



*We develop seismic policies and share information to promote programs intended to reduce earthquake related losses.*



*A non-profit earthquake consortium for the western states*

**Winter 2018  
e-Newsletter**

**Western States  
Seismic Policy Council**

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**SAVE THE DATE!**

**National Earthquake Program Managers Meeting and WSSPC Annual Meeting will meet held at the Crowne Plaza Seattle Downtown Hotel in Seattle, Washington April 30 – May 4, 2018.**

**WSSPC Board Update: The revised policy recommendation are posted on the WSSPC website as Version 3:<http://www.wsspc.org/public-policy/2018-wsspc-draft-policy-recommendations/>. The policies will need to be approved by the members at the Annual Business meeting on Friday, May 4 in Seattle, Washington (following the NEPM meeting).**

**WSSPC Policy Recommendation Survey**

The WSSPC office recently sent out a policy survey to assess whether the policies have been implemented by our member states, territories, and provinces, and to show progress towards meeting the goals set forth within the policies. The survey results will be compiled and made available on the WSSPC website. To take the survey, go to the following website, download the survey, and return the completed survey to the WSSPC office: <http://www.wsspc.org/public-policy/recommendation-survey/>

**New FEMA Region X Administrator—Mike O’Hare**

On Monday, December 11 WSSPC Board Member Mike O’Hare was sworn in as the new FEMA Region X Administrator by Brock Long. O’Hare joins FEMA with a wealth of knowledge having previously held roles as the Alaska Director of the Division of Homeland Security and Emergency Management and Acting Deputy Commissioner for the Department of Military and Veterans’ Affairs for Alaska. In his earlier career Mike worked as a Legislative Aide in the Alaska State Legislature.

“I look forward to working closely with our government, private sector and non-governmental partners as we continue to strengthen our culture of preparedness and community resilience” Mike O’Hare stated.



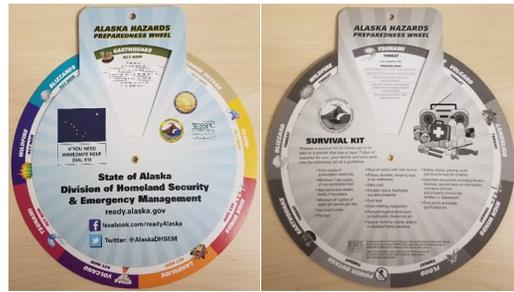
We will miss Mike’s participation as a Director on the WSSPC Board, and wish him well in his new position.

*Image: Mike O’Hare being sworn in by Brock Long.*

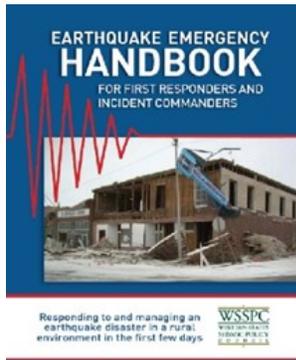
*Source: FEMA News Photo*

## Alaska Natural Hazards Preparedness Wheels

The Hazards Wheel is a fun way to learn more about nine different Alaskan hazards, including earthquakes and tsunamis. On one side, the wheel explains what the threat is and what preparedness actions to take and on the colored side it gives an easy to follow action plan if faced with that hazard. The wheels were printed using FY16 FEMA State Support funding.



## Earthquake Emergency Handbook



The *Earthquake Emergency Handbook for First Responders and Incident Commanders* was created for rural communities with limited resources and is intended to guide response within the first 48 to 72 hours after an earthquake – before State and Federal assistance is available. The handbooks were printed with FY15 FEMA State Support funding.

To obtain free copies, contact:  
Utah Division of Emergency Management  
c/o John Crofts  
State Office Building, Room 1110  
Salt Lake City, Utah 84114-1201  
jcrofts@utah.gov

Available as pdf: [http://www.wsspc.org/wp-content/uploads/2017/01/Handbook\\_FINAL\\_New.pdf](http://www.wsspc.org/wp-content/uploads/2017/01/Handbook_FINAL_New.pdf)

## Thank You to 2017 WSSPC Affiliate Members!

WSSPC welcomes all members of the professional community who share the common goal of reducing losses from earthquakes. Thanks one more time to our 2017 Affiliate Members:

### Corporate

- Degenkolb Engineers, Inc.
- Saunders Construction, Inc.
- State Farm Insurance Companies
- Weinstein Construction Corporation

