

## ABSTRACT

Native Americans have resided by Puget Sound for thousands of years and must have witnessed many geological events. They described these events using their own cultural concepts, and incorporated the stories into their oral tradition.

Traditions about the A.D. 900 Seattle earthquake, handed down by storytellers for 1,100 years may survive in stories about water-serpents near the Seattle fault. A horned water serpent was said to have its home in Seattle by the shore of Lake Washington, near landslides dated to the A.D. 900 earthquake. Another story, about an earthquake- and landslide-causing horned water-serpent on the eastern shore of Puget Sound in the Fauntleroy neighborhood of West Seattle, is close to a large undated landslide visible in LIDAR images but not easily seen on the ground. Finally, on the west side of Puget Sound, a story about the deepening of Agate Pass (located on the downthrown side of the Seattle Fault) tells of an underwater battle between a water-serpent and a mythic bird, resulting in ground shaking, churning of the waters, and permanent ground level change.

# Water-Serpent stories of Puget Sound Natives may refer to the A.D. 900 Seattle Earthquake

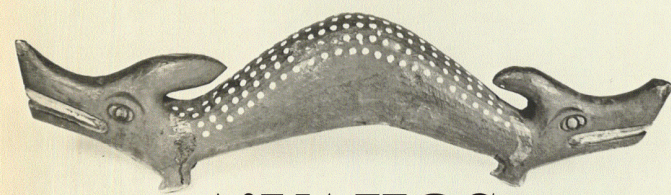
LUDWIN, R.S., Dept. of Earth and Space Sciences, Univ of Washington, Box 351310, Seattle, WA 98195-1310, rludwin@u.washington.edu

JAMES, K., Anthropologist, 13797 Silven Ave NE, Bainbridge Island, WA 98110, JONIENTZ-TRISLER, C., FEMA, Bothell, WA,

BUERGE, D., Historian, 310 NE 85th St, Seattle, WA 98115, PICKENS, J., Fauntleroy Community Association, Seattle, WA,

TROOST, K., Dept of Earth and Space Sciences, Univ of Washington, Box 351310, Seattle, WA 98195-1310, and

SKARET, M., Fauntleroy Community Association, Seattle, WA



## A'YAHOS

Quileute ceremonial representation of tabala, a vicious guardian spirit

A'yahos is a "Doctor" spirit power associated with shaking and rushes of turbid water. It comes simultaneously from land and sea, and is malevolent dangerous, and possibly fatal to encounter.

"At the spot where a'yahos came to a person the very earth was torn, land slides occurred and the trees became twisted and warped. Such spots were recognizable for years afterward" (M.W. Smith, 1940)

The a'yahos is a shape-shifter, often appearing as an enormous serpent, sometimes double headed with blazing eyes and horns, or a composite monster having the fore-quarters and head of a deer and the tail of a snake.

## SEATTLE FAULT - Stories correlate with geologic features, including three large landslides, one dated to A.D. 900

### AGATE PASS

Story:

**SERPENT, SHAKING, THUNDER, WATER DISTURBANCE, AND WIDENING**

Long ago, when this land was new, the area we know as Agate Pass was much smaller than today. ... There lived in this ... body of water a ... **Giant Serpent**.

The Double Headed Eagle flew over the pass and the **Giant Serpent** came up very angry. The two began to fight, and the earth shook and the water boiled... the people began to scream and cry until it was as loud as **thunder**.

