



**Public Disaster Education and Preparedness (PDE+P) Committee of  
the Marin Operational Area Disaster & Citizens Corps Council (DC3)  
Committee Meeting – Monday December 5, 2016**

**PDE+P Meeting Minutes for December 5, 2016**  
*Approved at PDEP meeting 2-6-2017*

**Attendance:**

Members Present:

Bill Tyler	CoChair, DC3 Member, Batt. Chief Novato Fire, Fire Marshal
Frank Cox	CoChair, DC3 Member, OES Auxiliary, OES trainer
Catherine Way	Mayor, City of Larkspur, member, MCCMC
Garry Lion	DC3 member, Marin Economic Forum
James Wickham	PG&E Safety + Preparedness Specialist
Maggie Lang	CERT Coordinator, Get Ready / Southern Marin
Megan Scott	Sr Program Coordinator H&HS Public Health Preparedness
Tom Roberts	AFN Communities: Whistlestop Chief Op Officer

Members Excused or absent:

David Peery	MMWD Safety & Risk Manager
Terry Scussel,	Access & Functional Needs - Develop Disability.
Philippa Lockwood	ARC Disaster Program Specialist / MIDC contact

Members of Public Present

Lori Schifrin	MMRC training officer, CERT, etc. / <a href="mailto:lori.sch@att.net">lori.sch@att.net</a>
Joshua Szarek	Neighborhood Response Group Coordinator for Larkspur Corte Madera areas <a href="mailto:joshuaszarek@gmail.com">joshuaszarek@gmail.com</a>
Steve Newton	COM Instructor, Geology / <a href="mailto:snewton@marin.edu">snewton@marin.edu</a>

Handouts distributed:

- Agenda, PDEP Monday Dec 5, 2016 version (a)
- Draft Minutes of PDE+P meeting of Nov. 7, 2016 version (b)
- Draft Minutes West Marin Disaster Council November 17, 2016
- Earth Magazine article by Steve Newton: ‘*The most Dangerous Fault in America*’:  
<http://www.earthmagazine.org/article/most-dangerous-fault-america>
- Marin CERT calendar <http://readymarin.org/calendar/>
- Disaster & Citizen Corps Council (DC3) Agenda 12-8-2016
- Final PDEP Committee report to DC3 to be submitted 12-8-2016

**I. Welcome, Introductions,**

- Bill Tyler called meeting to order at Central Marin Police Community room est 1305 hr., and asked members and attendees to identify themselves.

**Review Minutes**

- Garry moved, Catherine 2<sup>nd</sup>, the Nov 7th minutes were approved

**II. Hayward + Rodgers Creek Faults – What’s coming. What to do next.**

- Steve Newton, College of Marin Geology Instructor for some two decades, and author of the distributed article ‘*Most Dangerous Fault in America*’
- Using a PowerPoint presentation, Steve identified a series of Bay Area faults, notably the Hayward, Rodgers Creek, San Andreas, Calaveras, West Napa, Concord/Green Valley, and others, noting that the year 2007 63% probability estimate of a 6.7 Magnitude quake in the Bay Area within a 30 year window has been increased by recent studies.
- Scientists have determined the Hayward fault is linked to the Calaveras fault at its South end, and Rodgers Creek fault at its North end. Seismic coring samples across San Pablo Bay demonstrated a direct fault link between the Hayward and Rodgers Creek traces between Point Pinole and a landfall near Sears Point. The longer the fault length, the



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greater the quake that could be produced. The extended Hayward fault complex is now believed to be capable of a 7.2 to a possible 7.8 magnitude event.

