

# State of Alaska 2016 Activities



ALASKA  
**EARTHQUAKE  
CENTER**

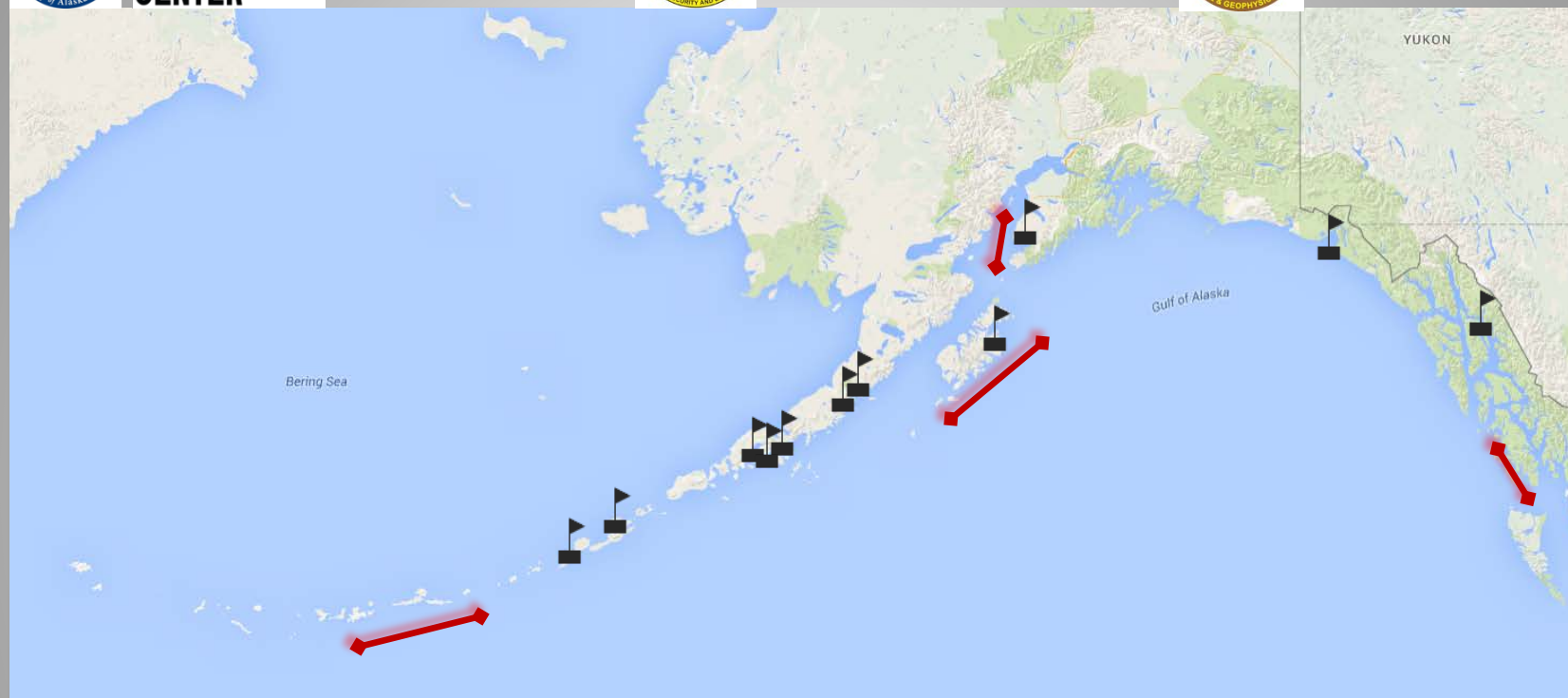
Geophysical Institute,  
University of Alaska  
Fairbanks



