Cascadia EarthScope Earthquake and Tsunami Education Program (CEETEP)

http://ceetep.oregonstate.edu

Workshop for Teachers, Interpreters, and Emergency Management Educators August 11-14, 2014

> Aberdeen Museum of History 111 East Third Street, Aberdeen, Washington <u>http://www.aberdeen-museum.org</u>

Primary room: Aberdeen Museum of History Exhibit Room

Secondary room: Meeting Room #1 (lower level)

Monday, August 11 (Day 1)				
Cascadia plate tectonics, earthquakes and tsunamis; Seismic and GPS monitoring: Earthquake				
and distant	tsunami preparedness			
8:30	Coffee, tea, juice, snacks for those who arrive early			
9:00	Introductions: CEETEP, EarthScope, Participants, Instructors (Bob Lillie). Please sit			
	with your Action Team. Tables will be marked.			
10:15	Break (Coffee, tea, juice, snacks)			
10:30	Beauty and the Beast: Plate Tectonics and Geological Hazards of the Pacific			
	Northwest (Bob Lillie)			
12:00	Thoughts/questions/reflection (Bob Lillie, Nancee Hunter, Beth Pratt-Sitaula, Bob			
	Butler)			
12:15	Lunch (Served in Entry Area)			
1:00	Basics of Earthquake and Tsunami Science and Hazards and Related Teaching			
	Activities (Bob Butler, Bonnie Magura, Roger Groom)			
3:15	Break (Coffee, tea, juice, snacks)			
3:30	Surviving a Cascadia Subduction Zone Earthquake (Brynné Walker, Bob DeGroot)			
4:30	Forms: Reimbursements; Stipends; Photo Permissions; Logistics for Day 2 Field Trip			
	(Nancee Hunter, Beth Pratt-Sitaula)			
4:45	Reflection, Questions, Implications (Bob Butler, Bonnie Magura, Roger Groom,			
	Brynné Walker, Bob de Groot)			
5:30	Adjourn			

Tuesday, August 12 (Day 2)		Field Trip Activities	
Field Trip: C	Cascadia earthquake and tsur	nami geology; EarthScope G	PS installation; Earthquake
and tsunam	i emergency planning		
7:30	Coffee, tea, juice, snacks for those who arrive early		
8:00	Depart Aberdeen Museum of History for Field Trip (designated car pools will be arranged Day 1)		
8:30	Stop 1 : Elk River Estuary (Brian Atwater, Bob Butler)	<u>Tsunami Geology</u>	Core for tsunami sand and discuss the varied evidence used to determine Cascadia's Great Quake and tsunami history.
11:00	Drive to Ocosta Elementary School		
11:15	Stop 2: Ocosta Elementary School (Brynné Walker, Paula Akerlund, and Cale Ash)	Tsunami Vertical- Evacuation Structure	Visit construction site for vertical-evacuation structure.
12:00	Drive to Grayland Fire Hall, Intersection of Hwy 105 & Grayland Beach Access Rd.		
12:15	Lunch, Grayland Fire Hall		
1:00	Stop 3 : Grayland Beach (Bob Lillie; Brynné Walker).	Beauty and the Beast; Extreme Evacuation Challenges	Brainstorm about interpretive opportunities and overcoming challenging tsunami evacuation sites.
1:45	Grayland Beach Evacuation Walk (Brynné Walker)	<u>Tsunami Evacuation Route</u>	Walk from Grayland Beach to Turkey Road Assembly Area. Includes time to thinl about and discuss hazards, infrastructure, solutions.
2:30	Drive to Stafford Prison off Hwy 105 between Aberdeen and Westport		
3:00	Stop 4 : GPS Station P398. (Beth Pratt-Sitaula)	<u>GPS Station</u>	Visit component of EarthScope Plate Boundary Observatory (PBO) and discuss how movements of Earth's surface tell us abou earthquake hazard.
	Drive back to Aberdeen Museum of History		
4:30	Adjourn		