Then, as if the earth was going to be swallowed by the waters, they began to boil and churn. Then, the Double Headed Eagle exploded out of the water and up into the sky with the body of the **Giant Serpent** in its claws. The Double Headed Eagle flew back into the mountain and behind him was left the wide pass ... (Jefferson, W., 2001, pp. 69-70)

Geology:

"DOWN" SIDE OF SEATTLE FAULT IN AD 900 (down motion minimal)

### FAUNTLEROY

Stories:

**A'YAHOS - SEA AND LAND MONSTER**

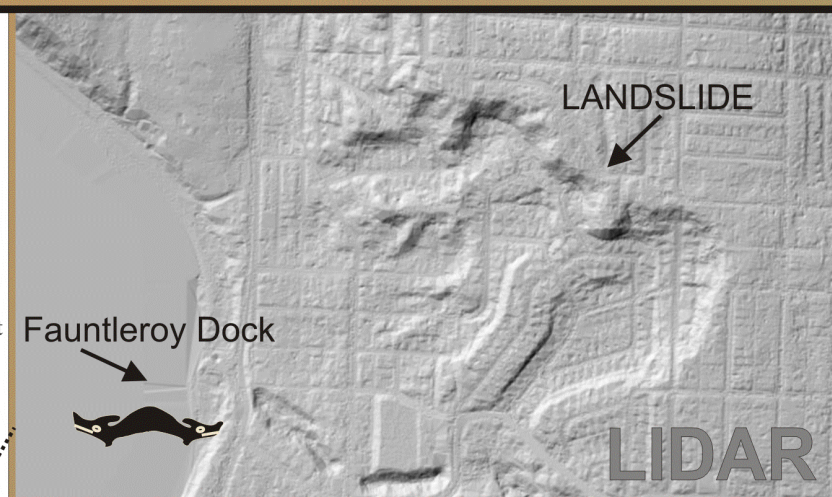
1.) "Brace Point ... was ... the abode of one of these monsters. At the base of this promontory is a... reddish boulder ... anyone looking at this boulder would be twisted into a knot. The boulder ... was believed to change its form" (Waterman, T.T., 2001, p. 69).

2.) Neighborhood residents identify the position of the boulder as near the Fauntleroy Ferry Dock, rather than at Brace Point (co-author Pickens and Skaret).

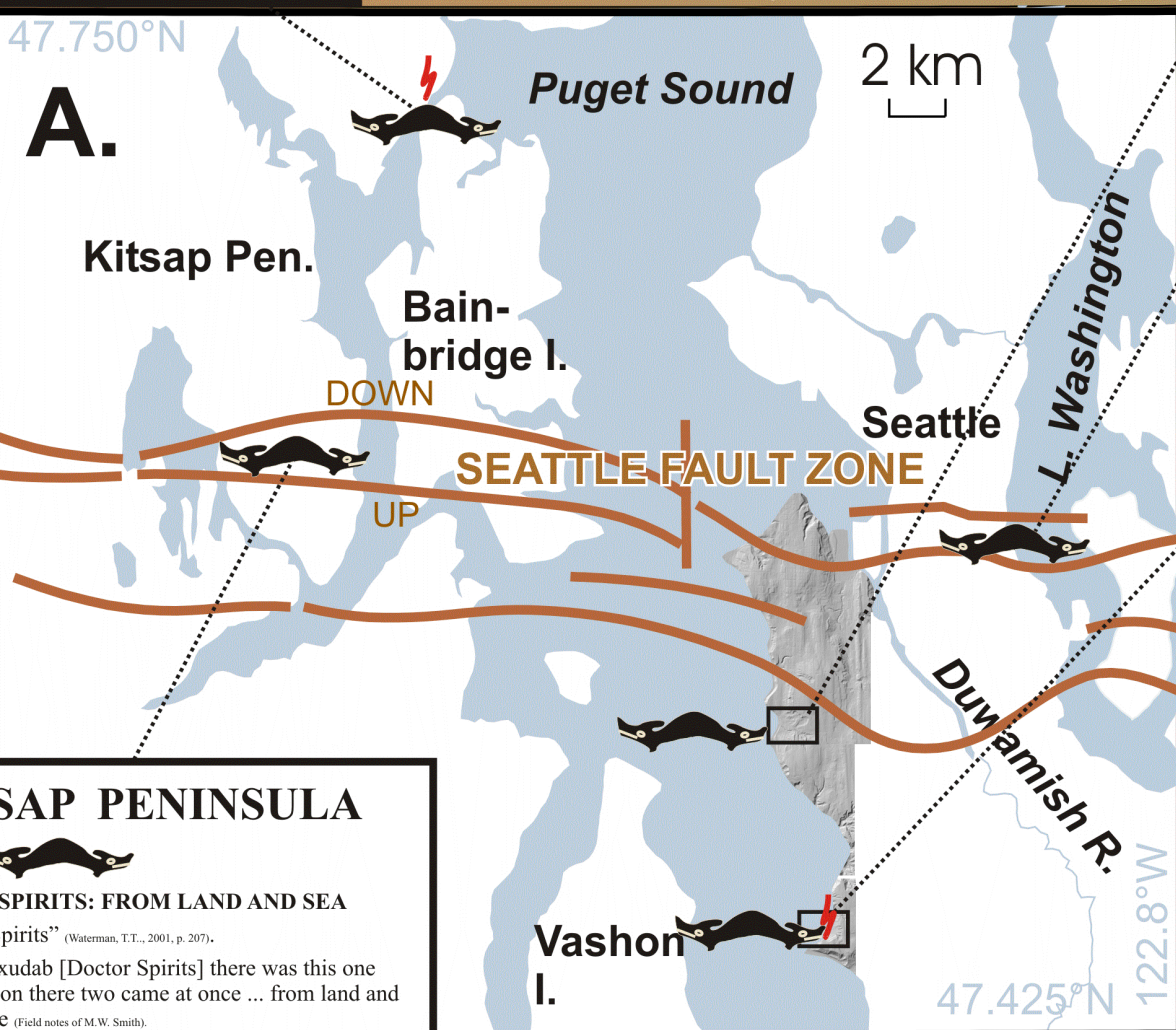
3.) "Two brothers from Staga'be went out along beach at Alki Point for power. One got it from sea and one from woods. They got it so strong that when ... they looked at stone it exploded" (Notes of Marian Wesley Smith).

