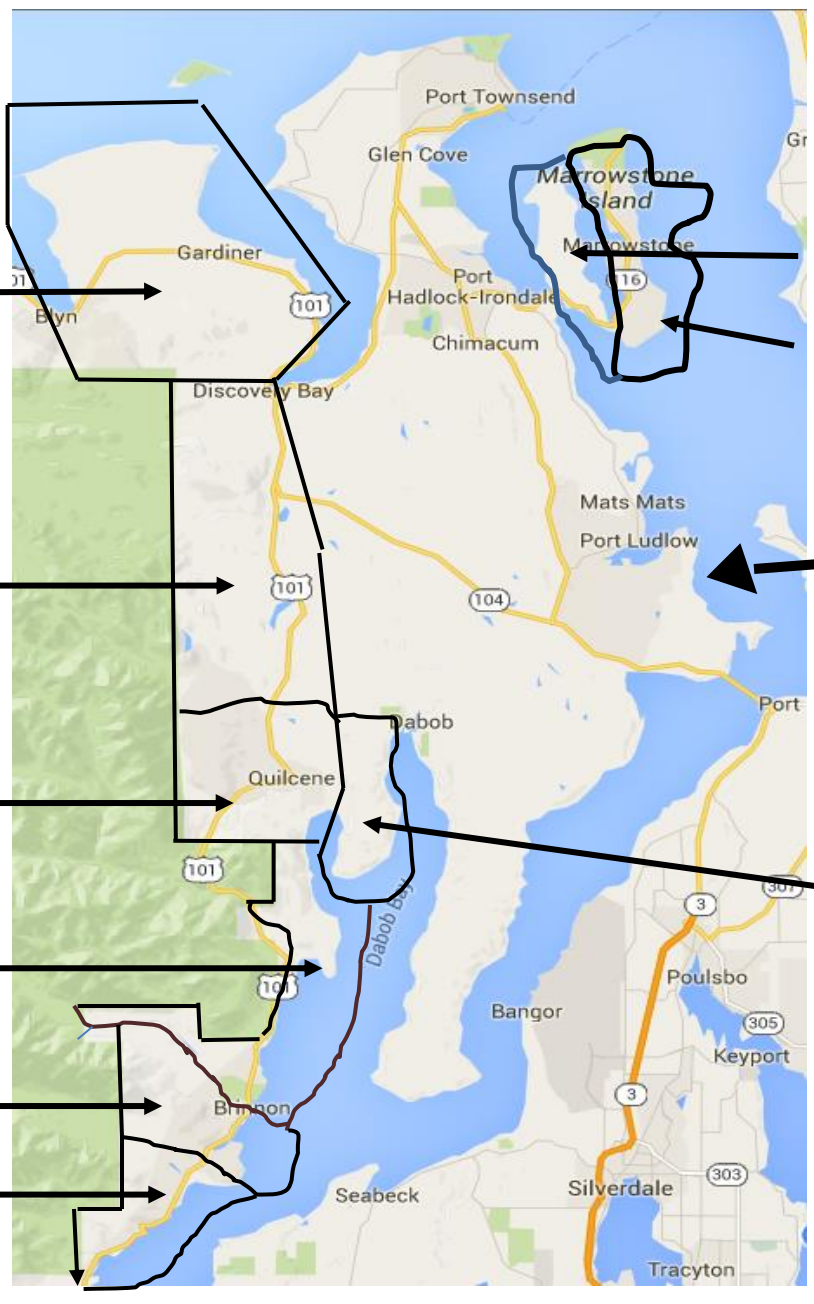


Sequim Bay and Diamond Point Lowlands (below 40 feet elevation)

Expected Jefferson County Micro-Islands



DIAMOND POINT (TEMPORARY CLALLAM COUNTY RESPONSIBILITY)