### Non-Profit Organizations

- Applied Technology Council
- CA Earthquake Authority
- Earthquake Engineering Research Institute

### Government

- City of Las Vegas, Department of Building and Safety
- Clark County, Nevada, Department of Building and Fire Prevention

Join as an Affiliate Member for 2018 and get the following benefits:

- Recognition of support with a link on the WSSPC website to your organization
- Participation on WSSPC Committees providing input to policy recommendations
- Quarterly E-Newsletters and Monthly Bulletins
- Opportunities to exhibit and sponsor activities

### **Applied Technology Council Co-Hosts Contest**

- The National Institute of Standards and Technology (NIST) and the Applied Technology Council (ATC) invite participation in the prediction of the seismic response of three deep, wide-flange structural steel beam-columns. Contestants are invited to submit a single entry of one of the following two categories: (1) Simple: Capturing the main response parameters; (2) Comprehensive: Capturing the full nonlinear cyclic response of the test specimens intending to predict overall and local response parameters.
- The submittal deadline is January 12, 2018 and category winners will be awarded at the American Institute of Steel Construction Conference (NASCC) taking place in Baltimore, Maryland on April 10-13, 2018. One representative of each category winner will be invited to make a presentation on the techniques used (model and analysis) and challenges arising in the prediction, which resulted in a winning team.
- For more information, please visit the contest website: <https://atcouncil.org/atc-106-blind-contest>

## **NEWS**

### **4.4 Magnitude Hayward Fault Earthquake**

On Thursday, January 04, 2018 at 2:39AM a 4.4 magnitude earthquake occurred along the Hayward fault near the Oakland-Berkeley border. According to the USGS ‘Did You Feel It?’ report, more than 9 million people felt weak, light or moderate shaking. In an interview with the Los Angeles Times, USGS geologist David Schwartz speaks about the earthquake but also about the importance of preparedness. The beginning of the new year is a great time to make sure that all your safety plans are prepared and you know how to react in every situation (i.e. at home, at school, at work, driving, etc.).

References:

<http://beta.latimes.com/local/lanow/la-me-ln-earthquake-bay-area-20180104-story.html>

<https://earthquake.usgs.gov/earthquakes/eventpage/nc72948801#executive>

### **National Earthquake Resiliency Coalition**

The National Earthquake Resiliency Coalition is a group formed after the last National Earthquake Conference in 2016 to keep the visibility on earthquakes alive. The group meets every 2 months on a conference call, with the next call occurring on January 18, 2018. The Coalition is led by FLASH who has set up a You Tube channel. Their goal is to have at least 100 subscribers.

You can subscribe here:

[https://www.youtube.com/channel/Ucc\\_3X9-gk1BwGij8WDM90RA](https://www.youtube.com/channel/Ucc_3X9-gk1BwGij8WDM90RA)

## M4.1 Earthquake in Dover, Delaware

On November 30, 2017 what was initially registered by the USGS as a magnitude 5.1 earthquake occurred roughly ten kilometers northeast of the Dover Air Force Base in Dover, Delaware. After further review, the USGS later revised the magnitude to 4.1. While there were no reports of injuries or damages to infrastructure, the quake was felt in many major cities along the U.S. East Coast.

“This is the largest quake within a 150 km radius of this hypocenter at least since 1994 (M4.6 near Reading, PA) and it may be the largest earthquake in Delaware since an event on Oct 09, 1871 along the Delaware River near Wilmington. The 1871 quake has no magnitude estimate, but caused some damage at Wilmington and New Castle, Delaware and at Oxford, Pennsylvania” (USGS).

The USGS “Did You Feel It?” Comparison map shows how far the shaking is felt from the epicenter of an earthquake. The yellow stars are the epicenters of recent earthquakes; as you can see, shaking travels further in the eastern and central part of the U.S. than the west.

The purple area is the felt area of the Dover, Delaware earthquake.

