



TsuInfo Alert

prepared on behalf of the

National Tsunami Hazard Mitigation Program

by the Washington Department of Natural Resources

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Description of the TsuInfo Program

by

Connie J. Manson

Washington Department of Natural Resources
Division of Geology and Earth Resources

Introduction

The National Tsunami Hazard Mitigation Program is a state-federal partnership to reduce the impacts of tsunamis on coastal communities. Three federal agencies (the National Oceanic and Atmospheric Administration, the Federal Emergency Management Agency, and the U.S. Geological Survey) are working with the five Pacific states (Alaska, Hawaii, Washington, Oregon, and California) on these tsunami mitigation efforts (Bernard, 1998).

TsuInfo is the information delivery component of that program.

Information about tsunami hazards and mitigation is sparse and widely scattered. Compounding this, many of the at-risk coastal communities are small, have limited resources, and are distant from universities or other significant information centers. The TsuInfo program was established to remedy these problems by collecting the pertinent reports and getting them to the people who need them.

TsuInfo is headquartered at the Washington Department of Natural Resources, Division of Geology and Earth Resources (DGER) library. We've been intensively collecting reports about tsunamis in that library since 1994 and have issued two bibliographies to aid tsunami mitigation in Washington (Manson 1994; Manson and Walkling, 1998). Funding from the national program allows us to

expand our tsunami mitigation collection and to provide copies of these materials to emergency managers and decision makers in the at-risk communities of the Pacific states. The TsuInfo program is funded for one year but may be continued if it is successful.

The Plan

The DGER library is rapidly gathering additional materials about tsunami hazards and mitigation, especially as they apply to the Pacific states. Newly acquired mitigation materials will be announced monthly in *TsuInfo Alert*, which will also include special subject bibliographies and various announcements. Copies of reports will be given or loaned to the program beneficiaries identified by the state emergency managers.

Progress

To date, we have:

- Contacted the state representatives to the National Tsunami Hazard Mitigation Program in the five Pacific States to request their list of program participants.
- Received those lists from Washington, Oregon, and California.
- Sent information packets to the participants and state representatives.

The Future

This program was established to help coastal communities mitigate tsunami hazards. We welcome your comments and suggestions to make this program work for you.

References cited

- Bernard, E. N., 1998, Program aims to reduce impact of tsunamis on Pacific states: *Eos (American Geophysical Union Transactions)*, v. 79, no. 22, p. 258, 262-263.
Manson, C. J., compiler, 1994, *Tsunamis on the Pacific coast of Washington State--An annotated bibliography and directory: Washington Division of Geology and Earth Resources Open File Report 94-5*, 17 p.
Manson, C. J.; Walkling, Lee, compilers, 1998, *Tsunamis on the Pacific Coast of Washington--A selected bibliography and directory: Washington Division of Geology and Earth Resources Open File Report 98-4*, 40 p.

TsuInfo Alert is published monthly by the Washington Department of Natural Resources, Division of Geology and Earth Resources. This publication is free upon request and is available in print (by surface mail) and electronically (by e-mail)..

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Participants in the TsuInfo program can request copies of reports listed in this issue from:

Library
Washington Department of Natural Resources
Division of Geology and Earth Resources
P.O. Box 47007
Olympia, WA 98504-7007
ph: 360/902-1472 or 360/902-1473
fax: 360/902-1785
e-mail: connie.manson@wadnr.gov or lee.walkling@wadnr.gov

staff: Connie J. Manson, Senior Library Information Specialist
Lee Walkling, Library Information Specialist
with thanks to
Jari Roloff, Geologist II/Editor



WASHINGTON STATE DEPARTMENT OF
Natural Resources
Jennifer M. Belcher - Commissioner of Public Lands

New Tsunami Mitigation Materials for the TsuInfo Program

November 1 through December 31, 1998

Note: Loans or photocopies of these materials are available to participants in the TsuInfo program.
(See p. 2 for ordering information)

Blong, R. J., 1984, Volcanic hazards--A sourcebook on the effects of eruptions: Academic Press, 424 p.

Index terms: MOUNT RAINIER/PIERCE CO./MOUNT SAINT HELENS/MOUNT BAKER / VOLCANIC HAZARDS/TSUNAMIS/LAHARS

Burby, R. J., 1987, Coping with losses to infrastructure from natural hazards: University of North Carolina at Chapel Hill Center for Urban and Regional Studies Report 87-02, 10 p.

Index terms: GEOLOGIC HAZARDS - SOCIAL ASPECTS

Burby, R. J., 1991, The role of floodproof retrofitting in floodplain management. In Laska, S. B., Floodproof retrofitting--Homeowner self-protective behavior: University of Colorado Institute of Behavioral Science, p. 199-220.