INDIAN ISLAND

MARROWSTONE ISLAND

LELAND

TO BE DETERMINED POSSIBLY BY FIRE DISTRICT BOUNDARIES

QUILCENE

BOLTON

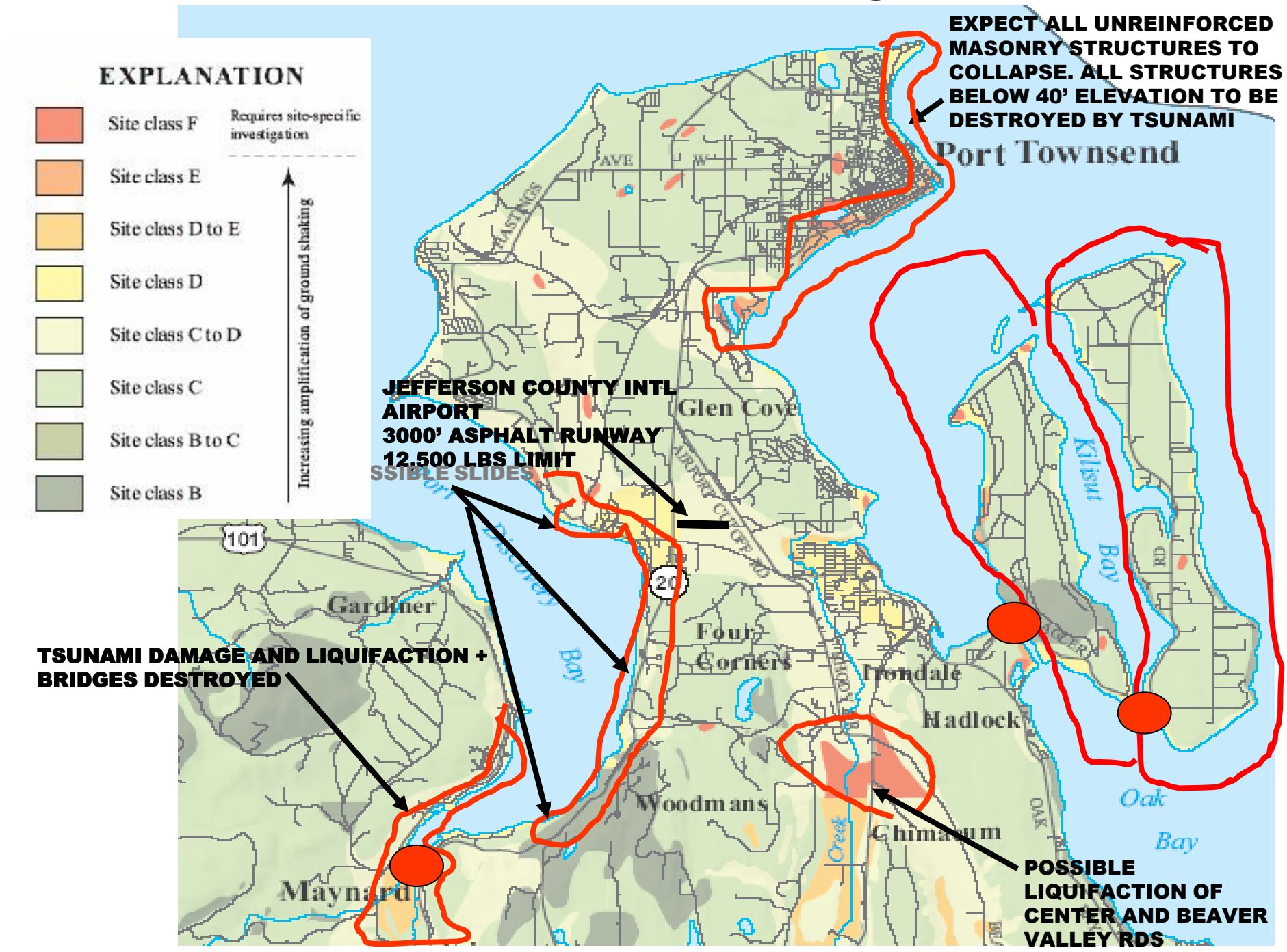
BRINNON

DOSEWALLIPS

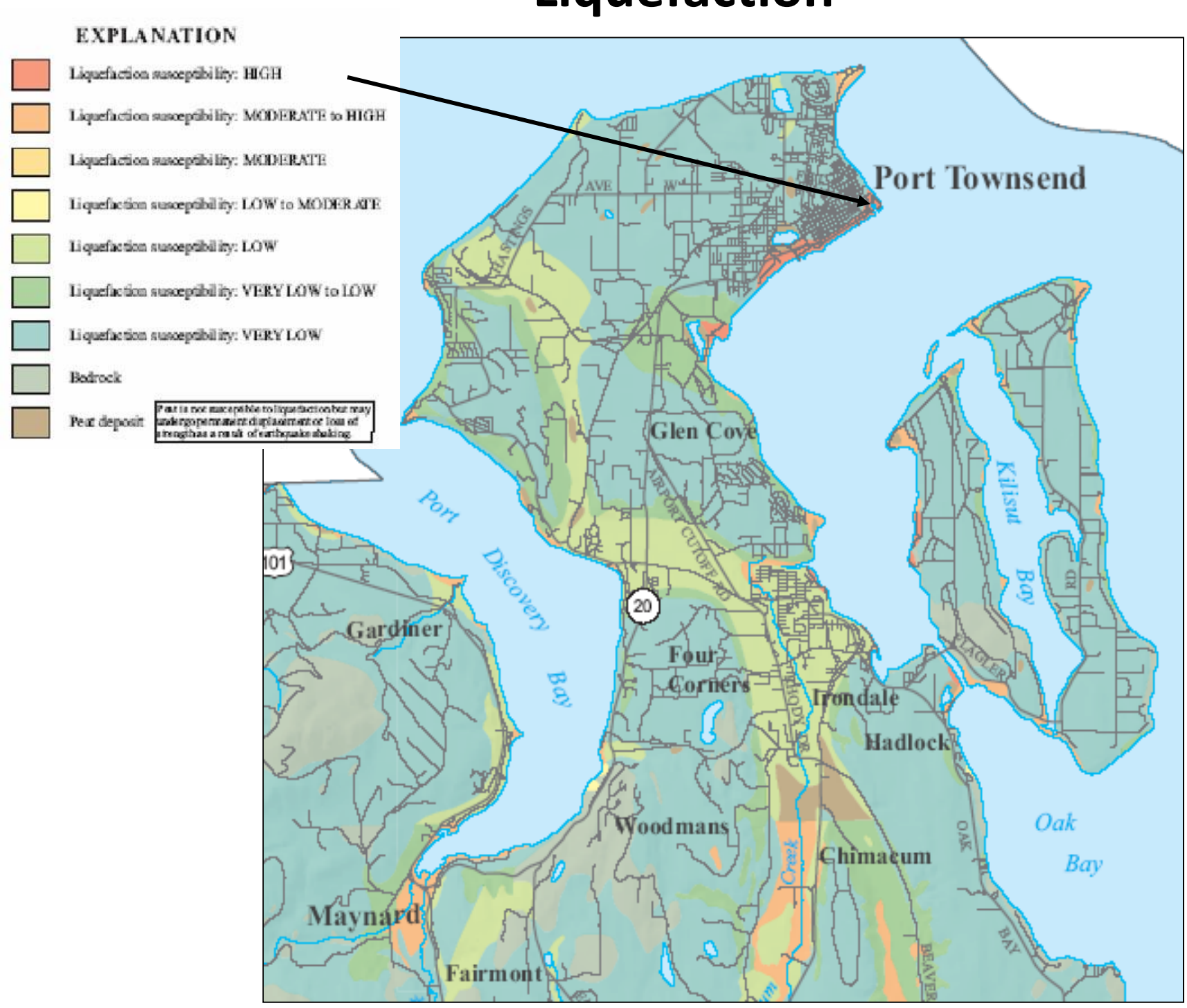