Geology:

LIDAR - PREHISTORIC LANDSLIDE - UNDATED



Seattle fault inferred location courtesy of Tom Brocher and Rick Blakely, USGS



### KITSAP PENINSULA

Stories:

**DOCTOR SPIRITS: FROM LAND AND SEA**

"Home of Spirits" (Waterman, T.T., 2001, p. 207).

"House of xudab [Doctor Spirits] there was this one side of Bremerton there two came at once ... from land and sea at same time (Field notes of M.W. Smith).

Geology:

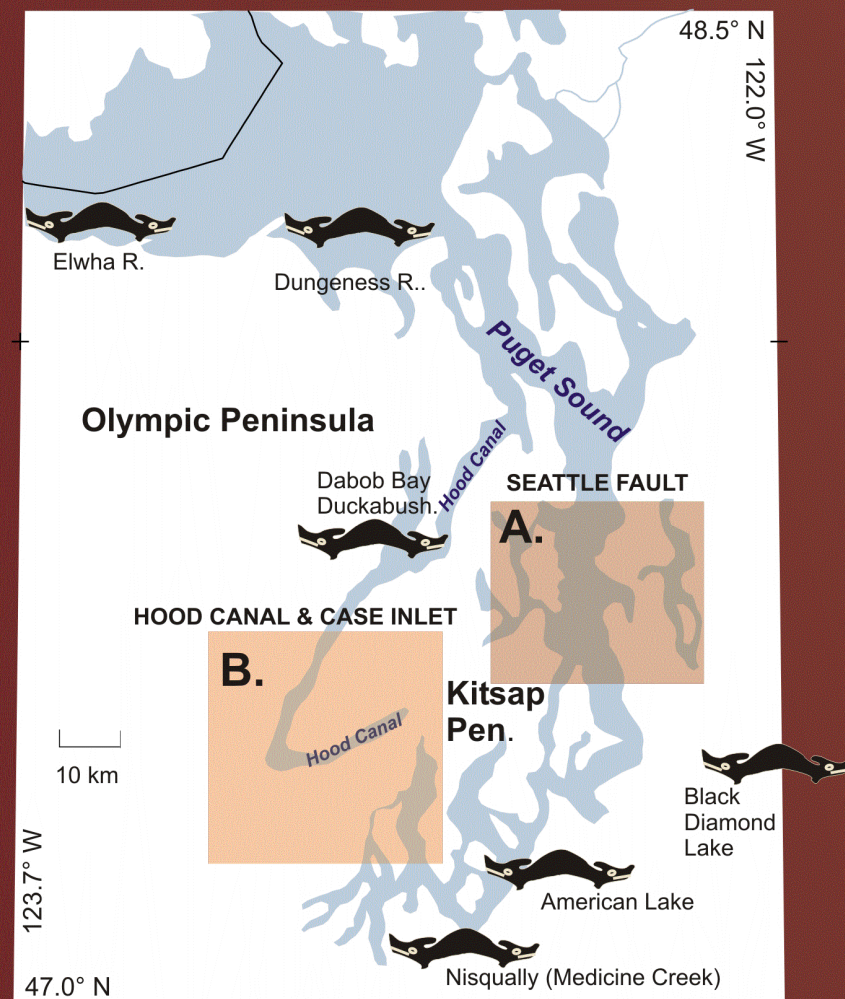
**BETWEEN INFERRED TRACES OF SEATTLE FAULT**

