

State of Alaska 2014 Activities



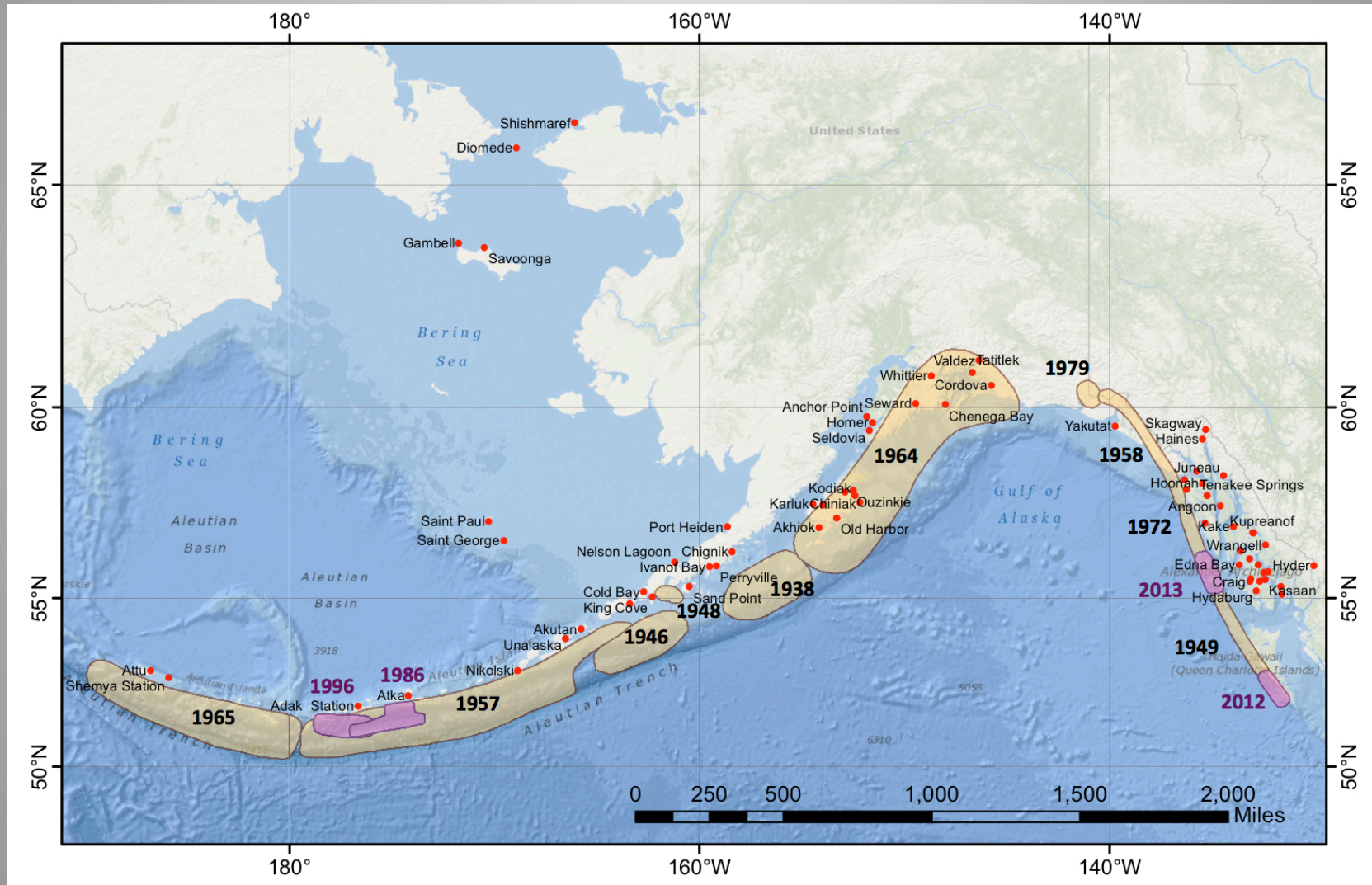
**Division of Homeland Security
and Emergency Management**