Index terms: UNITED STATES / FLOODS AND FLOOD HAZARDS - RETROFITTING/DISASTER PLANNING

Burby, R. J.; Kartez, J. D., 1988, The anatomy of losses to state and local government property from natural disasters: University of North Carolina at Chapel Hill Center for Urban and Regional Studies Report 88-13, 10 p.

Index terms: UNITED STATES / GEOLOGIC HAZARDS - ECONOMIC ASPECTS - PROPERTY LOSSES

Dmowska, Renata; Saltzman, Barry, editors, 1999, Tsunamigenic earthquakes and their consequences: Academic Press Advances in Geophysics, v. 39, 215 p.

Index terms: / TSUNAMIS INDUCED BY EARTHQUAKES

Fiedorowicz, B. K., 1997, Geologic evidence of historic and prehistoric tsunami inundation at Seaside, Oregon: Portland State University Master of Science thesis, 197 p.

Index terms: OREGON - CLATSOP CO. - SEASIDE, ORE. / TSUNAMIS - PALEOTSUNAMI DEPOSITS/ TSUNAMIS - EVENT 1700, 1964

Geist, E. L., 1999, Local tsunamis and earthquake source parameters. In Dmowska, Renata; Saltzman, Barry, editors, Tsunamigenic earthquakes and their consequences: Academic Press Advances in Geophysics, v. 39, p. 117-209.

Index terms: -- / TSUNAMIS - MATH MODELS

Jackson, P. L.; Kimerling, A. J., editors, 1993, Atlas of the Pacific Northwest; 8th ed.: Oregon State University Press, 152 p.

Index terms: WASHINGTON/OREGON/IDAHO / ATLASES

Johnson, J. M., 1999, Heterogeneous coupling along Alaska-Aleutians as inferred from tsunami, seismic, and geodetic inversions. In Dmowska, Renata; Saltzman, Barry, editors, Tsunamigenic earthquakes and their consequences: Academic Press Advances in Geophysics, v. 39, p. 1-116.

Index terms: ALASKA / TSUNAMIS INDUCED BY EARTHQUAKES/EARTHQUAKES AND SEISMOLOGY - EVENTS 1938, 1946, 1957, 1964, 1965/TSUNAMIS - MATH MODELS

Komar, P. D., 1997, The Pacific Northwest coast--Living with the shores of Oregon and Washington: Duke University Press, 195 p.

Index terms: PACIFIC COAST/OREGON - PACIFIC COAST / SHORELINES/EROSION/TSUNAMIS /COASTAL ZONE MANAGEMENT

Mustard, P. S.; Clague, J. J.; Woodsworth, G. J.; Hickson, C. J.; Jackson, L. E., Jr.; Luaternauer, J. L.; Monger, J. W. H.; Richetts, B. D.; and others, 1998, Geology and geological hazards of the greater Vancouver area. In Karrow, P. F.; White, O. L., editors, Urban geology of Canadian cities: Geological Association of Canada Special Paper 42, p. 39-70.

Index terms: BRITISH COLUMBIA - VANCOUVER/FRASER LOWLAND/WHATCOM CO./SAN JUAN CO./NORTHWESTERN WASHINGTON/ AREAL GEOLOGY/GEOLOGIC HAZARDS

Nasmith, H. W.; Buck, G. F., 1998, Engineering geology of the greater Victoria area, British Columbia. In Karrow, P. F.; White, O. L., editors, Urban geology of Canadian cities: Geological Association of Canada Special Paper 42, p. 21-38.

Index terms: BRITISH COLUMBIA - VICTORIA/ BRITISH COLUMBIA - VANCOUVER ISLAND / ENGINEERING GEOLOGY

Pararas-Carayannis, George, 1982, The effects of tsunami on society: Impact of Science on Society, v. 32, no. 1, p. 71-78.

Index terms: TSUNAMIS - SOCIAL ASPECTS

Recent Research about the Cascadia Subduction Zone Earthquake, January 26, 1700

Note: This is a selection of materials in the DGER Library. Copies of these materials are available to participants in the TsuInfo program. (See p. 2 for ordering information)

Adams, John, 1996, Paleoseismology in Canada--A dozen years of progress: *Journal of Geophysical Research*, v. 101, no. B3, p. 6193-6207.

Index terms: BRITISH COLUMBIA/ WASHINGTON/ CASCADIA SUBDUCTION ZONE / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY/ GEOLOGIC RESEARCH

Adams, John, 1996, Great earthquakes recorded by turbidites off the Oregon-Washington coast. In Rogers, A. M.; Walsh, T. J.; Kockelman, W. J.; Priest, G. R., editors, *Assessing earthquake hazards and reducing risk in the Pacific Northwest*: U.S. Geological Survey Professional Paper 1560, p. 147-158.