LIDAR: No features noted.

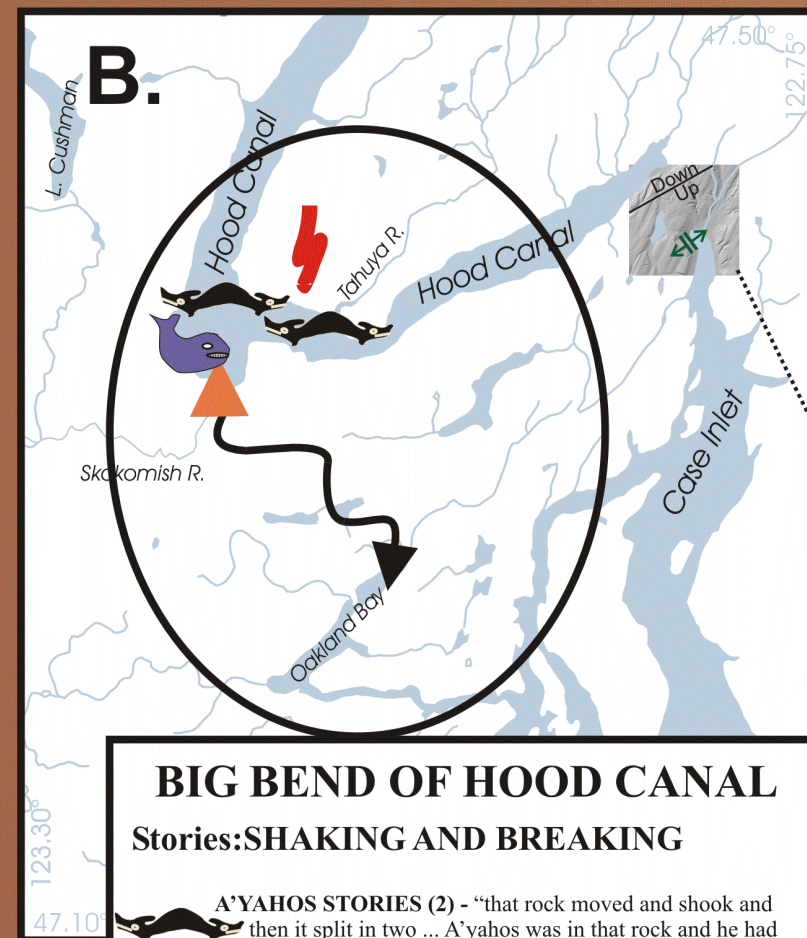


Salish mask linked to shaking effects, whirlwinds, and thunder. Two-headed snake

## Puget Sound Index Map and a'yahos sites (some correlate with known earthquake locales)



## HOOD CANAL & CASE INLET testable hypotheses



### CASE INLET

Story: Land opened by force

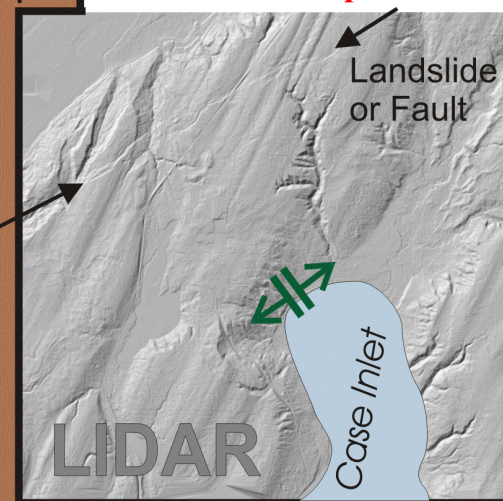
**PLACE NAME:** "... the land here was opened by force, the water entering and making a bay" (T.T. Waterman, 2001)

Geology:

**LIDAR:** Lineation, recently trenched by Alan Nelson, appears to be either a landslide or a fault scarp.

**PALEOSEISMOLOGY:** Theler Wetland, to the north, shows evidence of possible uplift - a sand sheet overlying marine deposits, with fresh-water plants above the sand sheet.

**Correlation: Imperfect**



### BIG BEND OF HOOD CANAL

Stories: SHAKING AND BREAKING

**A'YAHOS STORIES (2)** - "that rock moved and shook and then it split in two ... A'yahos was in that rock and he had opened his door for that young man." (Elmendorf, 1993, pp. 200-204)

**A ROCK CALLED THUNDER** - (Elmendorf & Kroeber, 1992, p. 38)

**A WHALE AND SHAKING IMAGERY** - "... they were at a place now called Union City. Whale called as he drew near, "All girls and women under forty do not look this way." While Whale was pulling to shore one young woman who wanted to see looked and as she did so Whale jumped back. This knocked the two men off and they lost their shells. (Palmer, K., 