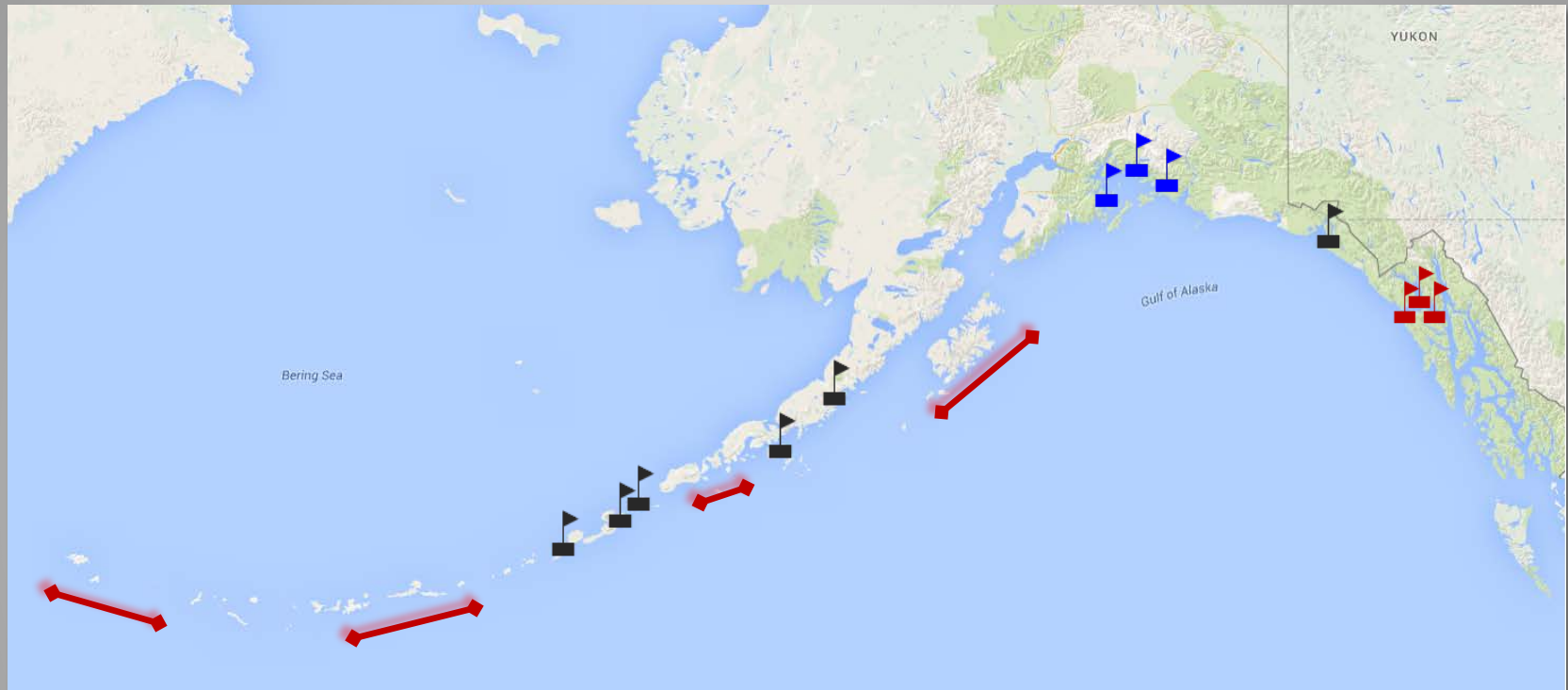
**Geophysical Institute,
University of Alaska Fairbanks**