- The Hayward Fault runs through densely populated cities such as Oakland (pop. 406,000), Fremont (pop. 224,000) and Berkeley (pop. 116,000), and is not far from the metropolises of San Francisco (pop. 805,000) and San Jose (pop. 945,000). The fault trace itself is now highly urbanized, with residential, commercial, medical, educational, transportation, and other infrastructure on top of, and on all sides of, the fault.
- The last major quake along the Hayward was in 1868. Jim Lienkaemper, USGS, published a study of the 11 major quakes along this trace since 1650, and determined we are in the 'middle' of a major quake probability for this area.<sup>1</sup>
- The expected event is likely to horizontally displace ground by about 6 feet, causing major loss of life and injuries, and severing critical lifelines including water supply, wastewater, East Bay tunnels, BART, powerlines, highways, and more.<sup>2</sup>
- The Bay Area geology is comparable to that underlying Kobe, Japan. The 1995 early morning 6.9 Mag quake in Kobe caused the death of more than 6,000 residents. A quake during daylight (business) hours would have caused far worse losses.
- It is projected a major event along the Hayward Fault will be a devastating event.
- Part of the reason losses will be so high is local and regional building codes permitted construction on unsafe zones subject to certain liquefaction, such as Paradise Cay, a waterfront community near Tiburon, CA, built on filled mudflats. Similarly, big box stores such as Costco or Home Depot in Marin County are built on landfill, and will experience severe shaking on a large quake. Major Bay Area highways, BART, Smart Train tracks, and other transportation corridors are also built on land subject to severe shaking.
- Mitigation efforts in the Bay area should include stricter building codes, improved development patterns, seismic retrofitting, appropriate use of quake-sensitive gas shutoff valves and of course preparedness efforts.

### III. PDEP survey of DC3 members – DC3 PowerPoint for discussion

- Bill and Frank talked through a PowerPoint Draft that will be presented to DC3 at the December 8<sup>th</sup> meeting, with PDEP members making several helpful suggestions.

### IV. Updates from PDEP members

#### - MCCMC Marin County Council Mayors + City Councilmembers

- Catherine advised the Twin Cities Disaster Preparedness Committee will review the recently held Neighborhood Response Group drills.
- Catherine and Maggie Lang will be contacting local disaster councils throughout Marin County to invite them to an introductory collaboration meeting to be held at the Central Marin Police Community room Thursday, January 19<sup>th</sup> – details to be developed.

#### - West Marin

- PDEP members received and reviewed the November 17, 2016 Draft Minutes West Marin Disaster Council.

#### - MIDC and Red Cross Events:

- Philippa was unable to attend but reported by email:

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<sup>1</sup> USGS zoomed map / probabilities along Hayward Fault: <https://pubs.usgs.gov/ds/2006/177/> with Quake History at: [https://pubs.usgs.gov/ds/2006/177/text/06BSSAmtgAbs\\_Final.htm](https://pubs.usgs.gov/ds/2006/177/text/06BSSAmtgAbs_Final.htm)

<sup>2</sup> USGS updated (August 2016) probabilities of a major Quake in the SF Bay Region concluded there is a 72 percent probability of at least one earthquake of magnitude 6.7 or greater striking somewhere in the San Francisco Bay region before 2043 see: <https://pubs.usgs.gov/fs/2016/3020/fs20163020.pdf> and estimates of losses: <https://earthquake.usgs.gov/regional/nca/wg02/losses.php>



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- Red Cross:
  - Red Cross continues to seek to fill the Disaster Program Manager (DPM) position previously filled by Crystal Silva, and invites recommendations from PDEP members.
  - We are continuing with slow-but-steady outreach for the Pillowcase Project. As a reminder, the Pillowcase Project provides personal preparedness information to youth in grades 3 – 5 through 40 – 60 minute presentations. At the end of the presentation, youth are provided with a Disney-branded pillowcase which they are then encouraged to take home and share with their families.
  - In Marin, we have agreed to work in collaboration and cooperation with the Get Ready 5th grade program. For this reason, in Marin, we are only targeting grades 3 and 4.
- MIDC
  - We had a very successful meeting with CERT and Marin Medical Reserve Corps (MMC) last month to discuss collaborative efforts between our agencies, particularly as it relates to volunteer recruitment and disaster response. We are working on a tri-fold brochure to help promote our partnership to the community. More details to follow.
  - MIDC met on November 29th to discuss planning for future MIDC workshops. We haven't yet settled on dates or themes but we are hoping to host at least 2 workshops in 2017.

### - Southern Marin / Business Community

- Garry advised he is scheduled for surgery December 13<sup>th</sup>, and is likely to be unable to attend the next couple of PDEP meetings. All PDEP members continue to wish him well.