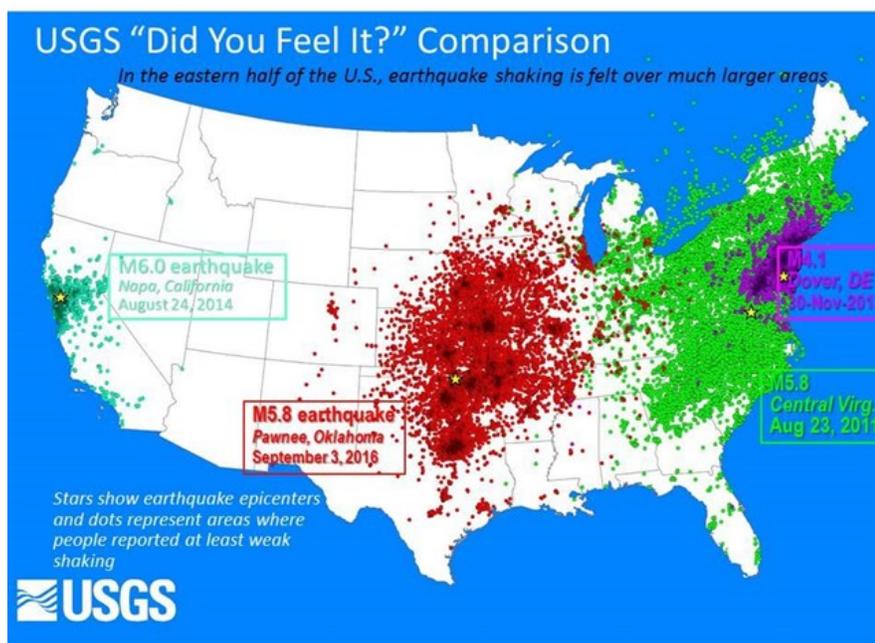


Image: “Did You Feel It?” map of U.S.  
Source: Robert Williams and Eric Jones, USGS

### References:

<https://earthquake.usgs.gov/earthquakes/eventpage/us1000bjkn#executive>

<https://www.usgs.gov/news/magnitude-41-earthquake-near-dover-delaware>

<https://watchers.news/2017/12/01/unusual-m4-1-earthquake-near-dover-delaware/>

## California Workers Compensation Losses Estimated in Study

The California Workers Compensation Insurance Rating Bureau commissioned Risk Management Solutions Inc., to estimate California worker's compensation claims in the event of an earthquake. Using a proprietary model that incorporates the latest science in earthquake hazard and vulnerability research, RMS reported future possible risks and losses in *Workers' Compensation Risk Assessment California Earthquake*.

The study looked at two different earthquake events: 100-year event and 250-year event. Researchers noted the vast difference in estimated losses depending on the time of day. "Recent earthquake events in California such as the Loma Prieta Earthquake (in 1989) and the Northridge Earthquake (in 1994) happened during off-peak hours," said Ward Brooks, rating bureau vice president of research. "Had the timing been different, the human impact could have been much worse."

Event	Estimated Loses	Fatalities	Time of Day
100-year earthquake	>\$300 million	Over 300	off-peak hours
100-year earthquake	\$1.5 billion	not calculated	peak work-time hours
250-year earthquake	>\$1.4 billion	Over 1,000	off-peak hours
250-year earthquake	\$5.1 billion	not calculated	peak work-time hours

The study also found that three counties – Los Angeles, Santa Clara, and Orange Counties – had about half the full time employees and payroll of the state dataset. As might be expected, the highest employee and payroll exposure coincides with the location of the hazard. The average annual estimated insured loss is \$29 million, a figure that cannot be excluded from workers' comp coverage. Injuries that created permanent total disabilities were the driver of overall estimated costs, accounting for over one-third of the expected annual loss.

### References:

<http://www.businessinsurance.com/article/20171219/NEWS08/912318024/Report-analyzes-workers-comp-and-earthquake-risk-in-California>

<https://www.wcirb.com/news/wcirb-report-california-earthquake-risk-assessment>

[https://www.wcirb.com/sites/default/files/documents/rms\\_earthquake\\_risk\\_study\\_for\\_wcirb\\_20171211.pdf](https://www.wcirb.com/sites/default/files/documents/rms_earthquake_risk_study_for_wcirb_20171211.pdf)

## HAZARDS MITIGATION & PREPAREDNESS

### **Embracing Building Regulations**

A new research study shows that even though people believe instituting building code regulations is too costly, in the short- and long-term such mitigation can actually be cost effective and increase property values.

This has become evident over the past few decades. In 1992 Hurricane Andrew led to the development of several design methods and building code regulations that, when used, significantly minimized wind damage on residential houses. Another example was when Florida implemented building code regulations before seven land-falling hurricanes struck the state in 2002. Researchers from the Wharton Risk Center and National Center for Atmospheric Research examined the performance of the Florida building codes and discovered the state experienced 72 percent less damage due to the codes.