**NTHMP Annual Meeting
Portland, January 2015**

Alaska coastal communities at risk of tsunamis



Objective 1: Mapping and Modeling



- ***Cordova, Tatitlek*** - report is published
- ***Chenega*** – report is published
- ***Elfin Cove, Gustavus, Hoonah*** – report is in press
- ***Unalaska, Akutan*** – report is accepted
- ***Sand Point, Yakutat*** – reports are in review
- ***Chignik, Nikolski*** – reports are in preparation
- ***Kodiak Island, Western Aleutians*** - Regional Assessment is in progress

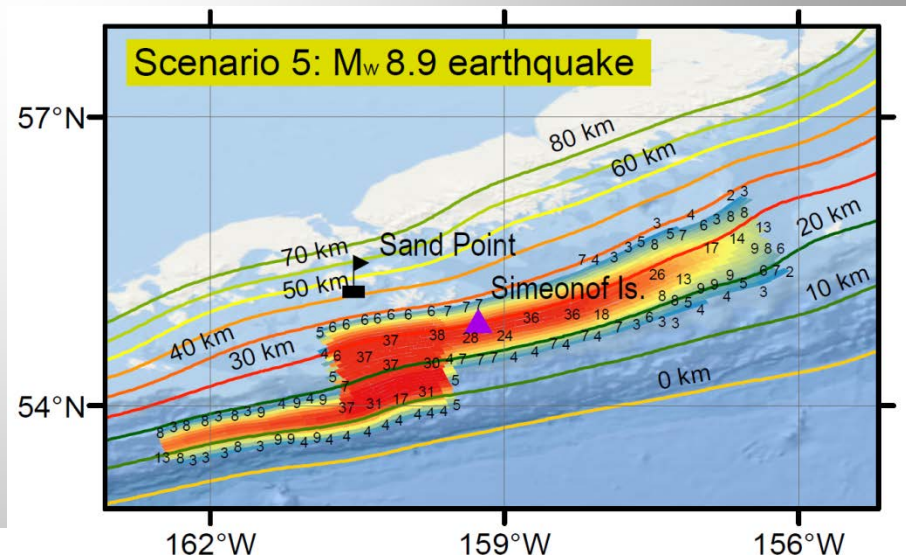
Objective 1: Mapping and Modeling

1. DEM Verification efforts: *Karluk, Larsen Bay, Chiniak, Ouzienki, Port Lions, Akhiok, and Old Harbor*. These DEMs are currently being developed by NGDC. DEMs for *Haines and Skagway* are already developed.



A very nice day for the DEM verification efforts

2. Development of the methodology to construct maximum credible scenarios for various communities. Application of this technique to define tectonic sources for *Sand Point, Unalaska/Dutch Harbor, Chignik, King Cove, Cold Bay* and landslide-sources for communities in glacial fjords such as *Yakutat, Juneau*.