DUCKABUSH

Jefferson County

Ground Shaking

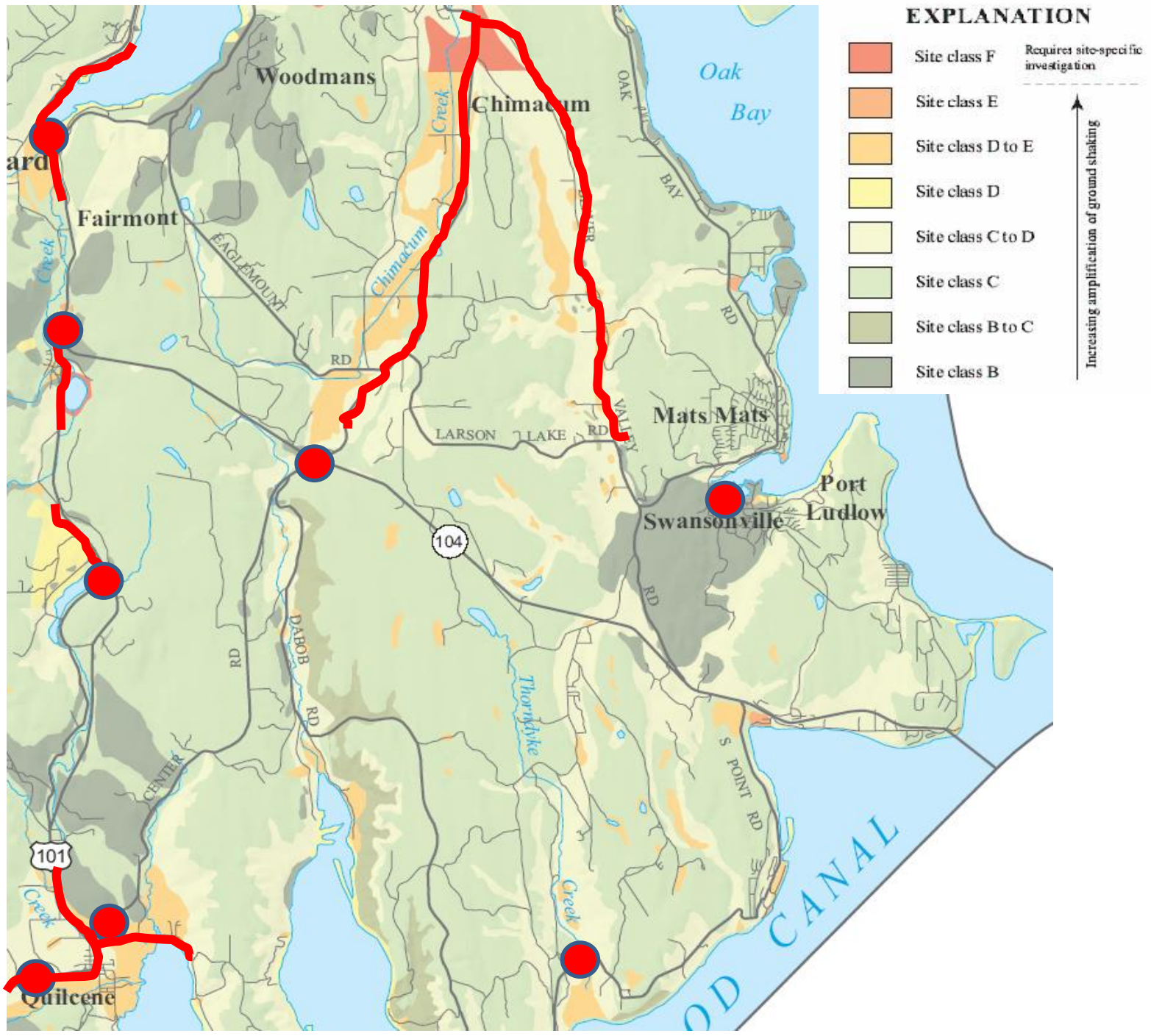