Although earthquakes do not occur as frequently as hurricanes, we know that incorporating the seismic provisions of the most recent building codes in new construction is what will reduce damage and save lives when an earthquake does occur. WSSPC has adopted policy recommendations that have addressed adopting the seismic provisions in the building code as well as identifying and mitigating vulnerable building types. These policy recommendations are on the WSSPC website at <http://www.wsspc.org/public-policy/adopted-recommendations/>.

In an interview with Temblor, David Oppenheimer, the former director of the USGS Northern California Seismic Network, stated “Elected officials must do their part to implement ordinances and laws that require the public to upgrade at-risk private property. A small investment in mitigation will have large payoffs to property owners, inhabitants, and resiliency of our metropolitan area.” There is no question that implementing building codes comes with a price tag, however history shows that the initial investment pays off in the end.

#### References:

<https://hazards.colorado.edu/news/research-counts/86>

<http://harbert.auburn.edu/news/Fortified-built%20homes%20increase%20property%20values%20by%207%20percent.php>

<http://temblor.net/earthquake-insights/largest-hayward-fault-earthquake-since-1981-raises-questions-about-what-could-happen-next-5999/>

There are so many ways to stay connected!

Online- [www.wsspc.org](http://www.wsspc.org)

Twitter- [@WSSPC](https://twitter.com/WSSPC)

Facebook- [www.facebook.com/WSSPC](https://www.facebook.com/WSSPC)

## Tiny Houses Offer Post-Earthquake Shelter



*Image: M.A.Di. House  
Source: wonderfulengineering.com*

Italian architect Renato Vidal designed the newest earthquake resistant, prefabricated house on the market known as the M.A.Di. house. It is built to withstand earthquakes by using cross-laminated timber (CLT) with steel hinges allowing it to be easily installed or folded and stored. The house is available in three sizes: a 290 square foot tiny home, a 603 square foot double home and a 904 square foot triple family home. All homes have two levels complete with a kitchen, dining area, bedroom (s), and bathroom. No foundation is needed for temporary installations.

The house is customizable and can ultimately have several functions. Due to its compact nature, the M.A.Di. house could easily be kept in storage until needed as an emergency housing system that could be installed in one day. Prices start at \$33,000.

### References:

<http://wonderfulengineering.com/foldable-house-can-withstand-earthquakes/>

<https://www.curbed.com/2017/11/27/16705326/madi-house-renato-vidal-tiny-prefab-flatpack-folding>

## RESEARCH

### **Offshore Islands Don't Protect Coastlines From Effects of Tsunamis**

Experimental testing of tsunami inundation on coastal beaches located behind offshore islands has confirmed results of prior computer simulations: contrary to what many in coastal communities may believe, offshore islands do not protect them from tsunami run up on the mainland.

Researchers from Texas A& M University conducted their experiments using the Oregon State University Directional Wave Basin where they created artificial tsunami waves that swept around improvised islands and onto a ramp serving as the model's beach.

As the waves passed around each side of the island, they met on the lee side where they nearly doubled in height. Researchers noted that as they moved an island closer to the beach, inundation on the mainland increased unless the tsunami wave broke before reaching the island. The island shape or presence of a reef did not impact the amount of inundation.

They also modeled side by side islands and found that, according to researcher James Kaihatu, "the coastline behind the gap between the islands experiences less inundation than the areas shadowed by the islands."

The team's findings were presented at the American Geophysical Union's 2017 Fall Meeting.

### References:

<https://eos.org/articles/offshore-islands-might-not-shield-coastlines-from-tsunami-waves>

<https://news.usc.edu/70790/offshore-islands-wont-offer-buffer-from-tsunamis-power/>

<http://www.sciencemag.org/news/2014/11/small-islands-offer-no-protection-against-tsunamis>

## Understanding the Queen Charlotte-Fairweather Fault System

Since 2012 when a large M7.8 earthquake struck Haida Gwaii, scientists have reinvigorated their focus on learning more about the Queen Charlotte-Fairweather fault system, a transform fault that marks the boundary between the Pacific plate and the North American plate. The Fairweather fault is on land for about 170 miles from Yakutat Bay in southeastern Alaska before it goes out to sea and joins with the Queen Charlotte fault offshore British Columbia, and ends at the Explorer Triple Junction.