Wednesda	y, August 13 (Day 3)			
	rthquake and tsunami science and activities; Local tsunami preparedness; Native ral histories; Pedagogical exchange among educators; Action Team planning			
8:30	Coffee, tea, juice, snacks for those who arrive early			
9:00	Cascadia Earthquakes and Tsunami and Related Teaching Activities (Bob Butler, Bonnie Magura, Roger Groom) Please sit with your Action Team. Tables will be marked			
10:30	Break (Coffee, tea, juice, snacks)			
10:45	Cascadia Earthquakes and Tsunami and Related Teaching Activities (Bob Butler, Bonnie Magura, Roger Groom)			
12:00	Thoughts/questions/reflection (Bob Butler, Bonnie Magura, Roger Groom)			
12:15	Lunch (Served in Entry Area).			
1:00	Science Storytelling through Interpretation: CEETEP team presents example of "Group Interpretive Program" from 2013 Workshop.			
1:15	Tsunami: Are You Ready? (Brynné Walker)			
2:00	Native American Oral Histories (Beth Pratt Sitaula)			
2:45	<u>Exchange of Pedagogies</u> : Working Together in Coastal Communities to Engage Students, Visitors and Residents on Earthquake and Tsunami Science and Preparedness (Bob Lillie)			
3:15	Break (Coffee, tea, juice, snacks)			
3:30	30 <u>Birds-of-a-Feather Breakouts</u> : How do I relate earthquake/tsunami science and preparedness to my learners at my venue? (<u>Interpreters</u> : Bob Lillie & Bob de Groo <u>EM Educators</u> : Beth Pratt-Sitaula & Brynne Walker; <u>Teachers</u> : Bob Butler & Nancee Hunter)			
4:15	<u>Action Teams</u> : Teams work on Community Educational Project on earthquake and tsunami science and preparedness. They will present their project plan during Day 4 of this workshop, and the results of implementation at the March 7, 2015 Share-A-Thon in Quinault, WA.			
5:30	Adjourn			

Thursday,	Thursday, August 14 (Day 4)					
Community earthquake and tsunami preparedness; Action Team presentations and post- workshop action plans						
8:30	Coffee, tea, juice, snacks for those who arrive early					
9:00	Digital Resources (Beth Pratt-Sitaula, Bob DeGroot)					
9:45	Preparedness for Post-Event Personal and Community Survival (Brynné Walker)					
10:30	Break (Coffee, tea, juice, snacks)					
10:45		Room 221 (small room) Tsunami Vertical Evacuation Structures (Roger Groom) Teachers	Room 219 (big room) Hazard Inventory (Bonnie Magura, Brynné Walker) Interpreters & EM Educators			
11:35		Room 221 Tsunami Vertical Evacuation Structures (Roger Groom) Interpreters & EM Educators	Room 219 Hazard Inventory (Bonnie Magura, Brynné Walker) Teachers			
12:15	Lunch (Served in Entry Ar	ea)				
1:00	Action Teams: Final preparations for presentations and discussion about the task, schedule, and logistics for each Action Team to develop their March 7, 2015 Share-a-Thon products.					
1:45	Action Teams: Groups 1, 2, and 3 present their ideas for development of Community Educational Programs on earthquake/tsunami science and preparedness. 20 minutes total per group (2 minutes prelude; 10 minutes presentation; 8 minutes discussion). Groups are encouraged to model how they will present specific concepts in different educational settings.					
2:45	Break (Coffee, tea, juice, snacks)					
3:00	Action Teams (continued): Groups 4 and 5 presentations.					
3:40	Action Teams debrief and further develop their Project Plan, including tasks, schedule, and logistics for completing and implementing their project and reporting results at March 7, 2015 Share-a-Thon.					
4:15	Post-Workshop Assessment (Michael Coe, Beth Pratt-Sitaula). Focus groups will be held by educator type (teachers, interpreters, EM educators). When you are not in a focus group, you will be taking the post-workshop survey.					
5:30	Adjourn					