A hypothetical slip distribution near the Shumagin Gap

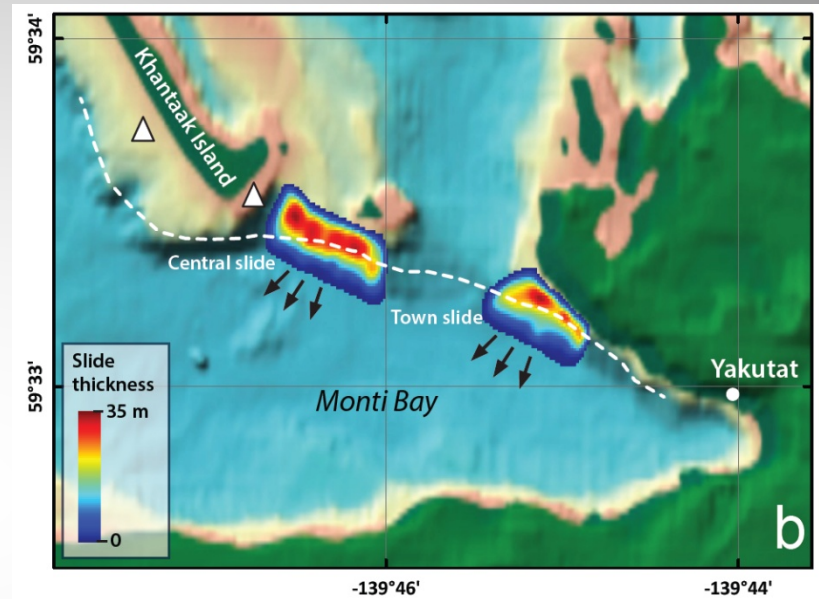
Objective 1: Mapping and Modeling

Location and thickness of the hypothetical submarine mass failures

- Assessment of the landslide-generated tsunami hazard in ***Yakutat and Juneau***. Collaboration with University of Delaware on development of the coupled model.

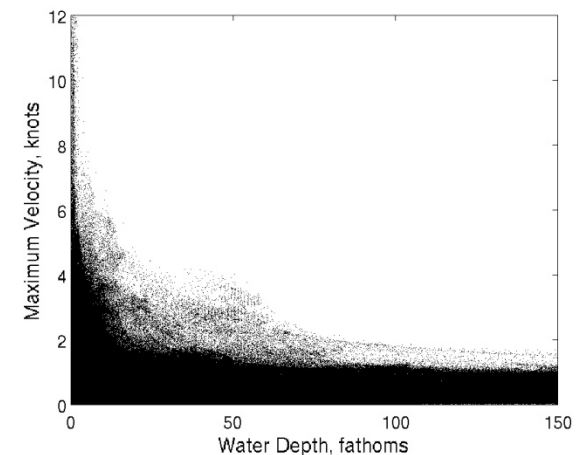
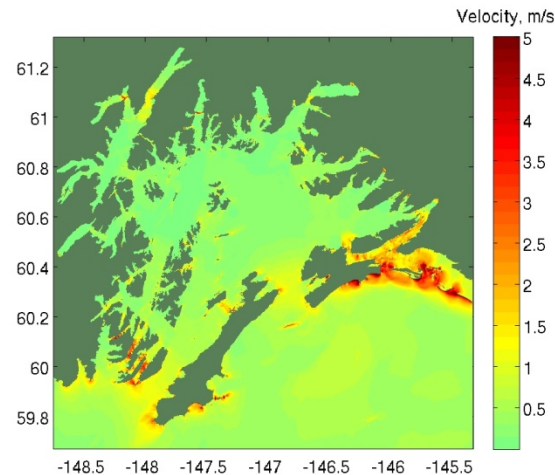
NHWAVE “Viscous Slide” => Alaska