U.S. and Canada scientists teamed up in 2015 on a multi-year research project exploring the fault system with a goal of better understanding the earthquake, tsunami, and submarine landslide hazards. Researchers conducted seismic-reflection surveys, collected bathymetric data, sampled the sea floor with piston cores, and collected high resolution images of the strike slip fault.

Gary Greene, representing the Sitka Sound Science Center, said “This investigation has revealed a spectacularly active fault zone that probably represents the best-defined and most extensive transform plate boundary found anywhere on Earth.” Analysis of the data is expected to take several years, and the results will help the region’s residents, businesses, and governments better prepare for the future.

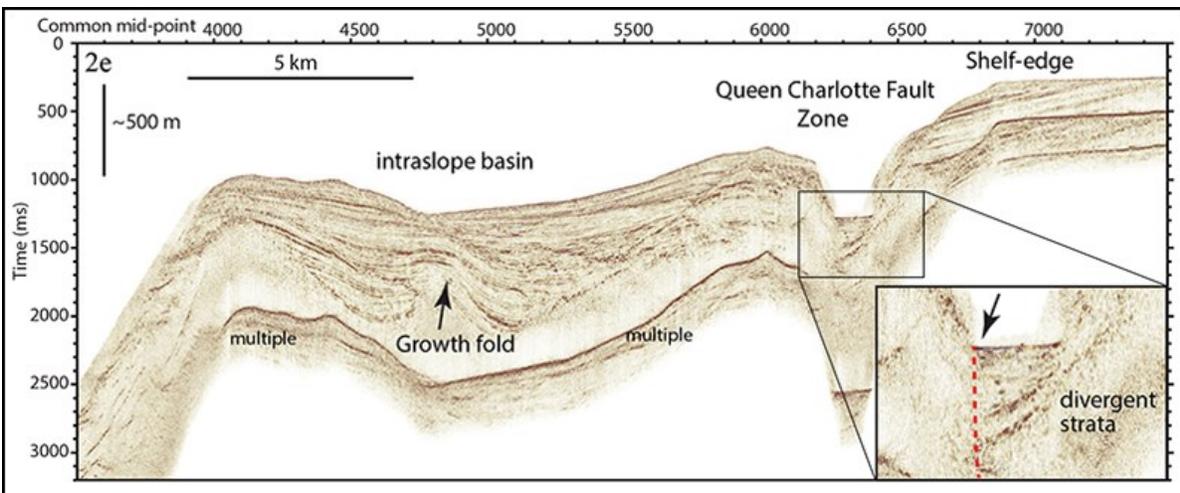


Image: Seismic Reflection Profile (acquired in August 2016)

Source: eos.org

### References:

<https://www.usgs.gov/news/us-and-canadian-scientists-explore-major-undersea-earthquake-fault>

<https://eos.org/project-updates/a-closer-look-at-an-undersea-source-of-alaskan-earthquakes>

<http://www.earthquakescanada.nrcan.gc.ca/historic-historique/events/19490822-en.php>

<http://nwcoastenergynews.com/2015/04/06/7304/devastating-megathrust-earthquake-substantial-hazard-haida-gwaii-canada-us-study-warns/>

### **Chile Seismic Records May Contribute to Better Understanding of Earthquake Nucleation**

The magnitude 6.9 Valparaiso, Chile quake in April 2017 was used by researchers to try to better understand the formation of earthquakes. Researchers used data from broadband stations and GPS readings from before, during and after the main shock of the earthquake to determine how the quake was initiated. They discovered it was triggered by a slow-slip event, categorized by its slower velocity rupture, about 2 days before the main shock. The formation of the earthquake, from the first foreshocks to the main shock to the final aftershocks, as well as the rupture dynamic (its movement, deformation, and rock breakage as the earthquake develops) were studied in great detail.

The research team, led by S. Ruiz of the Geophysics Department, Universidad de Chile, Santiago, Chile, created “one of the best records in existence of the nucleation phase of an earthquake”, according to Sarah Whitman, a freelance writer. “This is an important step toward understanding how earthquakes develop and could help scientists predict seismic events with more accuracy.”