Liquefaction

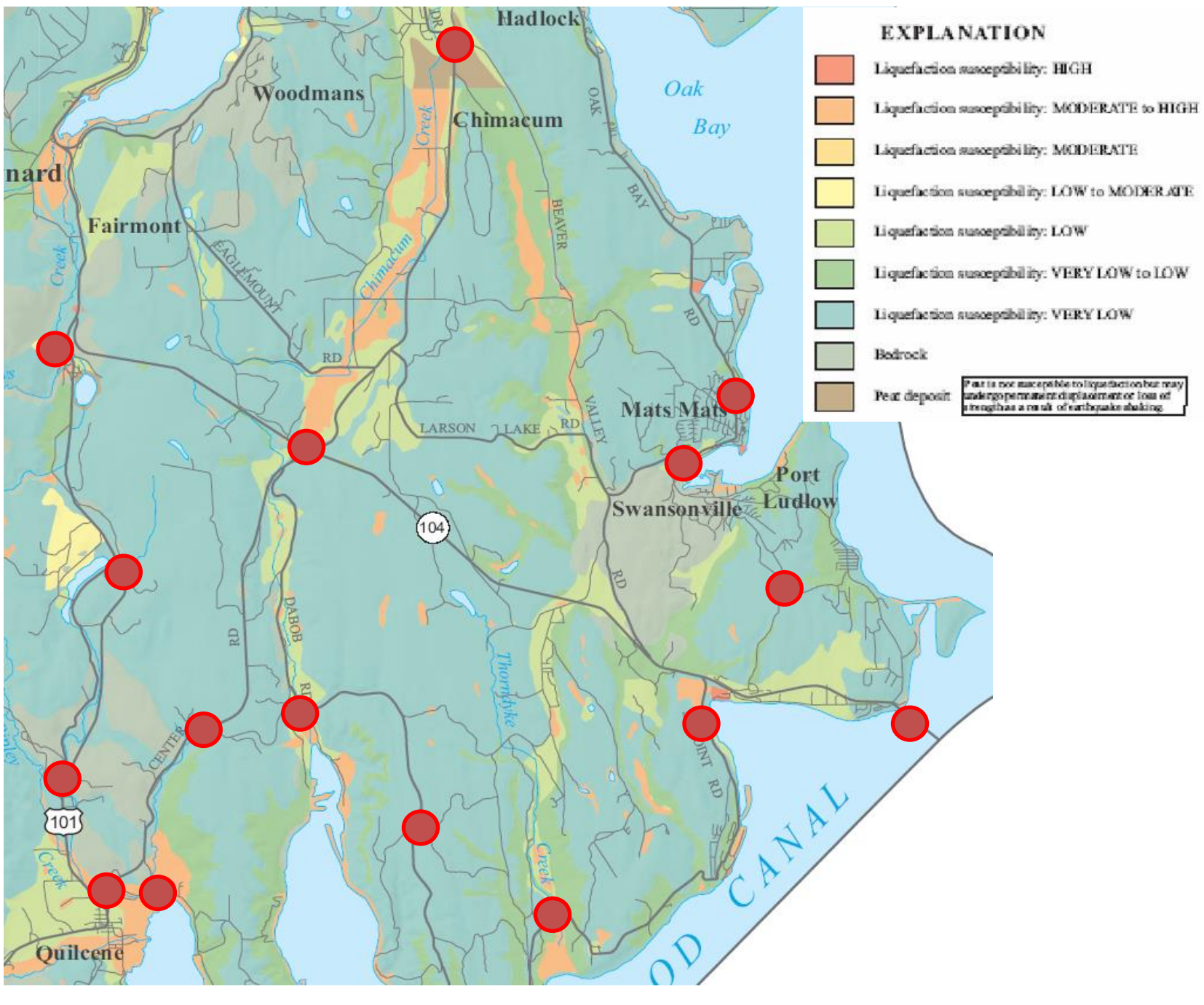


Jefferson County

Ground Shaking