Division of Homeland Security  
and Emergency Management



Alaska Division of  
Geological &  
Geophysical Surveys

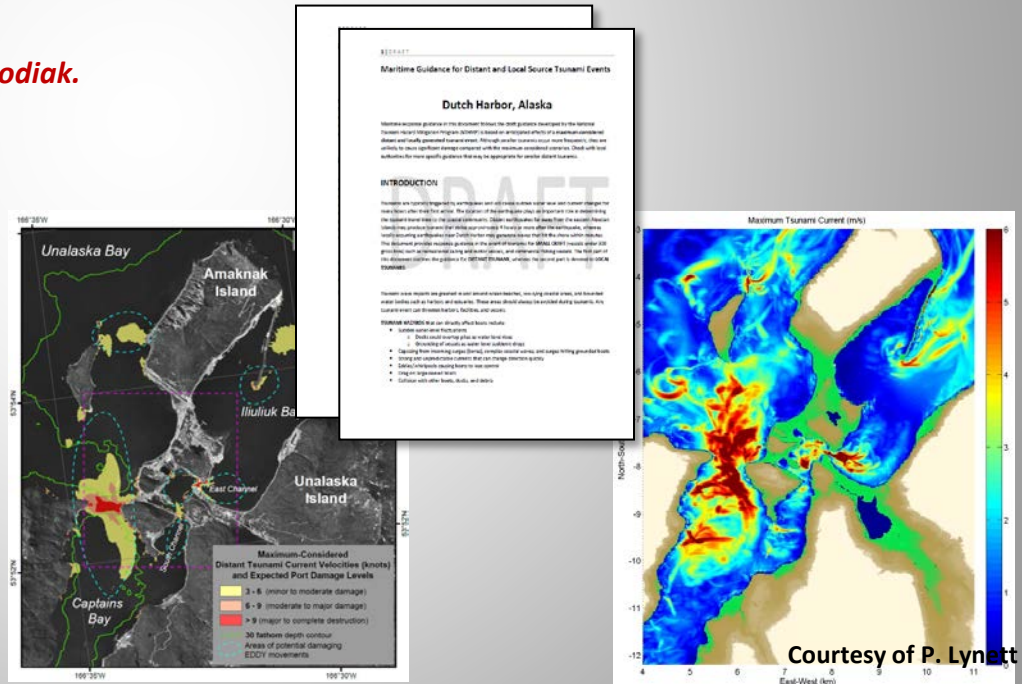
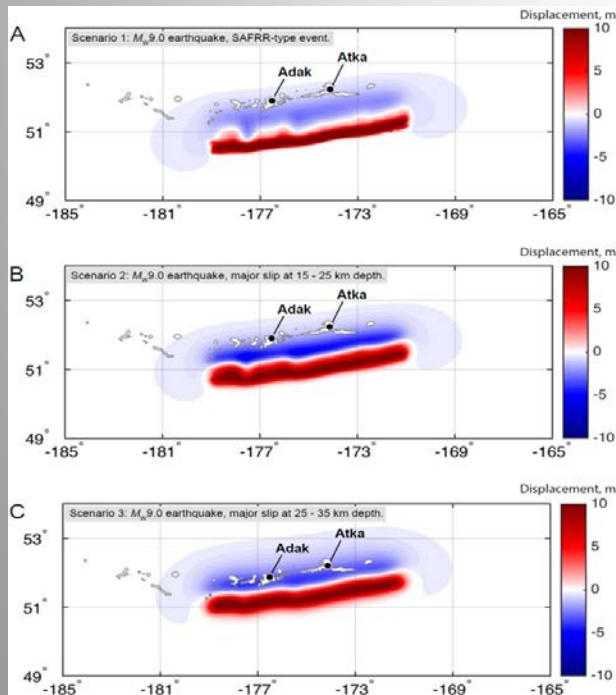


## NTHMP Annual Meeting Portland, February 2017

- ***Yakutat and Nikolski*** – two reports are published
- ***Cold Bay and King Cove*** – report is published
- ***Chignik Bay and Chignik Lagoon*** – report is published
- ***Sand Point*** – report is in press
- ***Kodiak City and USCG Base*** – report submitted
- ***Juneau*** – report is submitted
- ***Kodiak Island, Western Aleutians*** - Regional Assessment is accepted
- ***Southcentral and Southeast Alaska*** - Regional Assessment is modeled

# Objective 1: Mapping and Modeling

1. Approximate tsunami hazard boundary maps (THBM) for areas without high-resolution DEMs in *Adak, Atka, Akhiok, Chiniak, Karluk, Larsen Bay, Old Harbor, Ouzinkie*, and *Port Lions* were presented to the communities and are now at the publication stage.
2. Approximate THBM for *Port Graham, Nanwalek, Anchor Point, Craig, Port Alexander* and *Ketchikan* are developed.
3. Pedestrian travel time maps to safety were presented to the communities of *Unalaska, King Cove, Homer* and *Chignik Bay*.
4. Modeling of the tsunami currents near the *City of Sitka* and *City of Dutch Harbor* using the Alaska and FUNWAVE models for the maximum credible distant and local sources.
5. Modeling of tsunami currents in *Sitka, Dutch Harbor* and *Kodiak* due to  $M_w$  9.3 and 9.6 earthquakes by Pat Lynett (within the SAFRR project USGS).
6. Presentation of the maritime guidance to the *City of Kodiak*.