NHWAVE “Viscous Slide” => FUNWAVE

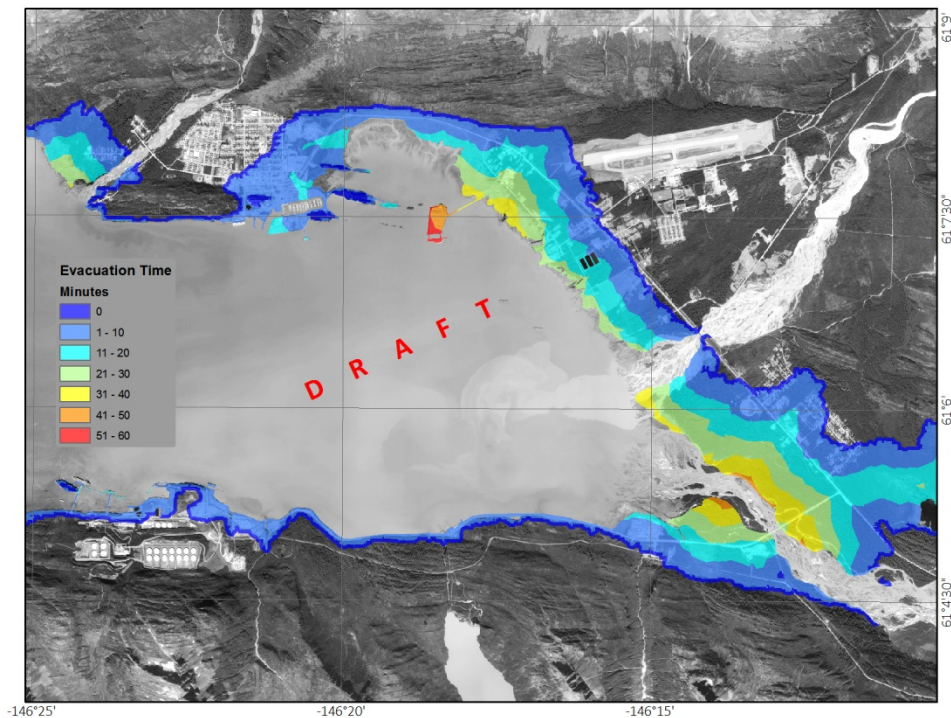


- Modeling of the tsunami currents reveals some hazardous currents forming in narrow passages and near the tip of the narrow peninsulas.

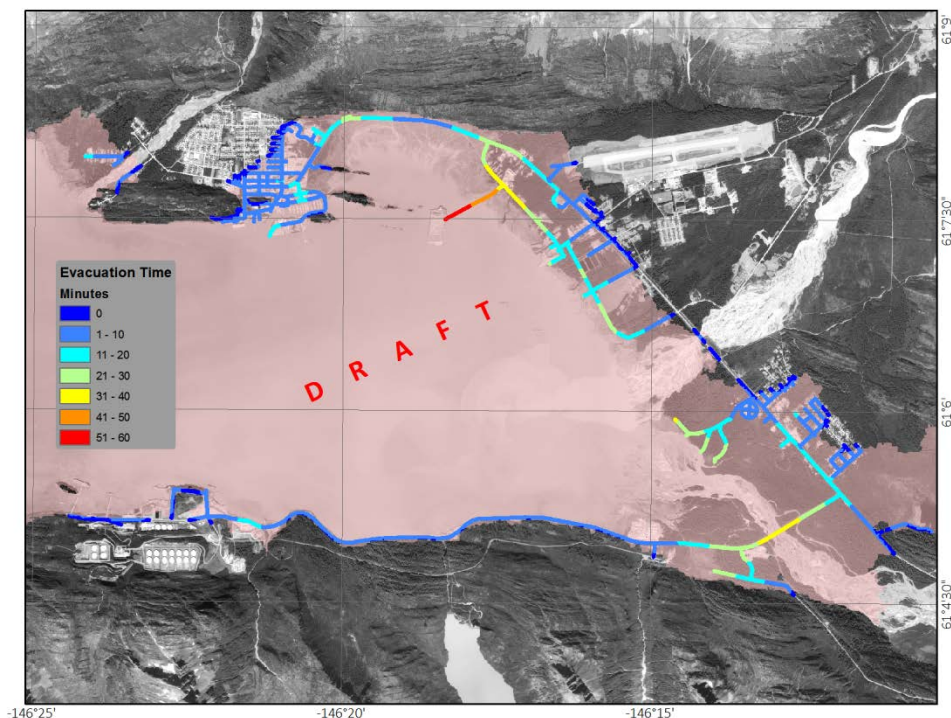
Modeling a Cascadia event in Prince William Sound



Objective 1: Pedestrian Travel Time to Safety



Travel time to **the boundary** of the tsunami inundation zone



Travel time to **the designated safe zones** from the tsunami inundation zone

Guidelines need to be developed!