Index terms: WASHINGTON/ OREGON/ CONTINENTAL MARGIN/ CASCADIA SUBDUCTION ZONE/ CASCADIA CHANNEL / MARINE SEDIMENTS - TURBIDITES/ EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY

Atwater, B. F.; Nelson, A. R.; Clague, J. J.; Carver, G. A.; Yamaguchi, D. K.; Bobrowsky, P. T.; Bourgeois, Joanne; Palmer, S. P.; and others, 1995, Summary of coastal geologic evidence for past great earthquakes at the Cascadia subduction zone: *Earthquake Spectra*, v. 11, no. 1, p. 1-18.

Index terms: CASCADIA SUBDUCTION ZONE/ PACIFIC COAST / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY/ SUBSIDENCE AND UPLIFT/ GEOCHRONOLOGY/ EARTHQUAKE-INDUCED LIQUEFACTION/ TSUNAMIS

Atwater, B. F., 1992, Geologic evidence for earthquakes during the past 2000 years along the Copalis River, southern coastal Washington: *Journal of Geophysical Research*, v. 97, no. B2, p. 1901-1919.

Index terms: COPALIS RIVER/ GRAYS HARBOR CO. / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLGY / QUATERNARY - RECENT/ SUBSIDENCE AND UPLIFT/ TSUNAMIS/ EARTHQUAKE-INDUCED LIQUEFACTION

Atwater, B. F., 1987, Evidence for great Holocene earthquakes along the outer coast of Washington State: *Science*, v. 236, no. 4804, p. 942-944.

Index terms: PACIFIC COAST / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY/ SUBDUCTION/ TSUNAMIS

Atwater, B. F., 1996, Coastal evidence for great earthquakes in western Washington. In Rogers, A. M.; Walsh, T. J.; Kockelman, W. J.; Priest, G. R., editors, *Assessing earthquake hazards and reducing risk in the Pacific Northwest*: U.S. Geological Survey Professional Paper 1560, p. 77-90.

Index terms: GRAYS HARBOR CO./ PACIFIC CO. / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY/ SUBSIDENCE AND UPLIFT/ TSUNAMIS

Atwater, B. F., 1996, Checklist for downsizing the greatest Cascadia earthquakes [abstract]: *Geological Society of America Abstracts with Programs*, v. 28, no. 5, p. 44.

Index terms: CASCADIA SUBDUCTION ZONE / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY/ GEOLOGIC RESEARCH

Atwater, B. F., 1996, Coastal geologic evidence for past great earthquakes at the Cascadia subduction zone [abstract]: PanPacific Hazard '96, Abstracts [downloaded Sept. 28, 1996, from <http://hoshi.cic.sfu.ca/~anderson/hazards96/>], 1 p.

Index terms: CASCADIA SUBDUCTION ZONE/ PACIFIC EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLGY

Atwater, B. F., compiler, 1994, Geology of the Holocene liquefaction features along the lower Columbia River at Marsh, Brush, Price, Hunting, and Wallace Islands, Oregon and Washington: U.S. Geological Survey Open-File Report 94-209, 64 p.

Index terms: COLUMBIA RIVER BANKS/ WAHKIAKUM CO./ MARSH ISLAND/ BRUSH ISLAND/ PRICE ISLAND/ HUNTING ISLAND/ WALLACE ISLAND / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY/ EARTHQUAKE-INDUCED LIQUEFACTION

Atwater, B. F.; Hemphill-Haley, Eileen, 1997, Recurrence intervals for great earthquakes in coastal Washington [abstract]: *Geological Society of America Abstracts with Programs*, v. 29, no. 6, p. A-131.

Index terms: PACIFIC COAST/ CASCADIA SUBDUCTION ZONE / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY - RECURRENCE

Atwater, B. F.; Hemphill-Haley, Eileen, 1996, Preliminary estimates of recurrence intervals for great earthquakes of the past 3500 years at northeastern Willapa Bay, Washington: U.S. Geological Survey Open-File Report 96-1, 88 p., 1 plate.

Index terms: PACIFIC CO./ WILLAPA BAY/ NIAWIAKUM RIVER/ WILLAPA RIVER / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY/ GEOCHRONOLOGY - RADIOCARBON DATING/ SHORELINES/ STRATIGRAPHY/ PALEOBOTANY - DIATOMS/ EARTHQUAKE PREDICTION

Atwater, B. F.; Hemphill-Haley, Eileen, 1997, Recurrence intervals for great earthquakes of the past 3,500 years at northeastern Willapa Bay, Washington: U.S. Geological Survey Professional Paper 1576, 108 p.