#### References:

Whitman, S. (2017), *Mapping a Valparaiso earthquake from foreshock to aftershock*, *Eos*, 98, <https://doi.org/10.1029/2017EO087283>  
<https://eos.org/research-spotlights/mapping-a-valparaiso-earthquake-from-foreshock-to-aftershock>  
<http://onlinelibrary.wiley.com/doi/10.1002/2017GL075675/abstract;jsessionid=CA19892E8AEFBA7A0AE32DE1133C4E5A.f03t02>

### **Slowdown in Earth’s Rotation Predicts Earthquake Increase for 2018**

At the October Geological Society of America meeting, Roger Bilham of the University of Colorado at Boulder and Rebecca Bendick of the University of Montana presented the idea of slowdowns in Earth’s rotation being able to predict earthquakes. In an interview, Bilham stated, “there’s a possibility that instability in the Earth’s rotating core might cause these slowdowns in rotation. And those tiny changes could cause the Earth’s tectonic plates to bump into one another, similar to the way people on a subway car or bus bump into each other when it stops abruptly.”

Research began by examining every earthquake to occur, with a magnitude 7.0 or higher, since 1900. Findings showed that roughly every 32 years the number of significant earthquakes worldwide increases. Around every 25-30 years the Earth’s rotation slows down; the slowdown historically lasts for five years with the last year triggering an increase in earthquakes. 2018 is the fifth year of a slowdown sequence which is why research teams believe we will see an increase in earthquakes, somewhere in the world.

#### References:

<https://www.smithsonianmag.com/smart-news/does-earths-molten-core-power-earthquake-cycle-180967054/>  
<https://www.forbes.com/sites/trevornace/2017/11/20/earths-rotation-is-mysteriously-slowing-down-experts-predict-uptick-in-2018-earthquakes/#63e3036d6f24>  
<http://temblor.net/earthquake-insights/can-changes-in-earths-rotation-be-used-to-forecast-earthquakes-5642/>

## Using Dark Fiber to Monitor Earthquakes

Scientists at the Department of Energy's Lawrence Berkeley National Laboratory and Stanford University have revealed that dark fiber can be used as sensors to detect earthquakes. Dark fiber (or optical fibers) are the vast network of unused fiber-optic cables installed throughout the country. The Stanford School of Earth, Energy & Environmental Sciences explained the idea of using dark fiber: "The same optical fibers that deliver high-speed internet and HD video to our homes could one day double as sensors for monitoring and studying earthquakes."

The researchers used Distributed Acoustic Sensing (DAS), a technology used in the pipeline and oil and gas industries, to record changes in the fiber. Vibrations change the signal recorded, and with some fancy signal processing, the researchers were able to distinguish not only different magnitude quakes but also detected and differentiated P and S waves.

Researchers have high hopes for dark fiber to someday be able to contribute to earthquake early warning but first they need to demonstrate that the technology can operate at city-wide and larger scales.

### References:

<https://blogs.agu.org/geospace/2017/12/05/dark-fiber-using-sensors-beneath-our-feet-to-tell-us-about-earthquakes-water-and-other-geophysical-phenomenon/>

<http://onlinelibrary.wiley.com/doi/10.1002/2017GL075722/full>

<https://www.nature.com/articles/s41598-017-11986-4>

<https://news.stanford.edu/2017/10/19/building-billion-sensors-quake-monitor-optical-fibers/>

## ADDITIONAL RESOURCES & PUBLICATIONS

### **Building Trust and Communication between Academic, Government and Industry Scientists**

Building trust and communication between stakeholders before a disaster strikes is imperative in order for collaboration during the disaster to occur effectively, according to a new study published by the Resilience Alliance in *Ecology and Society*. "Experience has shown that integrating nongovernmental scientific expertise into disaster decision making can improve the quality of the response, and is most effective if the integration occurs before, during, and after a crisis, not just during a crisis." Unfortunately, due to time pressures, differences in culture and priorities, as well as legal restraints, collaboration between academic, government and industry scientists doesn't happen very frequently. Using a methodology developed by Stanford ChangeLabs called the Deep Change Method, the study's authors propose a Science Action Network as a way to incorporate science-based decision making into partnerships.

To read the article visit: <https://www.ecologyandsociety.org/vol22/iss2/art18/>

## SAVE THE DATE!

*Week of April 30, 2018*

NEPM and WSSPC  
Annual Business Meeting  
Seattle, Washington  
[www.wsspc.org](http://www.wsspc.org)

## PEOPLE & TRANSITIONS

### WSSPC Welcomes New Members

- Erin Campbell, State Geologist, Wyoming State Geological Survey
- Jay Raskin, Chair, Oregon Seismic Safety Policy Advisory Commission (OSSPAC)
- Marschal Rothe, Montana Disaster Emergency Services, Response and Recovery Branch Manager
- Jerome A. Steuve, Director, Clark County, Nevada Department of Building and Fire Prevention [Affiliate Member]

### Acting Director, Division of Homeland Security & Emergency Management



Mr. Michael “Mike” Sutton was appointed as acting director of the Alaska Division of Homeland Security and Emergency Management (DHS&EM) within the Alaska Department of Military and Veterans Affairs on December 11, 2017. He was appointed Deputy Director on June 5, 2015.