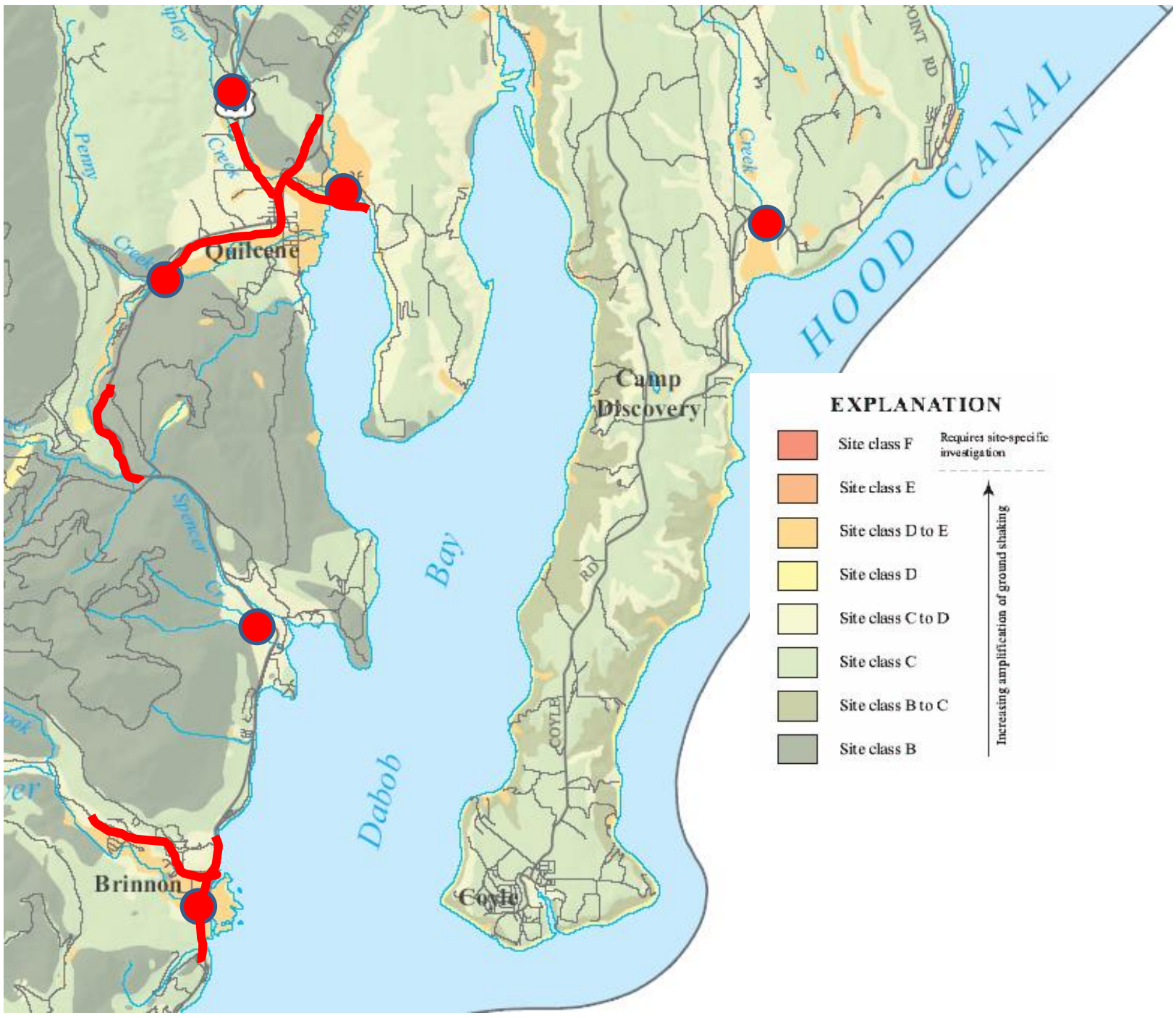


Liquefaction



Jefferson County

Ground Shaking



Liquefaction