Index terms: CASCADIA SUBDUCTION ZONE/ WILLAPA BAY/ PACIFIC CO. / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY/ EARTHQUAKE PREDICTION

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Index terms: PACIFIC CO./ WILLAPA BAY / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY/ STRUCTURAL GEOLOGY AND TECTONICS - SUBSIDENCE AND UPLIFT/ ARCHAEOLOGY AND HISTORY

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Index terms: CASCADIA SUBDUCTION ZONE/ PACIFIC COAST (WASHINGTON)/ GRAYS HARBOR CO./ PACIFIC CO. / GEOCHRONOLOGY - RADIOCARBON DATING/ EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY

Atwater, B. F.; Yamaguchi, D. K., 1991, Sudden, probably coseismic submergence of Holocene trees and grass in coastal Washington State: *Geology*, v. 19, no. 7, p. 706-709.

Index terms: PACIFIC CO./ WILLAPA BAY/ GRAYS HARBOR CO./ GRAYS HARBOR / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY/ QUATERNARY - HOLOCENE/ GEOCHRONOLOGY - DENDROCHRONOLOGY/ SUBSIDENCE AND UPLIFT

Benson, B. E.; Grimm, K. A.; Clague, J. J., 1997, Tsunami deposits beneath tidal marshes on northwestern Vancouver Island, British Columbia: *Quaternary Research*, v. 48, no. 2, p. 192-204.

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Carver, D. H.; Carver, G. A., 1996, Earthquake and thunder--Native oral histories of paleoseismicity along the southern Cascadia subduction zone [abstract]: *Geological Society of America Abstracts with Programs*, v. 28, no. 5, p. 54.

Index terms: CASCADIA SUBDUCTION ZONE/ OREGON - PACIFIC COAST/ CALIFORNIA - PACIFIC COAST / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY/ ARCHAEOLOGY AND HISTORY

Clague, J. J.; Bobrowsky, P. T.; Hutchinson, Ian; Mathewes, R. W., 1998, Geological evidence for past large earthquakes in southwest British Columbia. In *Geological Survey of Canada, Cordillera and Pacific Margin: Geological Survey of Canada Current Research 1998-A*, p. 217-224.

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Index terms: BRITISH COLUMBIA - VANCOUVER ISLAND/ PACIFIC COAST (WASHINGTON)/ OREGON - PACIFIC COAST / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY/ TSUNAMIS

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Index terms: BRITISH COLUMBIA/ WASHINGTON/ CASCADIA SUBDUCTION ZONE / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY

Clague, J. J., compiler and editor, 1996, Paleoseismology and seismic hazards, southwestern British Columbia: *Geological Survey of Canada Bulletin 494*, 88 p.

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Index terms: OREGON - PACIFIC COAST / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY

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Index terms: COLUMBIA RIVER / COWLITZ CO. / WAHKIAKUM CO. / OREGON - NORTHWESTERN / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY / EARTHQUAKE-INDUCED LIQUEFACTION / EARTHQUAKES AND SEISMOLOGY - GROUND MOTION, EVENT 300 YBP

Earth, 1998, Stumped--Old trees remember a killer quake: *Earth*, v. 7, no. 2, p. 9-10.

Index terms: PACIFIC COAST / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY - EVENT 1700 / TSUNAMIS (JAPAN) / GEOCHRONOLOGY - DENDROCHRONOLOGY

Hart, Roger; Peterson, C. D., 1997, Episodically buried forests in the Oregon surf zone: *Oregon Geology*, v. 59, no. 6, p. 131-144.

Index terms: OREGON - PACIFIC COAST/ CASCADIA SUBDUCTION ZONE / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY/ SUBSIDENCE AND UPLIFT/ SHORELINES

Hemphill-Haley, Eileen, 1992, The application of diatom paleoecology to interpretations of Holocene relative sea-level

change and coseismic subsidence in southwestern Washington: University of California, Santa Cruz Doctor of Philosophy thesis, 321 p.

Index terms: WILLAPA BAY / PACIFIC CO. / MARINE BIOLOGY / PALEOBOTANY - DIATOMS / SEA LEVEL / QUATERNARY - HOLOCENE / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY / SUBSIDENCE AND UPLIFT

Hemphill-Haley, Eileen, 1995, Diatom evidence for earthquake-induced subsidence and tsunami 300 yr ago in southern coastal Washington: Geological Society of America Bulletin, v. 107, no. 3, p. 367-378.

Index terms: PACIFIC CO. / WILLAPA BAY - NIAWIAKUM RIVER VALLEY / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY - 300 YEAR EVENT / TSUNAMIS / SUBSIDENCE AND UPLIFT / PALEOBOTANY - DIATOMS

Hutchinson, Ian; McMillan, A. D., 1997, Archaeological evidence for village abandonment associated with late Holocene earthquakes at the northern Cascadia subduction zone: Quaternary Research, v. 48, no. 1, p. 79-87.

Index terms: BRITISH COLUMBIA - VANCOUVER ISLAND / CASCADIA SUBDUCTION ZONE / PACIFIC CO. / WILLAPA BAY / GRAYS HARBOR CO. / GRAYS HARBOR / CLALLAM CO. / NEAH BAY / MAKAH RESERVATION / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY / ARCHAEOLOGY AND HISTORY / TSUNAMIS / EARTHQUAKES AND SEISMOLOGY - EVENTS 300 YBP, 1000-1100 YBP, ETC.