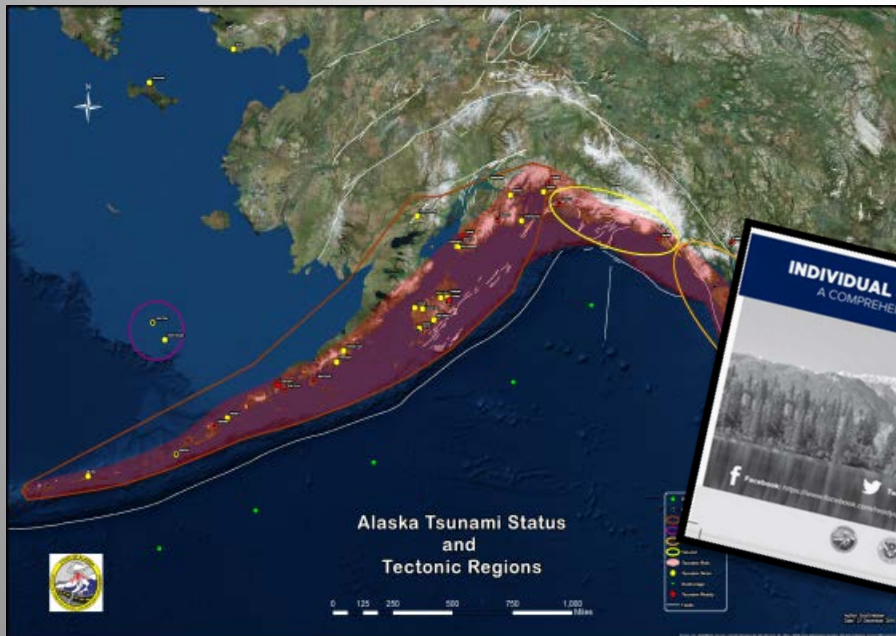


Tsunami induced by the distant sources

Tsunami induced by the local  $M_w$  9.3 source

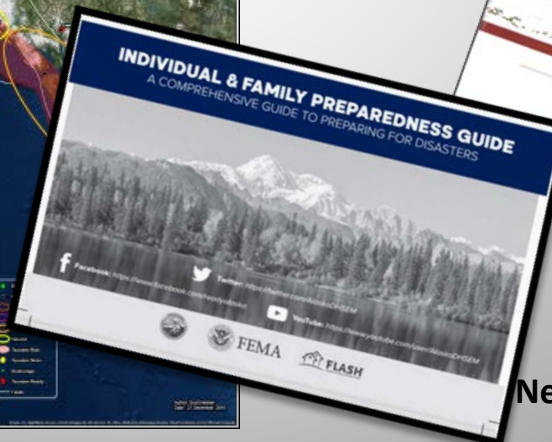
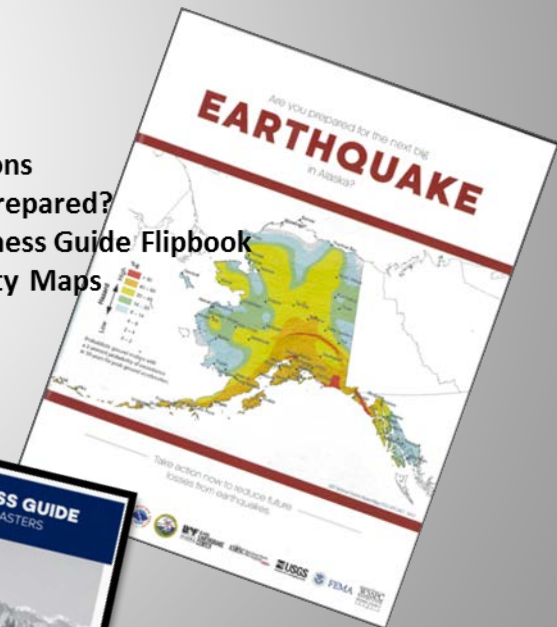
# Alaska DHS&EM 2016 Highlights

- Unalaska Tsunami Operations Workshop
  - Over 30 participants from 15 communities
  - School presentations
  - Radio interview
- Southeast Quake Simulator Tour
  - EQ & Tsunami presentations (Schools, USFS, EM's, City Council, Tribal community)
  - Covered 14 communities in 1 month, including Whitehorse, Canada. 10K attendees
- Alaska Assoc. of Harbormasters presentation
  - Maritime Guidance and harbor actions



## New Publications

- Are you prepared?
- Preparedness Guide Flipbook
- Community Maps



Next step- AK Maritime Guidance

# Alaska NTHMP 2017 Proposal

Task 1: Administer the State NTHMP tsunami grant

Tasks 2&3: Participation in the NTHMP activities, travel for members of the NTHMP Coordinating Committee

## **Objective 1: Continue Tsunami Inundation Modeling and Mapping**

Task 4: Publish and present the technical reports for four highly threatened communities: Haines, Skagway, Homer, and Seldovia

Task 6: High resolution modeling and mapping Adak and Atka (verification of the approximate Tsunami Hazard Boundary Zone developed in the FY14 period)

Task 8: Approximate Tsunami Hazard Boundary Zone for six highly threatened communities in non-mapped coastal regions of Southeast Alaska

Task 9: Develop and publicize pedestrian evacuation products for selected communities

Task 10: Tsunami DEM verification efforts for Craig, Klawock, Port Alexander, and Wrangell

Task 11: Tsunami Current Modeling at Places of Refuge near the communities of Chenega Bay and Tatitlek

Task 12: Developing a playbook approach for estimation of the time frame, over which significant wave activity and tsunami currents can occur in Unalaska/Dutch Harbor

Task 13: Tsunami DEM development for the communities of Old Harbor and Akhiok

## **Objective 2: Continue Mitigation and Education efforts**

Task 5: Conduct a Tsunami Operations Workshop

Task 7: Provide training for maintenance and support of tsunami sirens systems across Alaska

## **Objective 3: Promote TsunamiReady**

plan to re-certify communities to TsunamiReady status during the TOW.