### - CERT, Get Ready and Get Ready 5th:

- Maggie reported:  
Marin County CERT (MCC)
  - Status of 2016 Classes : Completed classes for 2016, graduated 274 CERTs from 13 classes, 9 different locations. Total= 1252 CERTs (2011-2016).
    - Average age=52 yrs. (14-85)
    - 58% women/48% men
    - 21 average class size
    - 8% out of county
    - 19 scholarships (7%)
    - 29 refreshers (10%)- no cost
  - A Tomales CERT class scheduled for Jan. 7 & 14 and So. Marin Boy Scout /Girl Scout class Jan./Feb. 2017. Regular schedule starts in Feb. in Novato.
  - CERTs are registered Disaster Service Workers. Maggie is in conversation with Cal OES re: our procedure for registering DSW's -somewhat different than other areas. A report on these efforts will be presented to DC3 on 12/8/16, with a brief update on CERT, approval of 2017 schedule and hopefully authorization for MCC to be registering entity for Marin County CERT DSW's.

### CERT Advanced Trainings:

- An advanced CERT class is scheduled Feb.16 in Mill Valley with a Leadership/ICS workshop. The 2017 dates are complete & active on [www.ReadyMarin.org](http://www.ReadyMarin.org). Possible topics for Advanced Training: What would a prolonged CERT deployment look like, working with children in post-disaster setting, First Aid classes, and next year's Annual Disaster Simulation Exercise.

### Readymarin.org website report:

- Ready Business is now online, and Ready Neighborhoods will soon be added.

### Get Ready



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- GR Classes are being offered by different instructors around the county; and Maggie will put dates on the website if we know about it.
- Maggie spoke at MCOE offices about the Get Ready 5<sup>th</sup> program recently.

### - Access + Functional Needs communities (AFN):

- Tom Roberts outlined meetings held at the County EOF of key Marin Transportation officials held on October 24<sup>th</sup> and December 5<sup>th</sup> at County OES following the April 14<sup>th</sup> OES Tabletop.
- The focus of the October meeting was to allow local and regional transportation officials to discuss common elements in their disaster plans, and the December meeting allowed the agencies to consider communications issues following disasters.
- Some agencies participate in the Marin Emergency Radio Authority (MERA) radio net that now supports fire, law, DPW and other first responders, while others use alternative radio links.<sup>3</sup>
- Marin County Office of Education (MCOE) will soon have some MERA capacity.
- OES is further surveying gas stations and other fuel providers in the County to determine if they have auxiliary power supplies in case of a major quake or similar event.

### - Public Health Preparedness and related programs

- Megan reported that County H&HS is preparing a full scale exercise for health providers and others to be scheduled for Spring 2017. Details to follow.

### - Utilities including MMWD and PG&E

- Dave Peery, MMWD, was unable to attend today's meeting.
- Jim Wickham, PG&E and Mill Valley Councilmember, attended a recent meeting that touched on post-disaster housing.
- PG&E and others are discussing issues base camps for PG&E staff following disasters.

### - Fire Services + County at Large Issues:

- Bill Tyler was unable to stay the entire meeting, so his report is deferred to our next meeting.

### - OES, Training and other Events:

- Frank outlined a few training and other events held recently or scheduled in the near term:
  - 2016 11 09 GReady Marinwood
  - 2016 11 17 EOC Flood Functional Exercise
  - 2016 12 05 OES Transportation #3
  - 2016 12 08 DSW Class
  - 2016 01 12 CVNL Hearts of Marin Luncheon
  - 2017 02 02 DSW class
  - 2017 03 09 DC3 agenda item: Bay Area earthquake planning

## VI. Open Time / Public Comment

### 2:50 PM end of meeting

- Frank Cox closed the meeting.

### Next Meetings:

#### **PDEP Meetings: 1-3pm Year 2017: draft dates to be discussed:**

**01/9/2017, 2/6, 3/6, 4/3, 5/1, 6/5, 7/3, 8/7, 9/4, 10/2, 11/6, 12/4/2017**

**Dates may be flexible as circumstances require.**

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<sup>3</sup> Marin Emergency Radio Authority: <http://mceronline.org/>



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**Site: PDEP unless otherwise posted: Central Marin Police Community Rm.  
DC3 Meetings: 3-5pm: 3/9/2017, 6/8, 9/14, 12/14/2017 – at new EOF.**

*PDEP\_Minutes 2016-12-05 b.docx  
Approved at PDEP meeting 2-6-2017  
Rev 2-15-17 0940 hr. fcox*