Jacoby, G. C.; Carver, Gary A.; Wagner, Wendy, 1995, Trees and herbs killed by an earthquake ~300 yr ago at Humboldt Bay, California: Geology, v. 23, no. 1, p. 77-80.

Index terms: CALIFORNIA - HUMBOLDT BAY / CASCADIA SUBDUCTION ZONE / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY

Jacoby, G. C., 1995, Tree-ring dating of coseismic coastal subsidence in the Pacific Northwest region. In Jacobson, M. L., compiler, National Earthquake Hazards Reduction Program annual project summaries--XXXVI: U.S. Geological Survey Open-File Report 95-210, p. 459-461.

Index terms: PACIFIC COAST / GRAYS HARBOR CO. / PACIFIC CO. / COPALIS RIVER / COLUMBIA RIVER / WILLAPA BAY / STRUCTURAL GEOLOGY AND TECTONICS - SUBSIDENCE AND UPLIFT / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY / GEOCHRONOLOGY - DENDROCHRONOLOGY

Jacoby, G. C., 1996?, Tree-ring dating of coseismic coastal subsidence in the Pacific Northwest region: U.S. Geological Survey contract report, 15 p.

Index terms: GRAYS HARBOR CO. / PACIFIC CO. / PACIFIC COAST / GEOCHRONOLOGY - DENDROCHRONOLOGY / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY

Jacoby, G. C., 1995, Tree-ring applications to paleoseismicity studies--Pacific Northwest [abstract]: Geological Association of

Canada/ Mineralogical Association of Canada Annual Meeting Final Program and Abstracts, v. 20, p. A-117.

Index terms: PACIFIC NORTHWEST / GEOCHRONOLOGY - DENDROCHRONOLOGY / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY

Jacoby, G. C., 1996, Tree-ring dating of coseismic coastal subsidence in the Pacific Northwest region. In U.S. Geological Survey, Annual project summaries--Volume 37, Pacific Northwest: U.S. Geological Survey, p. 61-64. [reports downloaded Dec. 2, 1998 from http://erp-web.er.usgs.gov/reports/VOL37/pn_vol37.htm]

Index terms: WILLAPA RIVER AREA / PACIFIC CO. / PRICE ISLAND / WAHKIAKUM CO. / GEOCHRONOLOGY - DENDROCHRONOLOGY / EARTHQUAKES AND SEISMOLOGY - EVENT 1700

Jacoby, G. C.; Bunker, D. E.; Benson, B. E., 1997, Tree-ring evidence for an A.D. 1700 Cascadia earthquake in Washington and northern Oregon: Geology, v. 25, no. 11, p. 999-1002, Data Depository item 9756.

Index terms: CASCADIA SUBDUCTION ZONE / GRAYS HARBOR CO. / PACIFIC CO. / WAHKIAKUM CO. / COPALIS RIVER / WILLAPA RIVER / COLUMBIA RIVER / PACIFIC COAST / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY / EARTHQUAKES AND SEISMOLOGY - EVENT 1700 / GEOCHRONOLOGY - DENDROCHRONOLOGY / GEOCHRONOLOGY - RADIOCARBON DATING

Kanamori, Hiroo; Heaton, T. H., 1996, The wake of a legendary earthquake: Nature, v. 379, no. 6562, p. 203-204.

Index terms: CASCADIA SUBDUCTION ZONE / PACIFIC COAST / TSUNAMIS / EARTHQUAKES AND SEISMOLOGY - EVENT 1700 / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY

Kelsey, H. M.; Witter, R. C.; Hemphill-Haley, Eileen, 1998, Response of a small Oregon estuary to coseismic subsidence and postseismic uplift in the past 300 years: Geology, v. 26, no. 3, p. 231-234.

Index terms: OREGON - PACIFIC COAST - SIXES RIVER ESTUARY / EARTHQUAKES AND SEISMOLOGY - EVENT 1700 / SUBSIDENCE AND UPLIFT / SHORELINES / PALEOBOTANY - DIATOMS

Kerr, R. A., 1995, Faraway tsunami hints at a really big Northwest quake: Science, v. 267, no. 5200, p. 962.

Index terms: CASCADIA SUBDUCTION ZONE / JAPAN / TSUNAMIS / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY

Mathewes, R. W.; Clague, J. J., 1994, Detection of large prehistoric earthquakes in the Pacific Northwest by microfossil analysis: Science, v. 264, no. 5159, p. 688-691.