1925)

**UPLIFT AT SKOKOMISH MOUTH** - "... he cursed the ground, and ... the water went away and a great mass of ground rose up, half sea half land, and so it is to this day"

**REVERSAL OF FLOW OF SKOKOMISH RIVER** - "a woman in myth times who did not wish the Skokomish River to flow into Oakland Bay ... Put her daughter up the river, and the current carried the daughter about 3 miles toward Shelton, but there she stuck and dammed the stream and made it go where it now runs. The daughter is now a rock in the former channel" (Elmendorf & Kroeber, 1992, p. 37)

**Geology:**

NO LIDAR AVAILABLE

**Testable Hypotheses based on stories:**

- Sudden Uplift
- Shaking
- Change in Skokomish channel

### LAKE WASHINGTON

Stories:

**A'YAHOS MONSTER'S HOME**

"On the lake shore opposite the north end of Mercer Island ... an enormous supernatural monster ... lived" (Waterman, T.T., 2001, p. 102)

Geology:

**PREHISTORIC LANDSLIDES DATED TO A.D. 900** (Karlén and Abella, 1992)

**HISTORIC LANDSLIDE IN 1898** (McDonald, 1956)

### THREE-TREE POINT

Stories:

**A'YAHOS MONSTER'S HOME**

1.) "a great snake lived inside, shoving the sand down when people disturbed him" (Waterman, T.T., 2001, p. 39).

2.) The A'yahos was located north of Three-Tree Point (James Rasmussen, Duwamish Tribe, personal communication, Oct. 16, 2003).

**THUNDER:** Native name of Lake Burien (Waterman, T.T., 2001, p. 39).

Geology:

**LIDAR - LARGE UNDATED, UNMAPPED, LANDSLIDE-LIKE FEATURE**

