

**City Council Workshop  
Emergency Disaster Preparedness  
Friday, May 4, 2012, 10:00 a.m. - 2:00 p.m.  
City Hall – Council Chambers**

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**CALL TO ORDER** Mayor Dudley called the meeting to order at 10:00 a.m..

**ROLL CALL**

Mayor Scott Dudley  
Three Members of the Council,  
Jim Campbell  
Tara Hizon  
Joel Servatius

Steve Powers, Interim City Administrator  
Lt. Craig Anderson, Oak Harbor Fire Department  
Renée Recker, Executive Assistant to the Mayor

Councilmembers Rick Almberg, Beth  
Munns, Danny Paggao, and Bob Severns  
were absent.

Mayor Dudley recounted a conversation with a Purdue professor while on a plane returning from Haiti. The professor considered Whidbey Island a dangerous place to live in light of fault zones and overdue earthquakes. This workshop's purpose was to identify the threat of catastrophic events on Whidbey Island and address major concerns. Lt. Craig Anderson, as the moderator for this workshop, coordinated the speakers and presentations with Mayor Dudley and Ms. Recker.

**Earthquakes and Whidbey Island**

Presented by Dr. Brian Sherrod, USGS, and Department of Earth and Space Sciences at the University of Washington, with a specialty in paleo-seismology of the Pacific Northwest. Dr. Sherrod is a research geologist with USGS and works toward finding active faults - 5 to 6 faults exist between Whidbey Island and up the coast toward Bellingham with 3 major faults on Whidbey. Dr. Sherrod gave a PowerPoint presenting a primer on earthquake geology. Local areas of concern: South Whidbey Island fault zone (running between Crockett and Hancock Lakes), Darrington/Devil's Mountain fault zone, and Birch Bay fault zone by Bellingham. A transformer fault lies under Oak Harbor and an event within this area's fault zones would be significant as would an event with the South Whidbey Island fault zone. Dr. Sherrod considers Western Washington the "soft underbelly of North America." All of the faults are active and a quake on Whidbey could be comparable to the quake in Christchurch, New Zealand. Dr. Sherrod also talked about the fault system running through the Cascades into Central Washington and Idaho. Academic papers will be published soon on these discoveries. See the USGS website: [www.usgs.gov](http://www.usgs.gov) along with the Pacific Northwest Seismic Network at: [www.pnsn.org](http://www.pnsn.org) for detailed earthquake information.

Mayor Dudley called for a break at 11:00 a.m. and the workshop reconvened at 11:15 a.m.

## **Deception Pass Bridge and Washington State Ferries**

Presented by John Himmel, WSDOT Emergency Manager; Archie Allen, WSDOT Bridge Superintendent, Northwest Region; and Tim Smith, Director of WSF Ferry Terminals. The common question is, at what magnitude will you close the bridge and Mr. Allen noted that is not solely how bridge closure is measured since many elements have to be considered in the aftermath of a quake. Mr. Allen gave a PowerPoint addressing how quake response is managed, and emphasized at-home planning which is critical. Mr. Allen's staff is trained in bridge inspection and emergency protocols. Their response weighs these factors: magnitude along with depth, shake maps, staff dispatch and inspection, access and emergency access. His department created emergency kits for staff to facilitate quick dispatch and three full crews stand by for inspections. If a bridge does not need to be closed, it is important to keep access and especially emergency access available. The Deception Pass Bridge survived the 1946 and 1965 earthquakes and can take a fair amount of movement and is not "on the radar" as problematic. Mr. Allen noted that though Deception Pass Bridge was built in 1935, it is not in back shape and not targeted for replacement dollars with a rating of 48.42. Bridges have to drop well below 50 to be of concern. This bridge is inspected annually. Pack rust has been the focus over the last four years; pin and hanger assemblies are inspected for internal cracks and would be replaced if cracked. Functionally, it is obsolete (inclusion of sidewalks, etc.) but it is architecturally and aesthetically beautiful.