Index terms: BRITISH COLUMBIA - VANCOUVER ISLAND, FRASER RIVER / SEA LEVEL / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY / PALEONTOLOGY

Meyers, R. A.; Smith, D. G.; Jol, H. M.; Peterson, C. D., 1996, Evidence for eight great earthquake-subsidence events detected

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Index terms: WILLAPA BAY/ PACIFIC CO. / GEO-CHRONOLOGY - RADIOCARBON DATING/ EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY/ GEOPHYSICS - RADAR SURVEYS/ SUBSIDENCE AND UPLIFT

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Index terms: CASCADIA SUBDUCTION ZONE / TSUNAMIS - MATH MODELS / OCEANOGRAPHY - TIDES / EARTHQUAKES AND SEISMOLOGY - EVENT 1700

Nelson, A. R.; Atwater, B. F.; Bobrowsky, P. T.; Bradley, L.-A.; Clague, J. J.; Garver, G. A.; Darienzo, M. E.; Grant, W. C.; Krueger, H. W.; and others, 1995, Radiocarbon evidence for extensive plate-boundary rupture about 300 years ago at the Cascadia subduction zone: Nature, v. 378, no. 6555, p. 371-374.

Index terms: CASCADIA SUBDUCTION ZONE / GEO-CHRONOLOGY - RADIOCARBON DATING / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY / EARTHQUAKES AND SEISMOLOGY - EVENT 1700

Nelson, A. R.; Personius, S. F., 1996, Great-earthquake potential in Oregon and Washington--An overview of recent coastal geologic studies and their bearing on segmentation of Holocene ruptures, central Cascadia subduction zone. In Rogers, A. M.; Walsh, T. J.; Kockelman, W. J.; Priest, G. R., editors, Assessing earthquake hazards and reducing risk in the Pacific Northwest: U.S. Geological Survey Professional Paper 1560, p. 91-114.

Index terms: CASCADIA SUBDUCTION ZONE/ WASHINGTON/ OREGON/ PACIFIC COAST / EARTHQUAKES AND SEISMOLOGY - PALEOSEISMOLOGY/ SUBSIDENCE AND UPLIFT

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Tsunami Mitigation

Note: This is a selection of materials in the DGER Library. Copies of these materials are available to participants in the TsuInfo program. (See p. 2 for ordering information)

Editor's note: Because of the length of this list, it is divided into these sections:

Subjects: General Works; News Media; Seawalls, Breakwaters, Tsunami Forests; Social Aspects; Warning Systems
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SEA WALLS, BREAKWATERS, TSUNAMI FORESTS

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Program participants

Steering committee

Eddie Bernard
NOAA/PMEL
7600 Sand Point Way NE
Seattle, WA 98115-0070

Frank Gonzalez
NOAA/PMEL
7600 Sand Point Way NE
Seattle, WA 98115-0070

Dick Hutcheon
NOAA/NWS
Alaska Region
222 W. 7th Avenue, #23
Anchorage, AK 99513-7575

Richard Hagemeyer
NWS Pacific Region
Grosvenor Center
Mauka Tower
737 Bishop Street, Suite 2020
Honolulu, HI 96813

George Crawford
Washington State Military Dept.
Emergency Management Division
Camp Murray, WA 98430-5122

Timothy Walsh
Washington Department of Natural
Resources
Division of Geology and Earth
Resources
P.O. Box 47007
Olympia, WA 98504-7007

Mark Darienzo
Oregon Emergency Management
595 Cottage Str., N.E.
Salem, OR 97310

Donald Hull
Oregon Department of Geology and
Mineral Industries
800 N.E. Oregon Street, #28
Suite 965
Portland, OR 97232

Richard Eisner
Governor's Office of Emergency
Services
Coastal Region
1300 Clay Street, Suite 400
Oakland, CA 94612-1425

Lori Dengler
Department of Geology
Humboldt State University
#1 Harpst Street
Arcata, CA 95521

Brian Yanagi
Hawaii Civil Defense Division
3949 Diamond Head Road
Honolulu, HI 96816-4495

Augustine S. Furumoto
349 Kekupua St.
Honolulu, HI 96825

Chris Jonientz-Trisler
Earthquake Program Manager
FEMA, Region X
130 228th St. S.W.
Bothell, WA 98021-9796

Clifford Astill
National Science Foundation
4201 Wilson Blvd., Room 545
Arlington, VA 22230

Craig Weaver
U.S. Geological Survey
c/o Geophysics Program
Box 351650
University of Washington
Seattle, WA 98195-1650

Roger Hansen
Geophysical Institute
University of Alaska
P.O. Box 757320
903 Koyukuk Drive
Fairbanks, AK 99775-7320

Gary R. Brown
Alaska Division of Emergency
Services
P.O. Box 5750, Suite B-210
Bldg 49000
Fort Richardson, AK 99505-5750

Alaska

Gary R. Brown
Alaska Division of Emergency
Services
P.O. Box 5750, Suite B-210
Bldg 49000
Fort Richardson, AK 99505-5750