Mr. Sutton started his career with the State of Alaska in November of 2005. Mike was the Exercise Program manager in the DHS&EM Preparedness Branch where he planned, coordinated, executed and evaluated the largest homeland security exercise in Alaska’s history - Alaska Shield 07.

Following a highly successful exercise and after more than 28 years of public service, Mr. Sutton ventured into the private sector and started his own business. As president of Alaska’s leading veteran-owned emergency management consulting firm, he won contracts for developing an Emergency Operations Plan for the National Science Foundation’s Antarctic outpost at McMurdo Station, writing the Alaska Catastrophic Response Plan for FEMA Region X, creating the first Regional Tribal Response Plan for FEMA, and updating emergency operations plans for dozens of Alaska’s borough’s and communities.

Mr. Sutton retired from the U.S. Air Force in 2005 after 25 years of service with over 2,400 hours in the F-4E and RC-135 aircraft.

Mr. Sutton holds a Bachelors of Business Administration Degree from Texas A&M University graduating in 1978, and completed post-graduate work in Leadership, Management, and Cultural Diversity. Mr. Sutton is a Distinguished Graduate of Squadron Officer’s School, completed Air Command and Staff College, and is a graduate of Armed Forces Staff College.

Mike is an avid outdoorsman and can be found on most weekends with his wife Alisha on one of Alaska’s many hiking trails or on their boat out in Prince William Sound. They have 3 grown children and live in Anchorage, Alaska.

*<https://dmva.alaska.gov/biographies>*

## CONFERENCES, WORKSHOPS & EVENTS

### **Oregon Seismic Safety Policy Advisory Commission (OSSPAC)**

January 9, 2018

Salem, Oregon

<http://www.oregon.gov/oem/Councils-and-Committees/Pages/OSSPAC.aspx>

### **Hayward Fault Meeting**

*Hosted by Math Science Nucleus*

*Planning for the 150<sup>th</sup> Anniversary of the 1868*

*Hayward Earthquake*

January 17, 2018

Fremont, California

<http://msnucleus.org/>

[haywardfault/150\\_hayward.html](http://msnucleus.org/haywardfault/150_hayward.html)

[Register by Tuesday, January 16, 2018]

### **2018 Working Group on Nevada Seismic Hazards**

February 5-7, 2018

Reno, Nevada

<http://www.nbmng.unr.edu/Geohazards/>

[Earthquakes/2018SeismicHazardsWorkshop.html](http://www.nbmng.unr.edu/Geohazards/Earthquakes/2018SeismicHazardsWorkshop.html)

### **Hawaii Mitigation Workshop**

February 21-22, 2018

Honolulu, Hawaii

### **NEMA Mid-Year Forum**

March 19-23, 2018

Alexandria, Virginia

<https://www.nemaweb.org/index.php/forums-meetings/save-the-date>

### **Changes to WSSPC Draft Policy**

**Recommendations are due to WSSPC Office:**

April 13, 2018

### **NEPM and WSSPC Annual Meeting**

April 30 – May 4, 2018

Seattle, Washington

<http://eqprogram.net/>

### **SSA 2018 Annual Meeting**

May 14-17, 2018 (New Dates)

Miami, Florida (New Location)

<https://www.seismosoc.org/meetings/>

### **11th United States National Conference on Earthquake Engineering**

June 25-29, 2018

Los Angeles, California

<https://www.11ncee.org/>

[WSSPC is a Cooperating Organization.]

### **AEG 61<sup>st</sup> Annual Meeting/13<sup>th</sup> IAEG Congress**

September 17-21, 2018

San Francisco, California

<http://www.aegweb.org/mpage/iaeg18m>

### **NEMA Annual Forum**

October 1-4, 2018

Savannah, Georgia

<https://www.nemaweb.org/index.php/forums-meetings/save-the-date>

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If you have a newsworthy item for our e-Newsletter, please forward it to  
Erin Mommsen Program Manager at: [emommsen@wsspc.org](mailto:emommsen@wsspc.org)