Mr. Himmel talked about prioritization of a lifeline route throughout the State and his work toward this since 2006. Current work has covered Paine Field and Everett down to Joint Base Lewis McChord. With a limited amount of funds, other areas are being worked on, but to do all of the State's bridges could take another 50 years.

Lt. Anderson asked, once a bridge is shut down, what are the requirements for inspection to reopen it? Mr. Himmel said there is no exact answer and Oak Harbor and Whidbey Island have a unique situation with both a bridge and two ferry runs. Mr. Himmel hoped it would take only a few days to a week noting it is important to not shut down a bridge unless it is absolutely necessary. Mr. Allen's team notifies the local team and emergency centers can communicate with State agencies. A huge effort is put toward regional catastrophic planning including how to deal with Oak Harbor if the bridge shuts down; an eight-county region is part of this planning.

Tim Smith, Director of Terminal Engineering and Capital Programs for WSF (everything except the vessels) talked about the seismic retrofit program which began in 2009 and is in a ten-year process. Whidbey Island terminals are among the newest facilities; we are more survivable. Some seismic retrofitting has been done on the Coupeville/Port Townsend route. Mr. Smith's largest concern is with the Mukilteo terminal. There are planned exercises in June for the southern part of Puget Sound to scenario a 6.7 earthquake. First responders are the operating crews in the terminals and they would use satellite radios in their facilities to ensure communication. Heavy terminal maintenance is contracted out and WSF is governed by the U.S. Coast Guard (both the

vessels and the terminals). In a catastrophic event, it becomes a case-by-case scenario. Coleman Dock and the Mukilteo terminal are two of the most heavily-used facilities. Mukilteo would collapse in a large quake that produced liquefiable soil; Clinton is designed to a higher standard.

Mr. Himmel summed up: We are your partner in any disaster; communication is important.

Mayor Dudley called for a break at 11:55 a.m. and the workshop resumed at noon.

### **Electricity to Whidbey Island**

Presented by Mary Robinson, PSE Manager for Business Continuity and Emergency Management; Walt Blackford, PSE Community Service Manager for Whidbey Island; and Kit Merritt, Engineer and expert for Whidbey Island's power grid. Ms. Robinson gave an overview of extreme snow and wind events in Washington, dependency on transportation systems, and the need for citizens to have emergency kits prepared for seven days without service; see [www.dhs.gov](http://www.dhs.gov). With the Nisqually quake, 139 substations were lost yet power was restored within hours. The impact from quakes and storms will be different; mutual assistance is key. Ms. Robinson presented a PowerPoint on overall PSE responses to emergencies statewide.

Ms. Merritt talked about how the island is served - north island receives service across the bridge which could then serve the whole island. There are ten substations on the island and five are in the north end. Redundancy is built into the system and Oak Harbor has not seen the number of outages as in years past. PSE has had lots of practice with wind and snow, but it would be a different scenario with an earthquake. Whidbey Island is within the first tier of load shedding; a visual example, we are at the end of an extension cord. Regardless of the bridge, there is more concern about potential damage to a substation and transformers. Ms. Robinson noted that Vashon Island is a good model for an island.

### **Lunch**

Lt. Anderson talked about how we would eat - first assessments are of family and medical needs and then thirst and hunger. Lunch for the workshop started with MREs for everyone and then the lunchtime discussion was turned over to Eric Brooks, Island County Department of Emergency Management Director. Mr. Brooks talked about survival kits versus comfort kits - something that I need versus something that I want to have.

Tammy Stillwell gave a PowerPoint about emergency kit preparations with comfort kits as a realistic guide and Thrive Shelf Reliance products were added to the lunch - a long shelf life, affordable, superior taste and quality. See [www.shelfreliance.com](http://www.shelfreliance.com) and [ThrivingHartNW.shelfreliance.com](http://ThrivingHartNW.shelfreliance.com)

Lt. Anderson talked about water needs and how to store water.