California

Capt. Robert Eilers
4985 Broder Blvd
Dublin, CA 94568
925/803-7800;; fax: 925/803-7878

Capt. Ovid Holmes
50 Glacier Drive
Martinez, CA 94553
925/646-4461; fax: 925/646-1120

Ron Sandler
555 H Street
Crescent City, CA 95531
707/487-1113; fax: 707/465-1470

Larry Clark
Courthouse
825 Fifth St.
Eureka, CA 95501
707/268-2500; fax: 707/445-7764

Caroline Constable
333 2nd St.
Lakeport, CA 95453
707/262-0662; fax: 707/262-0973

Lt. Ken Froberg
20 North San Pedro
Suite 2004
San Rafael, CA 94903
415/499-6584; fax: 415/499-7450

Richard C. Paige, Jr.
Mendocino Emergency Services
Authority
175 S. School Street
Room 107
Ukiah, CA 95482
707/463-5630/2; fax: 707/467-2504 e-mail: mesaofc@pacific.net

Harry Robins
240 Church St.
Salinas, CA 93902
408/755-5120; fax: 408/755-5004

John Volpi
1195 Third St., Rm 310
Napa, CA 94559
707/253-4421; fax: 707/253-4176

Margie Riopel
481 Fourth St.
Hollister, CA 95023
408/636-4004; fax: 408/636-4010

Lucien Canton
1003 A Turk St.
San Francisco, CA 94102
415/558-2700; fax: 415/431-7500

Lt. Tim McHenry
401 Marshall St.
Redwood City, CA 94063
650/363-4790; fax: 650/363-1868

John Hackley
55 West Younger Ave.
Suite 435
San Jose, CA 95110
408/299-3751; fax: 408/294-4851

Nancy Carr-Gordon
701 Ocean St., Room 330
Santa Cruz, CA 95060
408/454-2210; fax: 408/454-2710

Lt. Jack Hall
530 Union Ave., Suite 100
Fairfield, CA 94533
707/421-7030; fax: 707/421-6383

Sandy Covall
2300 County Center Dr.
#221-A
Santa Rosa, CA 95403
707/527-1152; fax: 07/526-5555
e-mail:
rsigterm@sonoma-county.org

Hawaii

Brian Yanagi
Hawaii Civil Defense Division
3949 Diamond Head Road
Honolulu, HI 96816-4495

Oregon

Jan F Glarum, Coordinator
Clatsop County Emergency
Management
355 7th Street
Astoria, OR 97103
Phone: (503) 325-8645
Office Fax: (503) 325-8675
e-mail: none

Al Aya
Cannon Beach Rural Fire Protection
District
PO Box 24
Cannon Beach, OR 97110
Phone: 503-436-2343
Fax: 503-436-2343
e-mail: 1032943@mcimail.com

Sgt. Lisa Wampole, Coordinator
Coos County Emergency Services
Second & Baxter
Coquille OR 97423
Phone: (541) 396-3121 x 312
Fax: (541) 396-5932
e-mail none

Matt Winkel, City Manager
City of Bandon
P.O. Box 67
Bandon, OR 97411
Phone: 541-347-2437 x229
Fax: 541-347-1415
e-mail: bandon@harborside.com

Director
Curry County Emergency Services
29821 Ellensburg Ave
Gold Beach OR 97444
Phone: (541) 247-7011
Fax: (541) 247-2705
e-mail:

David Hagood, City Manager
City of Gold Beach
29592 Ellensburg Ave.
Gold Beach, OR 97444
Phone: 541-247-7029
Fax: 541-247-2212
e-mail:

Wayne A. Stinson, Coordinator
Douglas County Emergency Services
Justice Bldg, Room 210
Roseburg OR 97470
Phone: (541) 440-4448
Fax: (541) 440-4470
e-mail wastinson@dcsco.com

Ike Jensen, Coordinator
Lane County Emergency Services
125 E 8th Ave
Eugene OR 97401
Phone: (541) 682-4160
Fax: (541) 682-2366
e-mail ike.jensen@co.lane.or.us

Skip Passenger, Fire Chief
Florence Fire Department
PO Box 340
Florence, OR 97439
Phone: 541-997-3564
Fax: 541-997-4400
e-mail: ffd@presys.com

Jim Hawley, Director
Lincoln County Emergency Services
Courthouse, Room 103
225 West Olive St
Newport OR 97365
Phone: (541) 265-4199
Fax: (541) 265-4197
e-mail lcdoes@pioneer.net

William Grimm, Fire Chief
Central Oregon Coast Fire and Rescue
District
PO Box 505
Waldport, OR 97394
Phone: 541-563-3121
Fax: 541-563-3190
e-mail none

Lila Bradley, Operations Coordinator
City of Lincoln City
PO Box 50
Lincoln City, OR 97367
Phone: 541-996-1235
Fax: 541-994-4881
e-mail lcpw@orednet.org