Alaska DHS&EM 2014 Highlights

- **Kodiak Tsunami Operations Workshop**
 - Over 30 participants from 15 communities
 - School presentations
 - Radio interview
- **“Cordova Campaign”**
 - Radio interview
 - Presentations (Schools, USFS, TSA, City Council, Filipino community)
 - Tsunami survivor remembrance ceremony
- **Riskland: Remembering the 1964 Earthquake**
 - Summer long exhibit display at Anchorage Museum

Alaska DHS&EM 2014 Highlights

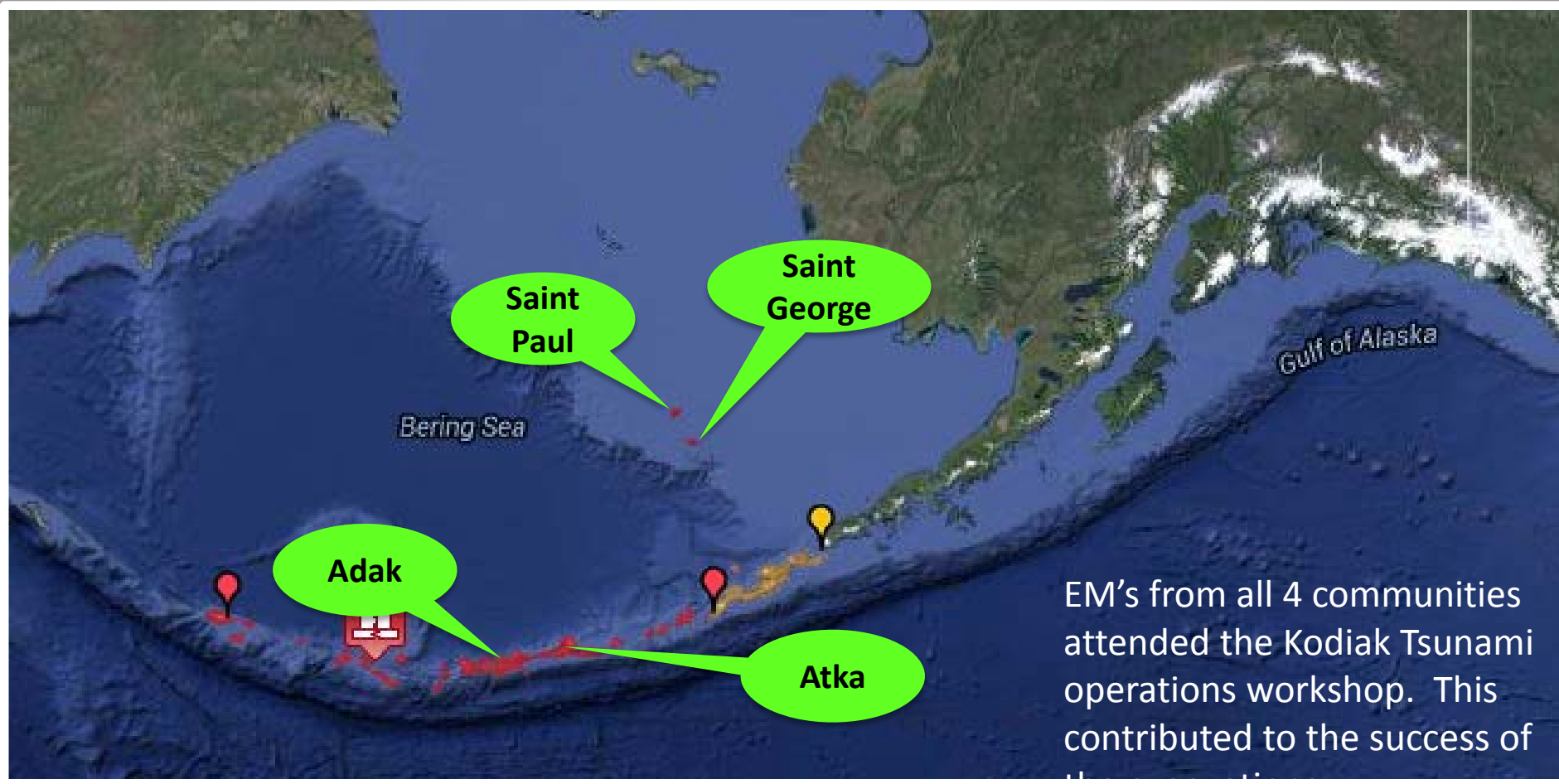
- **TSW Live Code Test**
 - **Complete community call-down**
 - **New EOC community contact database**
- **Alaska Shield 14**
 - **9.2 Earthquake/Tsunami scenario**
 - **National Capstone exercise**
- **“Lunch and Learn at the Capitol”**
 - **Legislature presentation**
- **Alaska Assoc. of Harbormasters presentation**

