



Tsunami Evacuation Building Workshop

September 28 & 29, 2009

**Cannon Beach
Seaside
Portland**

Workshop Locations



September 28, 2009
8:30 a.m. to 5:00 p.m.

Cannon Beach

Cannon Beach City Hall
163 East Gower Street
Cannon Beach, OR 97110

Seaside

Seaside Public Library
1131 Broadway Street
Seaside, OR 97138



September 29, 2009
8:30 a.m. to 5:00 p.m.

Portland

Portland State Office Building
Room 1-A
800 NE Oregon Street
Portland, OR 97232

Recommended Hotels

Tolovana Inn
3400 South Hemlock
Cannon Beach, OR 97110
1-800-333-8890

DoubleTree Lloyd's Center
1000 NE Multnomah Street
Portland, OR 97232
1-503-281-6111



Conceptual Design of Tsunami Evacuation Building: Cannon Beach City Hall

source: Ecola Architects, PC.

Sponsored by:

- Cascadia Region Earthquake Workgroup (CREW)
- American Society Civil Engineers (ASCE)
- City of Cannon Beach
- Oregon Department of Geology and Mineral Industries (DOGAMI)
- Oregon Emergency Management (OEM)
- Oregon Department of Land Conservation and Development (DLCD)

Program

September 28, 2009

Cannon Beach & Seaside

8:30 AM Coffee and poster display

**9:00 AM Presentation of Cannon Beach City/Tsunami Refuge
Jay Raskin, Ecola Architects**

Rob Schultz, Cannon Beach Police, and Mark Morgan, Cannon Beach Rural Fire District, will discuss history of CB tsunami efforts, with focus on fire district

Rich Mays, City Manager, will discuss the city's perspective and why they want to improve city hall
Yumei Wang, DOGAMI, will present overview of preliminary design and costs of new city hall with 3 options

Group discussion will involve above panelists and audience.

10:45 AM Break

**11:00 AM Walking Tour of Cannon Beach
Jay Raskin, Ecola Architects**

Tour will include evacuation area near City Hall, tsunami route signage, COWS loudspeaker, and visit to EOC at Fire Station.

12:00 PM Lunch provided

**1:00 PM No where to run: Seaside - driving tour
Jay Raskin, Ecola Architects
Tom Horning, Horning Geosciences**

Seaside is divided into three geographically distinct evacuation areas that are separated by two rivers and a marsh, all of which run parallel to the shoreline. The tour will visit two main surge corridors cutting through the south (Avenue N-Avenue I) and central (1st to 3rd Avenue) parts of Seaside, before meeting at the library for discussions. Bus tour picks up and drops off at the Cannon Beach City Hall.

**2:00 PM Public Meeting: Seaside Tsunami Refuge
Althea Turner, OEM
Doug Dougherty, Superintendent of Seaside School District
Harry Yeh, Coastal and Ocean Engineering, OSU**

This meeting will provide the public an opportunity to learn more about tsunami evacuation buildings and their role in tsunami preparation and mitigation. Tsunami simulations will be shown by Professor Harry Yeh of OSU.

Session ends at 5:00 PM

Program

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Portland

8:30 AM **Introductions, framework and goals of workshop**
Yumei Wang, DOGAMI
Jay Raskin, Ecola Architects

8:45 AM **TEB Policy Session**
Yumei Wang, DOGAMI
Jay Raskin, Ecola Architects

Seaside evacuation computer simulation by Prof. Harry Yeh, OSU, followed by panel discussion with representatives of federal, state and local elected officials/leaders on protecting tsunami prone communities

10:15 AM Break

10:30 AM **Tsunami Evacuation Buildings in Japan**
Tadashi Ishikawa, Kajima Corporation
Introduced by: Harry Yeh, Coastal and Ocean Engineering,
OSU

Mr. Ishikawa of Kajima Corporation will explain a design guideline for tsunami refuge building structures.

11:30 AM **Fema P646 and P646A**
Jon Heintz, Applied Technology Council

The presentation of findings of a FEMA product on tsunami shelter for vertical evacuation. Includes structures built to withstand tsunami and earthquake loads. This presentation includes recommendations on siting concepts, design concepts, performance objectives, and design loads that should be considered in locating and designing tsunami vertical evacuation structures.

12:00 PM **If you build it, will they come?: Design and Space Issues**
Daniel Wirtala, Oregon State University, graduate student

Using visual cues and design to encourage use of a tsunami evacuation building during a tsunami. Because these are new concepts in the United States, there will need to be a concerted education effort to instill confidence in the event of a tsunami.

12:15 PM Lunch provided

Program

September 29, 2009

Portland

State and Provincial Overviews of tsunami evacuation building structure efforts.

1:00 PM Oregon

Yumei Wang, DOGAMI, Co-leader and risk engineer

Jay Raskin, Ecola Architects, Co-leader and architect

Harry Yeh, Coastal and Ocean Engineering, OSU; Tsunami expert

Kent Yu, Degenkolb, Structural Engineer, structural design

Javier Moncada, Berger Abam, engineer, wave deflection structures

Marcy Boyer, Chinook Geoservices, geotechnical engineer

Tim Fiez, Gartrell Group, software architect, tsunami evacuation modeling

Oregon's tsunami risk management efforts. An overview of selected risk reduction efforts that are applicable to all of Oregon's communities. A group presentation on conceptual tsunami evacuation buildings

2:00 PM Washington State

Tim Walsh, Department of Natural Resources

2:30 PM California State

Lori Dengler, Humboldt State University

3:15 PM British Columbia

Maiclaire Bolton, British Columbia Provincial Emergency Program

3:00 PM Break

3:45 PM Group Discussion - Where do we go from here?

Yumei Wang, DOGAMI

Jay Raskin, Ecola Architects

Moderators will lead a group discussion on how best to implement tsunami evacuation buildings when needed to protect life in coastal areas.

Session ends at 5:00 PM