### **Emergency Water Supply System (City Hall Parking Lot)**

A demonstration by Noah Lemas and Duane McNett, Aquamira Technologies, Inc., was given to the workshop participants in City Hall's parking lot. Mr. Brooks is working on grants to address these types of systems. Rich Tyhuis, Oak Harbor Public Works Operations Manager talked about Oak Harbor's water system: three emergency wells that the City maintains, and a 500,000 gallon per day capacity for a 24-hour period before stressing the aquifer. The wells and booster stations have emergency generators in place if power is lost. The City has 3 million gallons of stored water and the new reservoir will add another 4 million gallons. The new reservoir will be designed to meet the issues shown in an earlier PowerPoint and will have earthquake couplings to protect it. Electronic message boards are an effective way to notify the public about the need for water reduction; reverse 911 is being considered, as well. With 90 miles of pipe in the ground, it is key that consumption is reduced and water is stored for fire protection. The City can go 72 hours and then water would be shut down.

### **Panel Discussion on Current Systems in place for a Large Scale Earthquake**

- Lt. Craig Anderson, Oak Harbor Fire Department.
- Eric Brooks, Island County Department of Emergency Management Director
- Lt. John Dyer, Oak Harbor Police Department (Did not participate - called away for an emergency)
- Sean Merrill, Battalion Chief, Navy Region Northwest Fire and Emergency Services
- Chris Tumblin, Whidbey General Hospital Emergency Management Coordinator
- Nancy Waddell, American Red Cross

Lt. Anderson noted that emergencies require a collective effort and each panel member explained what they do in their respective departments. With regard to the base, Mr. Merrill talked about the combined equipment and training between NASWI and Oak Harbor departments: area command would be set up along with triage. Training as a team will begin on 6/3/12. FEMA certification will be obtainable in 3 years; USR Team (Underground Search and Rescue) level status will also be achieved. We would be at USR Level 3, Seattle is Level 1, Kitsap County is Level 2. Mr. Brooks noted that Island County's jurisdictions for emergency management are coordinated through the emergency management council. He talked about their role in eliminating hazards, creating management plans and procedures, direction and coordination, communications and warnings to alert public officials and emergency response personnel, development and coordination of operations and procedures, logistics and facilities, mutual aid integration and coordination, training, assessment and evaluation of emergency management plans, response to information requests, public education programs, fiscal and administrative procedures to support emergency situations and vital records, and defining emergency management authority.

Food would not be stockpiled for communities but there are supplies for emergency personnel at emergency centers.

Ms. Waddell talked about the Red Cross helping people and first responders and how the local chapters are defined now. Coordination would also occur regionally (Island, San Juan, Whatcom, Skagit, Snohomish Counties). 15 shelters are registered now, 9 in Oak Harbor - mainly schools and churches, and the Red Cross has an emergency response vehicle on the south end. There are two supply caches of storage: north and south. The Red Cross does a lot of training and always welcomes more volunteers.

Per Mr. Brooks, emergency operations centers would be set up at the Oak Harbor Fire Department and the Commissioners room at the County campus.

Mr. Tumblin talked about Whidbey General Hospital's preparation noting that the hospital would be quickly overrun with patients. The hospital is part of a health care coalition with Whatcom, Skagit, San Juan, Snohomish, and Island Counties which would network the hospital response. Whidbey General is also working on a search and evacuation plan along with establishing alternate care facilities. Plans need to remain dynamic and not be set in stone, since they would depend on the type of disaster and what is still standing.

Lt. Anderson summed up that we are working together; there are exercises in the near future on how to enact a contingency plan. Echoing a statement made by Mr. Tumblin: Every day I do not get something done is a day closer to not being prepared for a disaster. Oak Harbor Fire Department will be holding a public workshop in September with demonstrations and teaching opportunities. The reality is the disaster will come. Lt. Anderson thanked the Mayor and Council for their support and Mayor Dudley also expressed thanks to those who presented this workshop. Have an emergency kit, think ahead, and plan for a week without food, water, and emergency supplies.

### **Adjourn**

Mayor Dudley adjourned the workshop at 2:30 p.m.

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Connie T. Wheeler  
City Clerk