Alaska DHS&EM 2014 Highlights

- **Unalaska visit**
 - **LEPC presentation**
 - **Harbormaster meeting**
 - **School presentations**
- **Siren Installations in SE Alaska**
 - **Klawock**
 - **Skagway**
 - **Craig**
 - **Ketchikan**
- **Evacuation Signage to Ketchikan and Craig**
- **Cordova TsunamiReady Recognition**

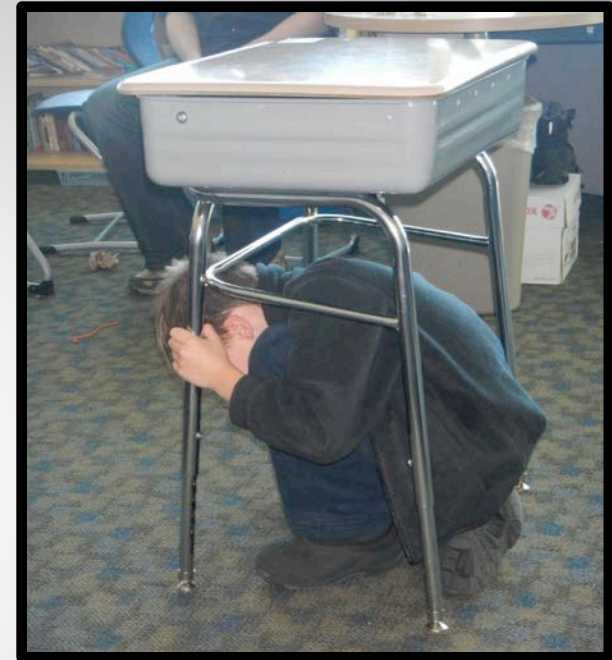
Alaska DHS&EM 2014 Highlights

June 23, 2014 TSW Evacuations



EM's from all 4 communities attended the Kodiak Tsunami operations workshop. This contributed to the success of the evacuations.

Alaska DHS&EM 2014 Highlights



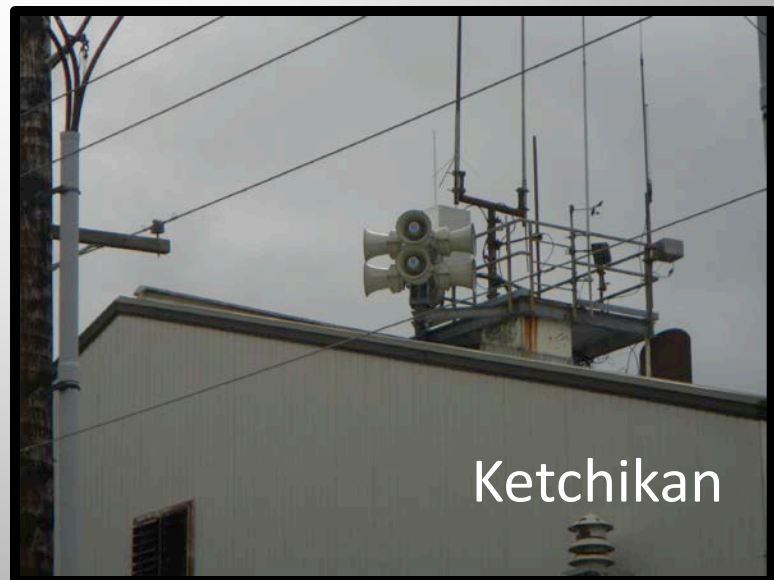
Alaska DHS&EM 2014 Highlights

Craig



Skagway

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Ketchikan

Alaska DHS&EM 2014 Highlights