Nancy Otterson, City Recorder
City of Yachats
P.O. Box 345
Yachats, OR 97498
Phone: 541-547-3565
Fax: 541-547-3063
e-mail cityoya@pioneer.net

Tom Manning, Director
Joanne Spencer, Emergency Manager
Tillamook County Emergency
Management
5995 Long Prairie Road
Tillamook OR 97141
Phone: (503) 842-3412
Fax: (503) 815-1801
e-mail: manning@co.tillamook.or.us
jspencer@co.tillamook.or.us

Terry Watts, Mayor
City of Rockaway Beach
P.O. Box 5
Rockaway Beach, OR 97136
Phone: 503-355-2291
Fax: 503-355-8221
e-mail none

Perry Sherbaugh, Chief
Manzanita Department of Public Safety
P.O. Box 129
Manzanita, OR 97130
Phone: 503-368-5343
Fax: 503-368-4145
e-mail: pschief@pdx.oneworld.com

Paul Visher
P.O. Box 986
Cannon Beach, OR 97110
Phone: 503-436-1000
Fax: 503-436-1011
e-mail: none

Lynn Smith, Communication Manager
Seaside Police Department
1091 South Holladay
Seaside, OR 97138
Phone: 503-738-6311
Fax: 503-738-6554
e-mail: spd.admin@aone.com

Stan Gibson, Fire Chief
City of Coos Bay
150 S. 4th St.
Coos Bay, OR 97420
Phone: 541-267-1191
Fax: 541-267-0378
e-mail: sgibson@ucinet.com

Don Yost, Harbormaster
Port of Coos Bay
P.O. Box 5409
Charleston, OR 97420-0607
Phone: 541-888-2548
Fax: 541-888-6111
e-mail: none

William Sharp, Fire Chief
City of Brookings
898 Elk Drive
Brookings, OR 97415
Phone: 541-469-2166 x215
Fax: 541-469-3650
e-mail:

Jay Cable, Public Health and Safety
City of Reedsport
451 Winchester Ave.
Reedsport, OR 97467
Phone: 541-271-3603
Fax: 541-271-2809
e-mail: reedsport@presys.com

John Hart
Heceta Homeowners Association
5086 Wood Lake Way
Florence, OR 98439
Phone: 541-902-943
Fax: none
e-mail: PJTH@presys.com

Bonnie Dunn, Commissioner
Port of Alsea
P.O. Box 1060
Waldford, OR 97394
Phone: 541-563-3872
Fax: 541-563-3334
e-mail: bonniebreach@yahoo.com

John Marra
Shoreland Solutions
P.O. Box 1046
Newport, OR 97365
Phone: 541-265-4660
Fax: 541-265-4660
e-mail: marrajj@fbo.com

Washington

Joe Ciarlo
Emergency Services Coordinator,
Emergency Services Section
Clallam County Court House
223 East 4th, Port Angles, WA
98362-0149
Phone: (360) 417-2305; Fax: (360)
417-2513;
e-mail: ccroads@olympus.net

Karin Frenell-Hanrahan
Deputy Director
Department of Emergency
Management
P.O. Box 630
Montesano, WA 9856
Phone: (360) 249-3911; Fax: (360)
5320-7902;
e-mail: kfh@co.grays-harbor.wa.us

T.J. Harmon
Assistant Director
Department of Emergency Services
P.O. Box 5000
Coupeville, WA 98239
Phone: (360) 240-5572; Fax: (360)
679-7314;
e-mail: tjharmon@co.island.wa.us

Bob Minty
Department of Emergency
Management
81 Elkins Road
Pt. Hadlock, WA 98339
Phone: (360) 385-3831 Ext. 529; Fax:
(360) 379-0513;
e-mail: bminty@co.jefferson.wa.us

Stephannie Fritts
Director
Emergency Management Agency
P.O. Box 101
South Bend, WA 98586-0101
Phone: (360) 875-9340; Fax: (360)
875-9342;
e-mail: pcema@willapabay.org

George Crawford
Earthquake Program Manager
Emergency Management Division
Washington Military Department,
Operations Unit
Building 20,
Camp Murray, WA 98430-5122 Phone:
(253) 512-7067; Fax: (253) 512-7207;
e-mail: g.crawford@emd.wa.gov

Barbara Thurman
Public Education Coordinator
Emergency Management Division
Washington Military Department,
Operations Unit
Building 20
Camp Murray, WA 98430-5122
Phone: (253) 512-7047; Fax: (253)
512-7207;
e-mail: b.thurman@emd.wa.gov



WASHINGTON STATE DEPARTMENT OF
Natural Resources

Jennifer M. Belcher - Commissioner of Public Lands

Library
Department of Natural Resources
Division of Geology and Earth Resources
P.O. Box 47007
Olympia, WA 98504-7007